P R O F O R M A

To: Team 3A of CMHPO/HHB

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Your ref: (1) in L/M to HHB/H/24/17/3/7/1/3

**Part 1 – Supplier’s Contact Details**

From:

(Name of the Supplier): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(please fill in)

Name of Contact person: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(please fill in)

Email: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(please fill in)

Note\* Please delete as appropriate

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*This document does not constitute any offer or invitation / solicitation of any offer in connection with the exercise described herein. Neither this document nor any activities in connection therewith shall create any legal obligations or liabilities in any way on the part of the Health Bureau (HHB) or the Government of Hong Kong Special Administrative Region. Neither this document nor anything contained herein shall form the basis of any contract or commitment whatsoever. In responding to the RMI, a respondent shall be deemed to have agreed to all the terms of this invitation.*

Dear Sirs / Madams,

I would like to provide the information of the Good for your consideration. **{\*Part 2 where a tick in the box (at the right-hand side) indicating that our products meet with the requirements and the Price Schedule in Part 3 and Particulars of Goods Schedule in Part 4 and the Sales Volume of the Offered Goods in Part 5 and Questionnaire in Part 6 below are duly completed.}**

The Requirements set out in **Part 2 (Technical Specifications for the Goods)** below consist of mandatory features and desirable features. All mandatory features are essential requirements.

(M): Mandatory

(D): Desirable

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**Technical Specifications**

Please provide return on Column IV & Column V as a point-by-point statement of compliance of the Technical Specifications or alternative proposal as appropriate as follows:-

