

SCOPE OF WORK

(PLEASE GIVE COMPLIANCE TO SCOPE OF WORK IN THE SAID FORMAT ALSO AS TABULAR PART IS NOT CLEARLY TABULATED IN TEMPLATE OF STAGE 2)

ANNEXURE – A

TENDER NO. CMM/TAPS-1&2/CMU/57790

DUE ON : AS PER NIT

- 1.0 **Scope of Work :** CAMC of RFID smart card based access control system (ACS) , VMS & TAMS installed at TM Site / ~~Hospital / Township~~ for a period of **ONE YEARS.** The scope of contract covers Preventive and breakdown maintenance of above systems and related software. Loading and unloading of the Euronet software / ECIL Software, VMS and TAMS software replacement of spares (*in case of comprehensive*), if required and to keep the instruments in perfect working condition.

List of instrument/equipment to be covered under the contract.

Sr.No.	Description of Instrument	Model No./ Sr. No. / Make	Quantity	Unit Rate per instrument in `
01	RFID smart card based access control system (ACS)	---	1 NO.	
02	RFID based Visitor Management and Time and Attendance Management System	---	1 NO.	

It contemplates the regular maintenance of the below systems located at TAPS 1&2 Site indicated in the following table, scope of work, terms and conditions, period of contract, payment terms, system configuration.

S. No	Location	Access Control system	TAMS	VMS
1	TAPS 1&2	√	√	√

- I. RFID Smart card based Access control system(ACS) at TAPS 1&2
- II. RFID based Visitor Management and Time and Attendance management system at TAPS 1&2

2.0 The scope of Services / Maintenance : *Include as per indent except commercial terms and conditions.*

2.1 Preventive and breakdown maintenance of above systems and related software. Loading and unloading of the Euronet software/ECIL Software, VMS and TAMS software shall be carried out. Software-updating (will be provided by NPCIL), installation of software patches and maintaining RFID card database backup on servers shall be carried out. Card enrollment data and Employee data shall be updated periodically at all locations on monthly basis. Lost card shall be intimated to all locations for disabling the card within 24 hrs. The changes incorporated in card database shall be intimated to all the sites.

2.2 Replacement of defective components, parts or items for the items covered under this tender. The replacement of faulty items shall be equivalent or better and the same shall be certified by Engineer In charge at respective sites. If the defective components, parts or items are replaced, the defective part will be returned back to the vendor.

2.3 Back to back agreement shall be entered or PO shall be placed on suppliers for preventive maintenance and emergency visits for the following main equipment:

- | | | |
|---------------------------------------|---|---|
| 1. Controllers, Readers, ACS software | - | Quarterly |
| 2. Turnstile gates, EM Lock& DRS | - | Quarterly |
| 3. TAMS | - | On line support from HQ on daily basis with two nos. resident support staff at HQ |

The agreement/PO shall cover minimum visits by vendors for carrying out preventive maintenance, however the vendor may decide for additional visits, Emergency visits as and when required shall be carried out. In case back-to-back agreement could not be entered for ACS related software & hardware, M/s ECIL will do the preventive maintenance of the systems.

2.4 Resident support team as per 3.1 of this specification shall be posted at TAPS 1&2 for day-to-day monitoring and maintenance of the ACS, VMS and TAMS.

2.5 Faulty components shall be handed over to vendor on replacement of faulty one with the same or higher version. Shifting and insurance charges of faulty spares, equipment and test instruments to their workshop shall be borne by the vendor. The vendor will maintain the stock of spares parts at sites for Turnstile gates, HKII cleaning kit, Toolkit etc. The list of the critical spare parts may be submitted along with the tender. When faulty HDDs are replaced, faulty HDDs will not be returned back to ECIL.

2.6 The ECIL shall carry out enrollment of employees with capturing of Bio-Metric and photography for preparation of ID cards. NPCIL will provide necessary infrastructure, consumables and blank RFID smart cards for the above. Employee data log shall be maintained for the ID cards issued to employees by NPCIL security/HR personnel. HR personnel will provide the requirement for ID card printing and will co-ordinate with ECIL team for card printing.

