

TENDER SPECIFICATIONS FOR PC BASED ELECTRONIC GUARD TOUR MONITORING SYSTEM

TECHNICAL SPECIFICATIONS FOR PROXIMITY (RFID) TECHNOLOGY

1. Introduction

The successful tenderer shall supply, deliver and install an electronic guard tour monitoring system, which shall operate in the following manner:

- 1.1 Each security officer is required to register his patrol at various pre-designation (**checkpoints**) using a hand-held compact and shockproof **data collector**.
- 1.2 The data collector with built-in **Bluetooth™ technology shall then communicate with the USB Bluetooth™ adaptor to transfer all read data to the PC**. To enable evaluation and printout of the collected data, a **data management software program is required**.

The electronic guard tour monitoring system shall include the following:

2. RFID Station Checkpoints

The checkpoints should have the following features:

- 2.1 **Shall be read at a proximity distance, through all substances other than metal. It shall be of 10 mm thickness for heavy-duty use (Unlike the glass micro chips or thin and fragile proximity chips)**
- 2.2 Shall be no larger than 30 mm in diameter.
- 2.3 Shall be vandal-proof, tamper-proof, electrocution-proof
- 2.4 Shall be water resistant & weather resistant
- 2.5 Shall contain an encapsulated chip which does not require external power
- 2.6 Shall have a unique code which cannot be copied or manipulated
- 2.7 Can be concealed, embedded or completely hidden
- 2.8 Shall be maintenance free
- 2.9 **Shall carry a lifetime warranty against manufacturing defects**
- 2.10 **Checkpoint ID Nos. must run in sequence for easy programming**

3. Portable Data Collector

The data collector shall have the following features:

- 3.1 Shall be able to read proximity checkpoint
- 3.2 **Shall be made of Stainless Steel Housing with Thermoplastic Elastomer encapsulation for higher durability**
- 3.3 **Shall be built-in with Bluetooth™ technology for contactless communication with the PC**
- 3.3 Shall have built in beeper and LED for visual and audible indication

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- 3.4 Does not require direct contact with the checkpoint to record the data
- 3.5 The data collector shall be water resistant, shock-resistant and tamper-resistant
- 3.7 The data collector shall withstand 2 meter drop
- 3.8 It shall have no open contacts. In this respect, the data collector shall be able to operate on batteries that require no re-charging.
- 3.9 The battery shall be readily available and able to last for approx.30,000 readings before replacement
- 3.10 The battery shall be user replaceable
- 3.11 It shall be compact in size, not larger than diameter of 30 - 39 x 160 mm
- 3.12 It shall be light in weight (less than 200 gm, incl. battery)
- 3.13 Shall not require any particular programming for easy operation
- 3.14 Shall have a memory capacity of up to 4000 readings
- 3.15 Shall indicate when battery is low
- 3.16 Shall have no movable parts
- 3.17 Shall take not more than 0.5 second to read the checkpoints
- 3.18 Programming data for the patrol rounds shall not be stored in the data collector
- 3.19 **The data collector shall have a built-in microwave detection fuse to detect physical abuse should it be placed in high powered equipment such as microwave oven.**

4. Data Communication with PC

- 4.1 **Shall not require any form of downloading unit or cable to communicate with the PC thus eliminating any unnecessary maintenance resulting in cost savings.**
- 4.2 **A USB Bluetooth™ adaptor shall be used to communicate between the data collector and the PC**
- 4.3 A RFID “downloading” ISO card shall be provided to enable the Bluetooth™ communication in the data collector to turn “ON” so as to transfer the data. Once the information is transferred, the Bluetooth™ communication turns “OFF” automatically.
- 4.3 For Online Real-time information by GSM/ GPRS, the system shall be ready for future expansion to transfer data via PDA or mobile phone to the central monitoring station.

5. Data Management Software Program

The data management software program should have the following features:

- 5.1 Shall be able to run on minimum Windows 98/ NT, XP, Vista
- 5.2 **The data management software shall be encrypted to avoid any tampering of data**
- 5.3 Shall monitor at least 500 - 50,000 checkpoints for future expansion
- 5.4 Shall be able to program at least 20 - 10,000 different rounds

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- 5.5 Shall be able to program in fixed or random patrol sequences
- 5.6 Shall include programming of at least 100 - 2000 event checkpoints related to observation by the guards
- 5.8 Shall have minimum 48 time windows per system
- 5.9 Shall have 2 level password protection
- 5.10 Shall be able to accommodate remote downloading for remote site monitoring
- 5.11 Shall have a back up / restore capability
- 5.12 Shall allow customized report format
- 5.13 **Data cannot be exported to a text file or excel spread sheet to preserve data integrity unless authorize by the client while maintaining the data integrity.**

- 5.14 **Shall be able to provide the following reports:**
 - A master data report
 - A listing of all checked checkpoints in chronological order stating checkpoint ID, location, starting and ending time
 - An evaluation of performance including, name of guard, all checked checkpoints in chronological order, checkpoint ID, events (incident) occurred, location and a statistical report in percentage
 - An evaluation of deviations, including name of guard and statistical report
 - A personnel evaluation report
 - A long term evaluation report with an indication of correct checks in percentage
 - Shall be able to produce history reports
 - Shall have the capability of sorting of data for easy evaluation

6. Additional

The following items of works shall be included in the tender prices:

- 6.1 Technical advice on the specified installation of checkpoints
- 6.2 Supply of installation documentation necessary for after-sales service
- 6.3 Assistance in programming the user's parameters according to client's data
- 6.4 One-time instruction of the client in the use of both hardware and software
- 6.5 Operation / instruction manuals for both hardware and software

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COMPLIANCE LIST

ALL VENDORS ARE REQUIRED TO PROVIDE COMPLIANCE INFORMATION ON THE COLUMN PROVIDED.

TERMS OF REFERENCE		COMPLIANCE	
		YES	NO
1.	Introduction		
	1.1		
	1.2		
2	Station Checkpoints – Proximity		
	2.1 Critical Compliance		
	2.2		
	2.3		
	2.4		
	2.5		
	2.6		
	2.7		
	2.8		
	2.9 Critical Compliance		
	2.10 Critical Compliance		
3	Portable Data Collector		
	3.1		
	3.2 Critical Compliance		
	3.3 Critical Compliance		
	3.4		
	3.5		
	3.6 Critical Compliance		
	3.7 Critical Compliance		
	3.8 Critical Compliance		
	3.9		
	3.10		
	3.11		
	3.12		
	3.13		
	3.14		
	3.15		
	3.16		
	3.17		
	3.18		
	3.19 Critical Compliance		

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4	Data Communication to PC		
	4.1		
	4.2		
	4.3		
5	Data Management Software Programme		
	5.1		
	5.2 Critical Compliance		
	5.3		
	5.4		
	5.5		
	5.6		
	5.7		
	5.8		
	5.9		
	5.10		
	5.11		
	5.12		
	5.13 Critical Compliance		
	5.14 Critical Compliance		
6	Additional		
	6.1		
	6.2		
	6.3		
	6.4		
	6.5		

NOTICE - Please note that above information is compulsory. Information not provided will be disqualified accordingly. The Contractor shall provide explicit responses of compliance or non-compliance for this tender. In the event of any non-compliance with the technical requirements, the Contractor shall satisfy the Authority with a write up to explain that the items offered are equivalent to the required. Where the Contractor fails to satisfy the Authority in the manner above, the tender is liable to be rejected.