| **Column I** | **Column II** | **Column III** | **Column IV** | **Column V** |
| --- | --- | --- | --- | --- |
| **Section** | **Technical Specification** | **(M)**  **/ (D)** | **Please ✓ if fully comply** | **Alternative proposal if not fully comply**  **(submit separate sheet, if needed)** |
|  | **Scope of Work** |  |  |  |
|  | The scope of works (the “Works”) shall comprise the design, supply, delivery, installation, planning, method statements, deep and active coordination, interface, supervision, testing, commissioning, training, documentation, system integration and activation, defects liability and maintenance of **Patient and Asset Tagging System (“System”)** to be provided at the Chinese Medicine Hospital, and in accordance with the drawings, and the specification. The completion of all systems shall be based upon its full functionality and operation. | **(M)** |  |  |
|  | The implementation services for the Contracts shall include the following items.  Supplier(s) shall submit return for ALL common clauses in the following Sections:  **Section 1 - Scope of Work & Equipment Specification**  **Section 2 - Standards for the Works**  **Section 3 - Overall System Requirement**  **Section 4 - Interfacing Equipment**  **Section 5 - Other Requirements**  **Section 6 - Defects Liability Period (DLP) / Warranty Period Services**  **Section 7 - Comprehensive Maintenance Services**  **Section 8 - Warrantee Services Specifications**  **Section 9 - Maintenance Services Specifications**  **Section 10 - Implementation Plan Specifications**  Major components of the Patient and Asset Tagging System:   1. 2-way tag sensing gates (“Gates”) detecting movements of patients and assets adopting RFID or equivalent wireless sensing technology, which shall generally comprise RFID tag readers (antennas) and associated control devices; 2. RFID tags for identification of patients and assets and the associated tag label printers; 3. Network based computer server station managing the identities and location/ movement record of patients and assets within specific areas and zones; 4. Handheld tag scanner for information association between tags and the System. | **(M)** |  |  |
|  |  |  |  |  |
|  | **General Requirement** |  |  |  |
|  | The implementation services for the Works aim to utilise the System for the following purposes:   * Anti wandering measure for the elderly patients * To prevent abduction of paediatric patients * To track high risk patients * To track movement and locations of major / important assets and equipment | **(M)** |  |  |
|  | The main function and logistic flow for management of the System are:   * Identification of patients within specific clinical areas / zones by strategic locations of the Gates * Identification of goods / equipment within specific areas / zones by personnel portering, except the goods delivery by autonomous mobile robots, by strategic locations of the Gates * Control and access of the system:  1. Computer workstations (wired connection); 2. Mobile devices (wireless connection).  * System alert message/ signal issue:  1. Alert message via mobile device applications; 2. E-mail   (Please refer to **Appendix B** for the System Architecture Diagram of Patient and Asset Tagging System.) | **(M)** |  |  |
|  | The Supplier shall design, supply and install the system software including interface with the Hospital Information System (“HIS”) and the Enterprise Resources System (“ERP”). | **(M)** |  |  |
|  | The Supplier shall design, supply and install the computer system server to be located at the Hospital Data Centre (“HDC”); programming design and development of system control / access via wired or wireless connection, including software/ application of mobile devices;  (Please refer to **Appendix A** for the Schedule of Quantity of Patient and Asset Tagging System Components). | **(M)** |  |  |
|  | The Supplier shall supply and install associated network equipment (including but not limited to patch cables, power cords and all necessary accessories, etc.) which shall be rack-mountable on EIA 19" rack with rack mount kits supplied, and to be installed in the racks provided by other contractor in Telecommunication Rooms (“TR”) and HDC. | **(M)** |  |  |
|  | The Supplier shall supply and install the Gates and all associated equipment (eg. antenna, system controller, readers) coming with associated wall-mount / ceiling-hung supporting frames, including cabling connection works between the Gates and the network data ports (via Cat 6 cable) and AC power sockets at the proximity. | **(M)** |  |  |
|  | The Supplier shall supply tags and handheld scanners for tag association with the tag management system. | **(M)** |  |  |
|  | The successful Supplier shall submit the type approval certificate or supporting document on the exemption from the Office of the Communications Authority (OFCA), HKSAR for the RFID system, and assist the hospitals to obtain user license, if required. Please state “N.A.” if not applicable | **(M)** |  |  |
|  |  |  |  |  |
|  | **Operational Requirement** |  |  |  |
|  | The system shall be virtually free from false triggering. | **(M)** |  |  |
|  | The elements of the system shall have proven track records in a Hong Kong hospital environment and shall be verified free of causing any interference to sensitive hospital equipment. | **(M)** |  |  |
|  | The system is a way of automating the management and locating process of patients and physical assets. It works by loading an RFID tag with data and attaching it to a relevant patient or asset. The data can include anything from name, condition, and location. | **(M)** |  |  |
|  | The system is designed for management of tracking important asset and equipment of department and patient within specific clinical areas and zones by using RFID to perform scanning and checking function. | **(M)** |  |  |
|  | Through an RFID tags, an RFID reader is able to capture the stored data. Eventually collecting it in a sophisticated patient and asset tracking system where the data can be monitored and actioned. | **(M)** |  |  |
|  | Specific technology and/or system design measures (to be specified\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) to prevent human error in the tracking process and achieve the following:   1. Tracking multiple patients and assets simultaneously; 2. Eliminating/ minimizing intervention on the tagging system by human activities; 3. Collecting data in real-time | **(M)** |  |  |
|  | The RFID asset tracking process can be broken down into the following stages:   1. Data is stored or associated on an RFID tag, with a unique electronic product code and is attached to an asset 2. An RFID handheld scanner identifies and locates nearby RFID tag | **(M)** |  |  |
|  | The RFID patient tracking process can be broken down into the following stages:   1. Data is stored or associated on an RFID tag (ie. wristband) with a unique code with patient related information 2. When the patient wearing the RFID tag (ie. wristband) approaches a monitored door with sensing gateway/ antenna, the system shall receive signals from the tag. These signals are then transmitted to the database and application server, where they are connected and integrated. | **(M)** |  |  |
|  | The offered RFID system and the operational flow programming shall be customer-made designed. The Supplier shall submit their proposal for Hospital’s review and approval before installation and application.  Design review meeting(s) shall be held with Hospital’s representatives to configure the System program design suiting hospital operation requirement. | **(M)** |  |  |
|  | The Supplier shall provide the full set of RFID system installation and technical implementation proposal, including but not limited to:   1. The proposed system demarcation plan with the RFID control and coverage 2. The proposed RFID system interface 3. The proposed functions and system features 4. The proposed system workflow on operation 5. The proposed equipment setting out and equipment list. | **(M)** |  |  |