2.7 The complaints shall be attended immediately, the problems shall be rectified within the period indicated with standby equipment as per the following table:

Sr. No.	Description of item	Period (within)	Normalization by taking out standby equipment (within)
1	RFID readers	24 hours (Standby available)	2 weeks
2	Controllers	24 hours (Standby available)	2 weeks
3	E & M Locks	24 hours (Standby available)	2 weeks
4	ACS server	24 hours (Standby available)	2 weeks
5	TAMS server	24 hours (Standby available)	2 weeks
6	Gates	120 hours	-
7	VMS	72 hours	-
8	Work stations	24 hours (Backup shall be available)	2 weeks

2.8 ACS, VMS & TAMS servers and ACS Client & PIA Client work stations shall be checked for operating system, database, MS Office for licensed software and if it is not available the same shall be communicated to NPCIL. The record of each available software's shall be identified with key number, user name, etc. If any licensed software/packages are not available, the same shall be intimated to engineer in charge. NPCIL shall provide or request ECIL to provide the software/packages. Payment towards the software packages provided shall be paid separately by NPCIL.

2.9 Any disposal of Faulty items including faulty ID cards shall be disposed as per DAE/NPCIL guidelines.

2.10 NPCIL will provide controllers - 2 nos, Smart card readers- 2 nos, SRT100 readers- 2 nos for immediate replacement/ fault rectification.

2.11 All items shall be accounted, details of material movement with gate pass No., status, etc to be submitted to Engineer In-Charge.

2.12 Existing Quick Heal Antivirus for ACS & VMS servers and PIA Client & ACS Client work stations shall be renewed by the vendor at free of cost to NPCIL.

2.13 BILL OF QUANTITIES :

SR. NO.	Description	Rate per Month	GST @ 18%	Rate per Month with GST	No. of Months	Total with GST (Rs.)
	CAMC for Corporate RFID smart card based Access Control system, RFID based Visitor Management system and Time & Attendance Management System					
1)	CAMC for Systems/Equipments which are not under Augmentation process				12	
2)	CAMC for Systems/Equipments which are under Augmentation process and will be replaced after completion of Augmentation. S.No. 1, 3, 11 to 15, 17 to 23 of Annexure-I (BoM)				12	
3)	Service support with a team of 1 Engineer, 1 Supervisor & 1 Senior Technician.				12	
	Total CAMC cost including GST @ 18%					

TARAPUR ATOMIC POWER STATION 1&2
Access Control System AMC – Bill of Material

S. No.	Description	Quantity
1	Euronet Access Controller supporting 4 Readers	23
2	Myfare Smart Card (HID) Readers (Europlex)	45
3	SRT Readers	9
4	Turnstile Gates Full Height – Dual lane	10
5	Turnstile Gates Full Height – Single lane	2
6	Electro Magnetic Locks 600 Lbs	14
7	Electro Magnetic Locks 1200 Lbs	3
8	Press to open Door Release Switches (DRS)	17
9	Hand Geometry Readers HK-II	18
10	Card Encoders (Myfare card programmer)	3
11	ACS Server with standard Accessories	1
12	VMS Server with standard Accessories	1
13	TAMS Server with standard Accessories	2
14	ACS Client PC with standard Accessories	1
15	PIA Client PC with standard Accessories	2
16	Web camera	2
17	Euronet Net Intelligent Building Management software	2
18	Visitor Management System (VMS) Software	2
19	TAMS Software	4
20	VMS – PIA Client Software	2
21	Windows 2003/2008 Server OS for ACS & VMS Servers	4
22	Cent OS Linux for TAMS server	4
23	MS SQL Server 2000/2005/2008 for ACS & VMS Servers	4
24	Windows 7	3
25	MS Office 2003/2007/2010	3
26	Data Modems	2
27	Network Switch with dual Media converters	2
28	ACS Backup Server	1
29	VMS Backup Server	1
30	TAMS Backup Server	2
31	XID 8600 RFID card Printer, ILM Laminator and card Management Software with Dongle	1 Set
32	RFID card Enrolment Software	1
33	RFID card Personalisation Software	1
34	RFID card Printing Software	1
35	PC with standard accessories for RFID card Printing System	1

3.0 Resident engineer support:

3.1 The vendor shall depute resident support as per the following table for attending day to day problems of system and personalization of employee cards as and when required.