|  | The RFID tags should be “passive type” without any battery and not a real-time tracking system. | **(M)** |  |  |
|  |  |  |  |  |
|  | **System Requirement** |  |  |  |
|  | The Supplier shall perform the interface coordination with other interfacing contracts / parties who are in collaboration to the construction and operation of the Patient and Asset Tagging System. | **(M)** |  |  |
|  | The Supplier shall provide Patient and Asset Tagging System computer system server with all necessary software and hardware (including but not limited to RFID sensing gateway/ antenna, handheld scanner, etc.) and the system shall operate at both server and workstation level and mobile device. | **(M)** |  |  |
|  | The computer server shall be provided by the Supplier and hosted in the equipment racks in the HDC of CMH.  (Please refer to **Appendix C** for the Typology Diagram) | **(M)** |  |  |
|  | The Supplier shall design, supply and install the Patient and Asset Tagging System and all associated peripherals equipment. The system shall consist of the following major equipment/ system components, including but not limited to: -   1. Administration Station (computer server) 2. RFID Patient and Asset Tagging System Server Software 3. RFID 2-way Sensing Gateway/ Antenna 4. RFID Handheld Reader 5. RFID Tags (wristband & paper/ flag types) 6. RFID Tag label printer | **(M)** |  |  |
|  | The system shall be able to perform the following functions: | **(M)** |  |  |
|  | The system shall be a web application. Any workstation/server system required shall be included and installed. | **(M)** |  |  |
|  | The system shall be able to register, change RFID tag and perform patient/asset association. It shall allow user to input item information in the system database.  Any device needed for RFID tag registration/disassociation shall be provided (to be specified). | **(M)** |  |  |
|  | The RFID sensor shall be able to detect the RFID tags with no barrier of metal, liquid and interfere of each other. | **(M)** |  |  |
|  | The system shall be able to send the notification to user when the patient move beyond the specific zone or area. | **(M)** |  |  |
|  | The System shall authenticate CMH’s users in accordance with CMH’s authentication system, including but not limited to Active Directory.  The System shall support role-based security, authorization and corresponding management features. | **(M)** |  |  |
|  | The web interface shall allow user to search/view/export item list with RFID tagging.  The system shall be included the filter function for limiting the search result. | **(M)** |  |  |
|  | The system shall be able to check the detail on mobile devices. | **(M)** |  |  |
|  | Audit log shall be provided. | **(M)** |  |  |
|  | All patient/ asset information shall be exported to a PDF document or excel and downloaded by users. | **(M)** |  |  |
|  | User can input the patient and asset information to register the new information by using web browser. The fills and categories of information shall be customized to suit user operational need. | **(M)** |  |  |
|  | The system shall allow customized notification/alert. | **(M)** |  |  |
|  |  |  |  |  |
|  | **Software Requirement** |  |  |  |
|  | RFID Patient and Asset Tagging System Server Software shall include but not limit to following features: |  |  |  |
|  | User Account Management | **(M)** |  |  |
|  | Location Management (create/ edit/ suspend) | **(M)** |  |  |
|  | Patient and Asset Management (create/ search/edit) | **(M)** |  |  |
|  | Patient and Asset Check-In/ Check-Out | **(M)** |  |  |
|  | Asset Disposal | **(M)** |  |  |
|  | Reports Generation:   1. Inventory 2. Transaction 3. Disposal 4. Stock Take 5. Patient In/out and location record | **(M)** |  |  |
|  | Mobile device applications achieving the following:   1. Alert signal issue to mobile devices on pre-set scenarios of cross-zones movement of tagged patients/ assets; 2. Compatible with IOS or Android devices; | **(M)** |  |  |
|  | Inventory report should include all equipment with latest information of asset number, brand, model, serial no., description, location, officer in-charge and remark. | **(M)** |  |  |
|  | Patient report should include information of patient name, patient ID number, bed number, room number, last seen location/time and movement record. | **(M)** |  |  |
|  | The System should be able to show which specific areas the patient/asset is currently in according to the area defined by the user. | **(M)** |  |  |
|  | The System should be able to perform stock taking, stock in, stock out and search functions of patient and asset. | **(M)** |  |  |
|  | The system should be able to support at least 500 pcs of patient tag (wristband type). | **(M)** |  |  |
|  | The system should be able to support at least 2,000 pcs of asset tag (paper/ flag type). | **(M)** |  |  |
|  | Support ultra high frequency (“UHF”) RFID wireless technology that can be scanned by a UHF portable reader provided by the supplier for stock-taking. | **(M)** |  |  |
|  | The supplier shall provide a web application (user interface) that can fulfill the following requirements: | **(M)** |  |  |
|  | The web application should be able to run in the Chrome or Edge or Safari. | **(M)** |  |  |
|  | Locate the patient/asset by pre-defined zones/ areas efficiently. | **(M)** |  |  |
|  | Generate a report of all patient/asset with latest information of location by pre-defined zones/ areas. | **(M)** |  |  |
|  | The report in excel and PDF format shall be customisable and can be generated from web-portal. | **(M)** |  |  |
|  | The Supplier shall provide 1 set of license and it is used for data collection, storage and patient and asset tracking management. The license and software shall be compatible with the RFID system, including all computers. | **(M)** |  |  |
|  | Software / license shall be upgraded without charges within the warranty period. | **(M)** |  |  |
|  | Mobile application / handheld device is used for on-site data collection, subject to the final decision from users. | **(M)** |  |  |
|  | The Contractor shall provide the permanent anti-virus software with licenses and the regular update to the anti-virus definition files for all components of the System when the corporate anti-virus software of the CMH is not applicable. | **(M)** |  |  |
|  | The Supplier shall ensure that there should not be any external non-hospital network connections to the RFID system unless authorized. | **(M)** |  |  |
|  | Confidential data concerning patients and hospital assets must not be exported for any usage other than authorized use in CMH. | **(M)** |  |  |
|  | Supplier shall provide a System data backup solution, eg. network attached storage (NAS) with RAID 1 and minimum 2 x 10TB storage, or other better solutions to be specified, to perform data backup. | **(M)** |  |  |
|  |  |  |  |  |
|  | **Hardware Requirement** |  |  |  |
|  | The equipment of the Patient and Asset Tagging System shall be using British Standard 13A plugs with Earth wired. | **(M)** |  |  |
|  | The output devices of the system shall be bonded to earth or double insulated, to avoid all potential electrical leakage. | **(M)** |  |  |
|  | The equipment shall be equipped with an over-current protective cutout device. | **(M)** |  |  |
|  | The equipment shall remain operational and within specifications throughout the voltage range of 220V ± 6 %, 50Hz ± 2%, Single Phase, AC electrical supply. | **(M)** |  |  |
|  | The equipment shall be free of burrs, sharp edges, protrusion and other defects which may cause any potential hazard to the users and maintenance staff. All surfaces and edges shall be smooth and non-abrasive. | **(M)** |  |  |
|  | Equipment offered shall comply with the safety requirements of IEC60950-1 / IEC60601-1 / IEC61010-1 or equivalent. | **(M)** |  |  |
|  | The electrical or electronic equipment shall comply with the requirements of “CE Mark” and “FCC Mark” (or their equivalent requirements) in relation to health, safety, environmental protection standards and electromagnetic radiation limit. | **(M)** |  |  |
|  | The Supplier shall supply CMH with medical equipment with international directive of RoHS, WEEE, etc. in restriction and control of heavy metal contents, disposition and recyclable options wherever possible, for CMH consideration. Detailed information, if any, shall be provided during tender submission. | **(M)** |  |  |
|  | Robustness design, hardware will be automatically started-up after reboot, without human interaction | **(M)** |  |  |
|  | The system offered shall comprise the following hardware or equivalent subject to final site condition, including but not limited to the minimum requirement. The Supplier shall provide sufficient hardware and accessories to facilitate smoothness and effectiveness connection of Patient and Asset Tagging System.  (Please provide details in **Schedule D**) | **(M)** |  |  |
|  | **RFID 2-way Sensing Gateway/ Antenna (“Gates”)** |  |  |  |
|  | All-in-one integrated UHF RFID antenna cum reader device, or equivalent equipment set (to be specified), capable of performing 2-way motion sensing of multiple RFID tags, x 77 pcs | **(M)** |  |  |
| 4 | Wide-angle multi-polarized antenna design, or equivalent technology (to be specified), which increases detection coverage over traditional single-direction RFID readers | **(M)** |  |  |
|  | Dual circular and linear coverage patterns, or equivalent configuration (to be specified), maximize tag visibility in any application regardless of environment size or complexity | **(M)** |  |  |
|  | Beam steering for pinpoint location accuracy typically better than 0.6 meters, or other achievable range to be specified. | **(M)** |  |  |
|  | Ability to distinguish direction of movement, can identify the patients or assets are moving into or out of a location through the Gates. | **(M)** |  |  |
|  | Steerable phase-array embedded antennas, other equivalent technology (to be specified). | **(M)** |  |  |
|  | 10/100 BaseT Ethernet network connectivity, IPv4, IPv6 | **(M)** |  |  |
|  | Operating temperature -20°C to 55°C | **(M)** |  |  |
|  | UHF RFID Frequency 902-928MHz | **(M)** |  |  |
|  | EPC global UHF RFID Class 1 Gen2/ ISO18000-6C | **(M)** |  |  |
|  | IEC IP51 Sealing | **(M)** |  |  |
|  | POE+ powered or by AC-DC power supply | **(M)** |  |  |
|  | To comply ROHS, WEEE | **(M)** |  |  |
|  | Ceiling-hung installation by proprietary supporting frames provided by the manufacturer, or equivalent supporting frames endorsed by the manufacturer in view of product compatibility and safety standard. | **(M)** |  |  |
|  | Operation height: Minimum 2,300mm(H) above finished floor level and under 2,600mm(H) false ceiling level. | **(M)** |  |  |
|  | The weight of the Gates should be less than 5.5 kg | **(M)** |  |  |
|  | **RFID Handheld Reader** |  |  |  |
|  | UHF RFID Handheld Reader x 42 pcs | **(M)** |  |  |
|  | Minimum 5.5” IPS HD display or above with Corning Gorilla 3rd generation industrial grade multi-touch capacitive screen, or equivalent (to be specified). | **(M)** |  |  |
|  | USB Type-C communication interface | **(M)** |  |  |
|  | MT6771 Octa-core 64-bit processor, 4 large core A73 + 4 small core A53, main frequency 2.0GHz, or equivalent (to be specified). | **(M)** |  |  |
|  | Minimum: RAM: 2GB, ROM 16GB, supports 256GB Micro SD card or above, | **(M)** |  |  |
|  | Operating temperature -20°C to 50°C | **(M)** |  |  |
|  | UHF RFID Frequency 865-868MHz, 902-928MHz | **(M)** |  |  |
|  | RFID Stock Take application preinstalled (application details and function to be provided) | **(M)** |  |  |
|  | Display instant progress while stock taking (information details to be provided) | **(M)** |  |  |
|  | The UHF RFID reader shall provide a search function for specific patient/asset tag. The reading range should be not less than 2 M (search range to be advised). | **(M)** |  |  |
|  | The operating hours of the UHF RFID portable reader should be more than 2 hours with RFID scanning. | **(M)** |  |  |
|  | The battery for the UHF RFID reader should be easy for replacement by the user. | **(M)** |  |  |
|  | The battery of the UHF RFID reader should be rechargeable. | **(M)** |  |  |
|  | Communication between the handheld reader(s) and the computer workstation(s) shall be capable by both wired (USB – Type C) and wireless (Wi-fi) connections (details to be specified). | **(M)** |  |  |
|  | **RFID Wristband Tag (Patient Tag)** |  |  |  |
|  | The supplier should provide 500 nos. RFID wristband tags for patient tagging system. | **(M)** |  |  |
|  | Wristband tag material shall be waterproof and durable in daily 24-hour comfort use by patients (proposed wrist band design to be specified). | **(M)** |  |  |
|  | RFID wristband tag should be reusable upon patient identity re-association. | **(M)** |  |  |
|  | Wristband tag shall be of minimized size having maximum 70mm x 20mm area for RFID tag installation and adequate band length for patient wearing (proposed wristband design and size to be specified). | **(M)** |  |  |
|  | The weight of wristband tag should be less than 2g (proposed weight to be specified). | **(M)** |  |  |
|  | The tags shall be white colour to facilitate easy marking and identification of patient data if required. | **(M)** |  |  |
|  | **RFID Paper Tag (Asset Tag)** |  |  |  |
|  | The supplier should provide 2,000 nos. RFID paper tags for asset tagging system. | **(M)** |  |  |
|  | Paper tag material shall be waterproof and durable in use under normal circumstances (proposed paper tag design to be specified). | **(M)** |  |  |
|  | Paper tag should be reusable upon asset identity re-association. | **(M)** |  |  |
|  | Paper tag shall be of minimized size having maximum 35mm x 15mm area for RFID tag installation and appropriate back paper size for attachment to asset/ equipment (proposed paper tag design and size to be specified). | **(M)** |  |  |
|  | The weight of paper tag should be less than 1g (proposed weight to be specified). | **(M)** |  |  |
|  | The RFID tag should be able to attach to the equipment surface best suiting the tag reading mechanism of the Gates and RFID scanner. | **(M)** |  |  |
|  | **RFID Tag Label Printer** |  |  |  |
|  | Supplier to provide 42 nos. printers (technology, design, dimension, specification of printer to be specified). | **(M)** |  |  |
|  |  |  |  |  |
|  | **Interfacing Requirement** |  |  |  |
|  | The system should interface with HIS regarding patient and goods stock information to retrieve patient and asset information including patient name, patient ID, room number, asset description, location, quantities and logistic record, etc. subject to agreement by CMH upon system design submission and review. | **(M)** |  |  |
|  |  |  |  |  |
|  | **Standards for the Works** |  |  |  |
|  | For design details, materials, equipment and workmanship, the Supplier shall make reference to International Electrotechnical Commission (IEC), conformité européenne (“CE”) marking, International Organization for Standardization (ISO) and other international committees to be approved by the Government Representative. | **(M)** |  |  |
|  | Installation, wiring and system equipment shall comply with the requirements of the following standards for the latest edition as at the date of the tender issue. Copies of the following standards must be obtained directly from the appropriate publisher:  (a) The Electricity (Wiring) Regulations issued by the Hong Kong Government;  (b) 2020 Edition of Code of Practice for the Electricity (Wiring) Regulations issued by the Electrical and Mechanical Services Department;  (c) "Regulations for Electrical Installations" issued by the Institution of Engineering and Technology (The IET Wiring Regulations, the latest Edition);  (d) General Specification for Building Services Installation in Government Buildings of the Hong Kong Special Administrative Region (2022 Edition);  (e) Local electricity supply company's requirements, the latest edition | **(M)** |  |  |
|  | The Supplier shall be responsible for all matters concerning work safety and health. The Supplier shall assume full responsibilities for the safety and health management and bear full liabilities for all injuries to all persons and all damages to all properties which have resulted from any accidents related to the execution of the Works. | **(M)** |  |  |