Sr. no	DESCRIPTION	Nos.
1	Engineer	1
2	Supervisor	1
3	Senior Technician	1

3.2 The service engineer shall follow the instructions given by NPCIL engineer for fault rectification, preventive maintenance and to check the healthiness of all the equipment.

3.3 The resident support who are in permanent rolls of ECIL shall be provided with accommodation and facilities as per DAE guidelines. The vendor shall provide mobile facility to their resident engineer for day to day communication and also during emergencies.

3.4 NPCIL will provide the sitting arrangements and intercom telephone facilities at site for all the resident support deputed at sites under this contract.

3.5 Each resident support can avail 10 days leave in a year subject to maximum 3 days continuous and for any additional absence or continuation of more than 3 days alternate arrangement will be made.

3.6 Resident support team will follow the NPCIL duty timing and will consult with Engineer-in-charge for their duty timing. Support team will perform its duty as per allotted duty timing.

3.7 Party supposed to provide all the tools and equipments (except GM tubes, Industrial PC and monitors & TFT displays) required for routine maintenance and break down maintenance work.

4.0 SCHEDULE OF VISIT :

4.1 Preventive : The agreement/PO shall cover minimum visits by vendors for carrying out preventive maintenance, however the vendor may decide for additional visits, Emergency visits as and when required shall be carried out. In case back-to-back agreement could not be entered for ACS related software & hardware, M/s ECIL will do the preventive maintenance of the systems.

4.2 Resident support team as per 3.1 of this specification shall be posted at TAPS 1&2 for day-to-day monitoring and maintenance of the ACS, VMS and TAMS.

4.3 Working Hours : All maintenance job shall be carried out during normal working hours i.e. 0900 hrs to 1700 hrs at TM SITE except holidays being observed by TM Site.

4.4 Service Personnel : Authorised, qualified and experienced Service Personnel shall be deputed to carry out the services under the contract. Service Personnel shall carry valid Photo ID Proof and ID Card issued by employer while visiting TM Site for security clearance etc.

5.0 Replacement of components / spares :

- 5.1 Replacement of defective components, parts or items for the items covered under this tender. The replacement of faulty items shall be equivalent or better and the same shall be certified by Engineer In charge at respective sites. If the defective components, parts or items are replaced, the defective part will be returned back to the vendor.

6.0 History Record / Log :

- 6.1 The downtime of equipment starts after the allowed response time as per the table of Clause No. 2.7. The record of the downtime has to be maintained in the Site Logbook.
- 6.2 *(In case of Services at Site Location)* The contractor shall prepare and maintain history card for all the equipments, shall fill up maintenance data on the card during each PMV / BMV. The card shall be retained with the instrument. The card shall contain details such as nature of PM done, breakdown maintenance done, spares replaced and other relevant data. The history record / log shall be verified by ENC.

7.0 Penalty :

- 7.1 Towards time delay for systems restoration:

S. No.	Description of item	Period for restoration back system online (a)	Standby equipment normalization (b)	Penalty per week or part there off beyond the allowed period
1	RFID readers	24 hours (Standby available)	2 weeks	Rs 500/- per 1 No.
2	Controllers	24 hours (Standby available)	2 weeks	Rs 1000/- per 1 No.
3	E & M Locks	24 hours (Standby available)	2 weeks	Rs 250/- per 1 No.
4	ACS server	24 hours (Standby available)	2 weeks	Rs 2500/- per 1 No.
5	TAMS server	24 hours (Standby available)	2 weeks	Rs 2500/- per 1 No.
6	Gates	120 hours	-	Rs 500/- per 1 No.
7	VMS system	72 hours	-	Rs 2500/- per 1 No.
8	Work stations	24 hours (Backup shall be available)	2 weeks	Rs 500/- per 1 No.
Penalty on the above will be limited to 5% of the total value of the contract per year				

7.2 Penalty for resident support:

If the alternate arrangements are not made for the resident support as per clause No.3.5, Rs 6000/- for Engineers and Rs 2000/- for Supervisor/Technicians for each day absent subject to 5 % of the total value of the contract.