|  |  |  |  |  |
|  | **Overall System Requirement** |  |  |  |
|  | The Supplier shall design, supply and install the Patient and Asset Tagging System associated peripheral equipment, hardware and software systems to achieve the operation flow. | **(M)** |  |  |
|  | The equipment will be used to serve the Patient and Asset Tagging System operation on a daily basis; thus the required quality, occupational safety and health as well as efficiency shall be built into logistic flow, workflow, facilities and contingencies and risk management process. | **(M)** |  |  |
|  | Languages of all display / working station information for all equipment and systems shall be English and Traditional Chinese. | **(M)** |  |  |
|  | The Supplier shall have a local equipment installation and technical support team to support all offered equipment and systems.  The Supplier shall provide the company relevant experience of supply and installation of equipment in the past *5* years, the Project’s Organisation Chart and the CVs of Proposed Project Team.  (Please provide details in **Schedule C)** | **(M)** |  |  |
|  | The Supplier shall provide, design, supply and install all systems, subsystem, components and accessories to achieve the full functionality of the Patient and Asset Tagging System. | **(M)** |  |  |
|  | The Supplier shall coordinate with the Design and Build Contractor for design, supply and installation of the electrical and mechanical services provisions to the installed items of equipment. | **(M)** |  |  |
|  | The Supplier shall work with the contractor of IT infrastructure to ensure the proper hosting, installation and configuration of the system.  Please refer to **Appendix D -** “CMH IT Infrastructure Services” | **(M)** |  |  |
|  | If there are any operational reasons that the system resided within the CMH premises needs to connect to the CMH network for information exchange with the hospital HIS systems and any subsystems, the Supplier shall be responsible for implementing such network connection and ensure that all the requirements described in **Appendix** **E -** **"**Furniture and Equipment (F&E) Security Guidelines for CMH" are strictly adhered to. | **(M)** |  |  |
|  | The Works shall be designed with contingency mode to prevent single point of failure. | **(M)** |  |  |
|  | All non-metal material shall be fire-retardant type and complied with UL94V2 or UL94V0, or other equivalent standards. | **(M)** |  |  |
|  | All Works materials shall allow cleaning with cleaning agents included water/soap water/diluted alcohol. | **(M)** |  |  |
|  | The Supplier shall implement for all items and works on the Equipment Installation Schedule. This includes all incidentals, equipment, appliances, services, hoisting, scaffolding, supports, tools, supervision, labour, consumable items, fees, licenses, etc., necessary to provide complete installation. | **(M)** |  |  |
|  | The Supplier shall provide all relevant structural floor, wall or ceiling loading requirements (e.g. supporting structural frame) to Design and Build Contractor for mounting of Patient and Asset Tagging System on walls or ceiling, including transportation, also other necessary equipment for facilitating equipment hoisting for installation and maintenance where applicable.  (Please provide details in **Schedule A)** | **(M)** |  |  |
|  | The Supplier shall provide fixing, support framework and maintenance platform for all equipment and all system components. | **(M)** |  |  |
|  | If there are any permanent structural building works to be supplied and installed by the Supplier, all mounting support details with necessary structural design calculation and installation method shall be certified by Hong Kong Registered Structural Engineer (RSE).  The RSE shall have at least 5 years post registration experience in structural design and coordination. | **(M)** |  |  |
|  | The Supplier shall provide all electrical and mechanical works associated with the Patient and Asset Tagging System and/or the System installations or as required for satisfying the current Building Ordinances and relevant statutory regulations and rules in relation to the System.  (Please provide details in **Schedule B)** | **(M)** |  |  |
|  | The Supplier may propose specific requirements / international standards of building works applicable to the installation of the Patient and Asset Tagging System other than those specified herein.  (Please provide details in **Schedule B)** | **(M)** |  |  |
|  | The Supplier shall take responsibility for the liaison and coordination with CMH Representative, Design and Build Contractor, and Building Services Contractor for the site installation and co-ordination work to ensure smooth implementation of all necessary Building Services works which shall be carried out by the Supplier for the installation of the Patient and Asset Tagging System. | **(M)** |  |  |
|  | The Supplier shall be responsible for the coordination with all related contractors and other external parties. It shall include but not be limited to the coordination for cable trunking and conduit arrangement, power supply arrangement, site logistics, access control and other building service provisions, etc. required for the supply and installation of the Patient and Asset Tagging System. | **(M)** |  |  |
|  | The Supplier shall be responsible to supply and install all required material, fitting, cables, pipeworks, ductworks, etc., for connecting the equipment to the corresponding building services provision by the Design and Build Contractor and its subcontractors. Any revision or additional works on the building services provisions, including but not limited to fire service, lighting, air-conditioning & mechanical ventilation, drainage, water supply point, medical gas outlet, etc., shall be responsible by the Supplier to ensure the design performance would be not affected and degraded after installation of equipment. | **(M)** |  |  |
|  | The Supplier shall be responsible for all statutory submissions for any revision or additional works on site to suit the installation and daily operation of the equipment if required. | **(M)** |  |  |
|  | The Supplier shall arrange for all submissions and allow for all costs relating to all statutory inspections and certificates and for sectional completion as appropriate and as necessary. | **(M)** |  |  |
|  | The Supplier shall be responsible for sealing up the reserved wall opening and providing and installing the appropriate fire barriers, fire-stop sealants, fire-stop blocks, etc., as necessary to maintain the fire resistance rating, where applicable. | **(M)** |  |  |
|  | The Supplier shall be responsible to re-provide, reinstate and make good of the fire barriers, fire-stop sealants, fire-stop blocks, etc. for fire compartmentation, fire rated enclosure, cables trays, pipes and other penetrations required for equipment installation to maintain the fire resistance rating, where applicable. | **(M)** |  |  |
|  | The Supplier shall make good of the Fire Service Installation (“FSI”) if the equipment affect the FSI by the Design and Build Contractor. The Supplier shall be responsible for the cost incurred and submission to the government so that the area(s) remain compliance with relevant fire services statutory requirements. | **(M)** |  |  |
|  | The Supplier shall provide all labour and materials necessary to form a complete implementation services as prescribed. It shall include not only the major items of equipment shown or specified but also all the incidental peripheral components necessary for the complete execution of the Works. | **(M)** |  |  |
|  | The Supplier shall be responsible for ensuring that the final installation is in full compliance with all requirements and regulations of relevant Government Authority. The Supplier shall also be responsible for obtaining all necessary permits, etc. where applicable. | **(M)** |  |  |
|  | The Works shall also fully comply with all statutory ordinances, regulations, standards, codes of practice, circular letters relevant to the System installation together with any amendments made thereto as required by the relevant authorities for the safe and operation of the Works. | **(M)** |  |  |
|  |  |  |  |  |
|  | **Interfacing Equipment** |  |  |  |
|  | The Supplier shall perform all the interface works to be required for the Patient and Asset Tagging System and the associated connecting system(s).  The Supplier shall interface and integrate all the systems in their own Contract, and interface and integrate with HIS and/ or other contracts / external systems as provided by others for forming complete function of the Patient and Asset Tagging System.  The Suppliers shall coordinate with each other to implement their design, equipment supply and installation works in neat and well-coordinated layouts to be required for performing complete system function of the Patient and Asset Tagging System Equipment in the CMH.  The Supplier shall conduct interface works with the Design and Build Contractor for the building services provision and building / structural provision to the Patient and Asset Tagging System Equipment in their Contract and the associated connecting equipment and system.  (Please refer to **Appendix B** for the System Architecture Diagram of Patient and Asset Tagging System. | **(M)** |  |  |
|  | For all interfaces, the Supplier shall get all required information from the relevant Interfacing Contractors *I* Parties for his/her own coordination and perform the coordinated interface management and manage the associated design works. | **(M)** |  |  |
|  | The system should interfacing with CMH system to retrieve information, | **(M)** |  |  |
|  | The roles and responsibilities of the Supplier shall be as follows:-   1. To identify and establish all the necessary interfaces and their requirements jointly and mutually with the other Interfacing Contractors / Parties. 2. To provide the necessary information, material, technical expertise and manpower required for the interface design and interface testing works. 3. To coordinate with the Interfacing Party in obtaining access to the site, on which Interfacing Contractors / Parties will be carrying out their own construction activities. 4. To provide all required information and Building Services requirements, if applicable, to perform the interfacing design, management and implementation works. 5. To provide single point of contact to coordinate with the Interfacing Party to inspect if the provisions provided are ready in accordance with the coordinated interface drawings, which are prepared by himself/herself and agreed with the interfacing party. 6. To plan, coordinate and finalize the interfacing design with the Interfacing Contractors / Parties as well as with any third party or statutory authorities that are necessary in the course of interface design development. 7. To plan, co-ordinate, organize and execute all interface tests during off-site and on-site environment. 8. To produce jointly with the Interfacing Contractors all the required Interface Management Plan (IMP) and Detailed Interface Documents (DID) which shall include Detailed Interface Programme (DIP), and Interface Test Documents (ITD). 9. To appoint a competent and experienced person who will be the single point of contact on interface design and management with the other Interfacing Contractors / Parties. 10. To prepare and submit all interface design meeting minutes, and monthly interface design progress report to the Government Representative for information. | **(M)** |  |  |
|  | The Supplier shall attend site / co-ordination meetings to ensure that building works by other parties proceed satisfactorily and allow wiring, installation and other related works by the Tenderer to be completed according to programme. | **(M)** |  |  |
|  | The operation of Patient and Asset Tagging System Equipment shall be complied with all Fire Services Department (FSD) requirement. The Supplier shall coordinate with the Design and Build Contractor to arrange sufficient space and support for the fire services provision such as in-rack fire sprinklers and the pipe works, etc. | **(M)** |  |  |
|  |  |  |  |  |
|  | **Other Requirements** |  |  |  |
|  | **Installation Requirement** |  |  |  |
|  | The Supplier shall be responsible for all the engineering works for setting up, configuration, software programming of the Patient and Asset Tagging System. | **(M)** |  |  |
|  | The Supplier shall be responsible for supply and installation of all power cords, HDMI cables, CAT5e / CAT6 cables, control cables, cabling and ancillaries for all system interfacing the Works. The cables supplied shall be of low smoke zero halogen (LSZH) type. | **(M)** |  |  |
|  | The Supplier shall be responsible for the design, supply and installation of all mounting brackets and fixing accessories for all types of mounted type equipment according to the type of installation to suit the actual site condition.  The design and supply of the mounting brackets and the associated installation details shall be coordinated with CMH Representative and interior design architect. Any modification of installation details shall not lead to any additional cost. | **(M)** |  |  |
|  | Installation of devices should not obstruct takedown / re-fix of any false ceiling tiles or hinder any maintenance works. | **(M)** |  |  |
|  | The Supplier shall assign competent worker(s) to carry out inspection or works when opening up and re-fixing the false ceiling. Improper fixing of equipment should be rectified or removed as soon as possible to minimize potential falling risks. Special attention should be given to ceiling panels with additional loading (e.g. speakers, spot lighting, etc.). | **(M)** |  |  |
|  | The Supplier shall design, supply and install independent (structural) supporting structures at the structural ceiling soffit (4,500mm general structural floor to floor height) to all Gateways to be hung under false ceiling (2,600mm false ceiling level above finished floor level in general). | **(M)** |  |  |
|  | Any equipment to be installed above false ceiling should be safely fixed and installed at a location that can be accessed readily for repair / replacement. | **(M)** |  |  |
|  | The wall / ceiling mount equipment shall be properly installed with sufficient numbers of anchors or screws selected with reference to the size and weight of the equipment and the type of mounting surface coming with structural design calculation certified by the equipment manufacturers or registered structural engineer(s). | **(M)** |  |  |
|  | To enhance safety in department, safety wire / chain shall be provided to all wall mount / ceiling mount installation. The exact length and quantity of safety wire / chain shall be designed to fit the individual installation, including but not limited to the shape and weight, and site environment. | **(M)** |  |  |
|  | The Supplier shall check for any hidden cables / conduits before the installation to avoid causing interruption to CMH services. | **(M)** |  |  |
|  | The Supplier will be liable for the repair / repair cost for any damage caused during the installation process and due to the proposed installation works. | **(M)** |  |  |
|  | The wall / ceiling mount equipment shall be designed to cater the needs of end-users, by complying the latest revision "Design Manual: Barrie Free Access (2021 Edition)" as baseline. | **(M)** |  |  |
|  | Sufficient maintenance access and facilities shall be provided for future repair and maintenance of the systems. | **(M)** |  |  |
|  | The systems/subsystems after installation shall not obstruct the maintenance access to the other existing services. | **(M)** |  |  |
|  | Supplier shall guarantee their wall/ceiling mounted supporting strength enough to support hanging up their product as offered and their installation shall be according to Manufacturer provided standard installation and mounting method. | **(M)** |  |  |