7.3 Quarterly Certificate for Penalty calculation shall be submitted as per Checklist Summary_1.

7.4 Checklists to assess the performance of the systems on quarterly basis.

- Checklist No : TAPS12_ACS_AMC-001
- Checklist No : TAPS12_ACS_AMC-002
- Checklist No : TAPS12_ACS_AMC-003
- Checklist No : TAPS12_ACS_AMC-004
- Checklist No : TAPS12_ACS_AMC-005

Preventive Maintenance (Quarterly) Checklist

Site Name: _____

No. of controllers in the network: _____ Euronet.Net Version : _____

No. of Reader in the network: SRT Readers: _____ HID Readers : _____

Ref : P.O. No.

S.No	Description	Done (Y/N)	Remarks
1	Visual Inspection of the controllers and readers		
2	Functional test either thru Euronet terminal or at location if feasible		
3	Check Connection of SRT readers, HID readers, EM Locks, HK-2 readers, DRS connection and LAN ports (wherever possible)		
4	Installing the software updates		
5	Backup of software and user database whenever changes		
6	Checking of generation of all reports		
7	Checking LAN connectivity of all controllers		
8	Checking of Readers online connectivity		
9	Checking healthiness of power supply including battery		
10	Generation of reports in Softcopy		
11	Any other checks by OEM		

Preventive Maintenance (Half Yearly) Check list

Site Name: _____

No of Printers: _____

No. of Laminators: _____

Ref : P.O. No.

S.No	Description	Done (Y/N)	Remarks
1	Card Printer (EDI Secure)		
a	Visual Checking		
b	Cleaning of filters		
c	Cleaning of rollers		
d	Card movement harness checks		
e	Cartridge compartment cleaning		
f	Card movement speed adjustment if required		
g	Printing sample card		
2	Card laminator (EDI Secure)		
a	Visual checking		
b	Cleaning of Filters		
c	Cleaning of rollers		
d	Card movement harness checks		
e	Laminator roll compartment cleaning		
f	Card movement speed adjustment if required		
g	Temperature adjustment as required		
h	Lamination of sample card		

Preventive Maintenance(Quarterly) check list

Site Name: _____

No. of Turnstile Gates: Full Height: _____ Half Height: _____

No. of Flab Barriers: _____ No. of Tripod Gates: _____

Ref:P.O.No.

Sr. No.	Description	Done (Y/N)	Remarks
1	Visual checking		
2	Cleaning of Gear mechanism		
3	Cleaning of rollers		
4	Gate movement harness checks		
5	Springs and magnetic sensors checking		
6	Lock alignment		
7	Speed/Time adjustment for rotation if required		
8	Power supply checking		
9	Tightening of screws and bolts of Gates		
10	Interface connectors checking for loose contacts		
11	Any other checks by OEM		

Preventive Maintenance (Half Yearly) check list

Site Name : _____

VMS Software Version : _____ PIA Client Version: _____

Ref:P.O.No.

S.No.	Description	Done (Y/N)	Remarks
1	Checking Database backup scheduler for daily & monthly backup		
2	Installation of Latest VMS & PIA client Software patches if any		
3	Archiving of VMS Database		
4	Checking for viruses in VMS server & PIA client PC		
5	Installation of windows & MS SQL server service packs (if required)		
6	Checking of Free Hard disk space in the VMS server. If sufficient space is not available, archive VMS database log file.		
7	Checking of Card encoder & camera		

Sub: Daily activities to be planned by ECIL at Site

Ref : P O. No.