|  | Before drilling holes on walls, utilities detection shall be performed to avoid the utilities (pipes, ducts, wiring) inside the wall. | **(M)** |  |  |
|  | **Safety and Test** |  |  |  |
|  | Safety Test  Ordinances Concerning Product Safety  Supplier shall confirm that:-  (a) License(s) for the provision of the offered product:-  [ ] is required under the Chapter \_\_\_\_\_\_\_\_\_\_\_ of Hong Kong Ordinance and a copy of which is attached.  [ ] is not required.  (b) Test certificate/report for the provision of the offered product is required and a copy of which:-  [ ] is attached.  [ ] will be completed and submitted during acceptance of goods.  (c) [ ] Test certificate/report for the provision of the offered product is not required.  (d) The Authority \*is required / is not required to maintain the license(s)/test certificate(s) for the possession or use of the offered product.  (Please put a tick in [ ] and delete \* as appropriate) | **(M)** |  |  |
|  | **User Acceptance Test**  For the purpose of this Contract the Goods shall be subject to a functional test for its conformance with the operational and reliability requirements to the satisfaction of the user. In the event that the equipment fails to conform to the above stated requirements, the Supplier is required to carry out appropriate remedial measures and/or any rectification works, including replacement of the entire equipment, where deemed necessary. The date of acceptance of the Goods shall be determined by the CMH based upon the satisfactory completion of such functional test. | **(M)** |  |  |
|  | **Update Technology** |  |  |  |
|  | The system shall be new and of up-to-date model (but in general with proven design not less than 2 years) designed for a nominal serviceable life of at least **7** years. | **(M)** |  |  |
|  | The system supplied shall be proven and to be factory off the shelf standard model products. | **(M)** |  |  |
|  | **Special Notes** |  |  |  |
|  | The Supplier shall be fully responsible for delivery, storage, installation, connection of the item(s) to the services provisions provided until the item(s) is satisfactory completed and accepted by Hospital Representative. | **(M)** |  |  |
|  | The Supplier shall pack and remove all accumulated debris from hospital. No storage of materials and debris will be permitted at the CMH. All the wastes must be disposed at proper place at the cost of the Supplier as approved by the Environmental Protection Department (EPD) / Hospital. | **(M)** |  |  |
|  | The Supplier should note that he will be held responsible for any damage to hospital property as may be caused during item(s) transportation and installation. All due measures should be taken by the Supplier to protect such property. | **(M)** |  |  |
|  | The Supplier shall quote a separate unit price for all items and the related accessories, if applicable. | **(M)** |  |  |
|  | Composite drawings for the designated areas and rooms to be equipped with the items are attached. The Supplier shall provide detailed design requirements with shop drawings showing the layout drawing and set up of the offered items for hospital’s approval. The Supplier shall state clearly all services required for the smooth installation and operation of the equipment in particular electrical supply, steam supply and exhaust air arrangement, if applicable. The Supplier must highlight any deviation so that it can be considered during quotation evaluation. The Supplier shall be responsible to connect the equipment from the termination points of the building services provisions. | **(M)** |  |  |
|  | After reviewing the floor plan, drawings, the Supplier shall ensure the offered items be able to fit into the designated areas and rooms. | **(M)** |  |  |
|  | The Supplier shall mark the fitting out of the furniture items, if applicable, into the designated rooms / areas for hospital consideration. | **(M)** |  |  |
|  | The Supplier shall provide catalogue and the proof and certificate of all the standard and requirements upon request. | **(M)** |  |  |
|  | No temporary storage space for any equipment shall be available within the CMH. If any equipment arrives earlier, than the agreed delivery schedule, the Supplier shall be responsible for the storage of the equipment outside the CMH. | **(M)** |  |  |
|  | The Supplier shall declare their offered product(s) the compliance with Radiation Ordinance (Cap. 303) with details in **Schedule B.** | **(M)** |  |  |
|  | The offered equipment shall not contain any radioactive substances (RS). | **(M)** |  |  |
|  | The offered equipment shall not be an irradiating apparatus (IA). | **(M)** |  |  |
|  | The Supplier is required to strictly follow the house rules of the building Supplier for carrying out works within the site boundary. | **(M)** |  |  |
|  | The manufacturer’s certificate concerning the fitness of item(s) should be provided. | **(M)** |  |  |
|  | **Scope of Supply** |  |  |  |
|  | The Supplier shall supply, deliver and install the subject item(s) including all accessories, training, optional items (if any) and manuals to the satisfaction of the CMH Representative. | **(M)** |  |  |
|  | The subject item(s) supplied shall be self-contained and fit for the purpose. | **(M)** |  |  |
|  | Standard accessories and provisions not specified explicitly but normally supplied together with the subject item(s) shall be provided unless they are replaced by other options. | **(M)** |  |  |
|  | The Supplier shall clearly specify the make, model and details of the manufacturer of the subject item(s) in the offer. All relevant catalogues shall be submitted with quotation document for quotation assessment. | **(M)** |  |  |
|  | **IT / IS Security Requirements** |  |  |  |
|  | The system shall support and comply with all requirements described in “CMH IT Security Requirements”, which can be found in **Appendix E** (Furniture and Equipment (F&E) Security Guidelines for CMH). The Supplier shall review the document thoroughly, and then fill out the “Sample Network Security Compliance Report” for submission of tender. | **(M)** |  |  |
|  | All conduits, cabling, trunking, ducting, switches, hubs necessary signal repeater / booster / amplifier, selection box, power supplies, power supply sockets, interface(s) adapters for the above networking and display, output units shall be supplied and installed by the Supplier for their proper functions. | **(M)** |  |  |
|  | The Supplier should contact CMH IT Department within 2 weeks after the tender awarded if network connection is required for the system implementation. | **(M)** |  |  |
|  | Successful tenderer shall submit drawings on proposal of the network installation for each room used by the system as well as the network layout drawings with respect to trunking and ducting etc. for areas involved. | **(M)** |  |  |
|  | The Supplier shall provide the necessary data ports to facilitate connections to the CMH external network, with approval of CMH IT. The Supplier shall also setup the external network for communications between components of the system if necessary, with approval of CMH IT Department. | **(M)** |  |  |
|  | The Supplier shall provide the information regarding the approximate number of power sockets and data ports required, with their proposed positions indicate on the floor plan for each site to support the functioning of the system. The final socket/port position shall be carefully considered to ensure the cables are fully covered/not to be exposed and accessible by the public and patients. | **(M)** |  |  |
|  | The Supplier shall note their cabling works shall be following the schedule agreed by users & building constructors. | **(M)** |  |  |
|  | The Supplier shall suggest interim solution for System Testing purposes while any part of the hospital network infrastructure still under construction. | **(M)** |  |  |
|  | **Training** |  |  |  |
|  | Operation Training  On-site operational training sessions in Cantonese or English delivered by certified personnel for hospital staff shall be provided by Supplier at no additional charges. The training equipment should be identical to that of the purchased equipment as far as practicable. | **(M)** |  |  |