Access Control system

Sr. No.	Daily monitoring / activity
1	ACS network monitoring for healthiness of controllers / readers (thru maint. terminal - euro.net)
2	Interlock logic with gates
3	Alarms clearing (after faults rectification)
4	Power supply status
5	Local area network status
6	Data export to TAMS
7	Hand Geometry readers healthiness
8	Physical checks for any abnormalities
9	Employees data enrolment and Updation of data of other sites if any'
10	Time and date synchronization with local timings
11	Informing any abnormalities to NPCIL system engineers at Sites
12	Coordination agencies at site
13	Gates smooth rotation and movement checking(whenever permissible)

II. TAMS

Sr. No.	Daily monitoring / activity
1	Data updation if any
2	Import data from ACS
3	Checking integration with VMS
4	Remote support from HQ
5	IBA integration availability (wherever available)
6	Informing any abnormalities to NPCIL system engineers at Sites

III. VMS

Sr. No.	Daily monitoring / activity
1	Data updation if any
2	Physical checking of Enrollment terminals and its availability
3	Checking integration with ACS
4	Logs clearing
5	Healthiness of system along with printer
6	Informing any abnormalities to NPCIL system engineers at Sites

IV. Auxiliary equipment integrated with above systems:

Healthiness and connectivity checking

8.0 Period of Contract : ONE YEARS from PERIOD 28/01/2019 TO 27/01/2020.

- 9.0 All required tools and tackles, manpower, testing instruments etc. including safety gears or any other requirement for the performance of the work shall be in contractor's scope. During the performance of the contract, utmost care in handling departmental equipments and items should be taken by the contractor. In case of any damages caused to the departmental equipment due to negligence, mishandling and for any other reasons of contractor and their personnel, the same shall be repaired / rectified/replaced at contractor's risk and cost, in case of failure, cost of such damages will be recovered from the invoices of the contractor.
- 10.0 The repairs and service shall be rendered at TAPS 1&2 where the instrument/a is/are installed.
- 11.0 **Liquidated Damages** : Applicable on service charges either per instrument / equipment or lumpsum quarterly / half yearly etc. basis as per GCC-SUPPLY1-R4. In case of delay in maintaining service schedule / delivery period, LD will be applicable. Based on dated schedule communicated to the contractor by ENC, Recovery of LD will be made based on certification given by ~~Doctor / Officer~~ / Engineer-in-Charge as per actual work schedule adhered to & shall be taken in account covered under point No. 7 i.e. PENALTY.
- 12.0 **Payment** : Comprehensive Annual Maintenance Contract Charges will be paid on Quarterly basis along with 100% applicable GST after satisfactory completion of job for that quarter against submission of the following documents.
- 12.1.1 Invoice in Triplicate
- 12.1.2 Certificate in original from Engineer In-Charge/SME(I) indicating details of services and maintenance works for that quarter has been completed satisfactorily and services of resident engineers have been imparted satisfactorily indicating deduction of penalty for down time if any as per clause No. 6.
- 12.1.3 GST Certificate
- 13.0 **Jurisdiction** : The contract shall be governed by the laws of India for the time being in force. The courts situated in nearby area from the place (MUMBAI) from where the order is issued only shall have jurisdiction to deal with and decide any matter arising out of the contract.
- 14.0 **Other Terms and Conditions** : All other terms and conditions of GCC/SUPPLY-1-R-4 including Security Deposit, Liquidated Damages will be applicable to this Contract.

15.0 NOTES :

- (1) The Corporation will not be responsible for any damage to the contractor's material(s) and injury to / death of the contractor's personnel might suffer during the performance of the contract.
- (2) The contractor shall abide by the safety rules and regulations of the Corporation during the performance of the contract.
- (3) Contractor shall make his own arrangement for conveyance, boarding / lodging of their Service Engineer/s without any extra charges to the Corporation. However, on request, accommodation and conveyance at chargeable basis as per rules and regulations of the Corporation will be provided subject to availability.
- (4) Safe Custody of Corporation's Material / Instruments / Equipments : Whenever Corporation's material are handed over for repair / services job, utmost care should be taken for its Safe Custody till the period the material are delivered back to TMS, NPCIL. In case of loss of material, damage/s, such loss and damages should be made GOOD to NPCIL and in case of failure to make good the loss or damage/s, Cost of such losses/damages will be recovered from the supplier's Bills against this Contract or any other Contracts, at the rates decided by NPCIL and the decision by NPCIL will be the final and binding on the Supplier.