|  | **Documentation** |  |  |  |
|  | The Supplier shall provide service manuals which contain sufficient service information including full part list, circuit diagrams and all essential information for carrying out the preventive maintenance, corrective maintenance, alignment and calibration of the item(s). | **(M)** |  |  |
|  | All photocopies of operation and maintenance manuals shall be properly binded, stamped and certified as true copies of the original by the manufacturer. | **(M)** |  |  |
|  | Should any original equipment manufacturer products be included, the documents as specified above shall also be provided. | **(M)** |  |  |
|  | At the time of delivery of the equipment, appropriate set(s) of the manufacturer’s original operation and maintenance manuals in English, or in Chinese complete with full circuit diagrams levels shall be provided with the equipment ordered. | **(M)** |  |  |
|  | If applicable, the Supplier is encouraged to submit the documentation in form of softcopy in lieu of hardcopy. | **(M)** |  |  |
|  | Software documentation  The Supplier shall provide full documentation of the software supplied, including but not limited to the following:   * Version number; * Flowchart and source codes (for self-developed software, scripts, etc.); * Hardware and software platform requirements for the software; * Software installation files stored in commonly used storage medium, such as USB storage device, CD-ROM, DVD-ROM, etc.; * Licence of the software (if applicable); * Installation and configuration procedures; * List of parameters, configurations and settings with descriptions; * Routine maintenance procedure; and * System software and data backup and restoration procedures. | **(M)** |  |  |
|  | **Delivery** |  |  |  |
|  | Delivery of the item to CMH is required in 2025 3Q tentatively. It is subject to further update or change according to the progress of building works. Supplier should indicate the lead time for delivery in terms of days after receipt of confirmed order. | **(M)** |  |  |
|  |  |  |  |  |
|  | **Defects Liability Period (DLP) / Warranty Period Services** |  |  |  |
|  | The Supplier shall provide **TWELVE (12) months** Defects Liability Period (DLP) / Warranty Period after the user acceptance testing and the completion of rectification of all defects.  The Supplier shall provide all parts for replacement to enable the equipment to be restored to its normal operational conditions. The lead time of all parts shall be less than 24 hours or such other time agreed to by the user. | **(M)** |  |  |
|  |  |  |  |  |
|  | **Comprehensive Maintenance Services** |  |  |  |
|  | The Supplier shall provide comprehensive maintenance services to all Patient and Asset Tagging Equipment offered in this Contract for a period of Six (6) years after **12-months warrantee service**, including **preventive maintenance (PM) service**, **corrective maintenance (CM) service** if the comprehensive maintenance services are required by the CMH and replacement of genuine spare parts to maintain the full function to the performance specifications. | **(M)** |  |  |
|  | At least One (1) **preventive maintenance services** per year shall be provided during the warranty period. The routine service shall include all necessary repairs, replacement of parts, adjustments, calibration, cleaning, dust removal and lubrication necessary to ensure that the performance of the system conforms to the performance specifications stipulated to the equipment’s service manual. The Supplier is required to provide to CMH, the scope of services of scheduled maintenance for the equipment. A label shall be affixed on the equipment to indicate the due date of the routine service. | **(M)** |  |  |
|  | The Supplier shall provide **corrective maintenance (CM) service** for all Patient and Asset Tagging Equipment offered in this Contract.  The Supplier shall be responsible to solve the maintenance issues including but not limited to defects, software failure and malfunction of equipment. | **(M)** |  |  |
|  | The Supplier shall provide price schedule for each year of the 6-year maintenance period, after the Defects Liability Period (DLP) / Warranty Period, of maintaining the offered equipment / system and accessories in order to provide services in accordance with the standards laid down by the equipment manufacturers.  (Please provide details in  **Part 3 – Price Schedule: Maintenance Price Information)** | **(M)** |  |  |
|  | The Supplier shall be responsible for maintaining the latest patches, fixes and anti-virus definitions for the supplied computers / servers. | **(M)** |  |  |
|  | Unless otherwise specified herein the maintenance services including but not limited to maintenance of Systems software including provision for the latest fixes and OS software releases and the right of upgrade to them, shall be provided free of additional charges. The Supplier shall also provide the services for the system software maintenance works with minimum THIRTY (30) man-days per year. | **(M)** |  |  |
|  | The Supplier shall responsible to obtain and renew necessary license / certificate for the Patient and Asset Tagging Equipment and system that is required to comply with applicable Ordinances in Hong Kong without additional cost to CMH. | **(M)** |  |  |
|  | Should an equipment under the statutory requirement of licensing, the Supplier shall be responsible for reminding CMH Representative of the license expiry date; and the Supplier shall be responsible to engage appropriate authorized technical party for equipment assessment, and providing support with relevant technical document to CMH for license renewal so as to fulfil the statutory requirement wherever applicable. | **(M)** |  |  |
|  | Upon notiﬁcation of any relevant recalls, safety alerts, ﬁeld correction notices, incidents involving the offered equipment / system items, the Supplier shall attend to the call on site as soon as practically reasonable, inform the equipment manufacturer for investigation and collect the detailed investigation report and safety recommendation to the user. | **(M)** |  |  |
|  | The Supplier shall provide a list of frequently used consumable parts and spare parts to the user upon completion of DLP for setting up parts store in CMH. Sufficient back up stocks of the recommended essential consumable and spare parts shall be kept in Hong Kong. | **(M)** |  |  |
|  | For the consumable parts and spare parts not covered in this contract, the Supplier shall submit quotation(s) for the recommended consumable parts and spare parts for users' acceptance when replacement or consumable parts and spare parts is considered necessary, the quotation shall include parts number and basic technical parameters / specification (if applicable). | **(M)** |  |  |

**Section 8 -** **Warrantee Services Specifications**

The item should include a **free of charge 12-months warrantee service** on acceptance of the completion of provision of the item. Please provide return on Column IV & Column V as a point-by-point statement of compliance of the Warrantee Services Specifications or alternative proposal as appropriate as follows:-

| **Column I** | **Column II** | **Column III** | **Column IV** | **Column V** |
| --- | --- | --- | --- | --- |
| **Section** | **Warrantee Services Specifications** | **(M)**  **/ (D)** | **Please ✓ if fully comply** | **Alternative proposal if not fully comply**  **(submit separate sheet, if needed)** |
|  | The Supplier shall provide all parts for replacement to enable the equipment to be restored to its normal operational conditions. The lead time of all parts shall be less than 24 hours or such other time agreed to by the user. | **(M)** |  |  |
|  | The Supplier shall provide free software upgrade and rectification, if applicable, include but not limited to any repair and related routine maintenance services. | **(M)** |  |  |
|  | The Supplier shall rectify the faulty issues (e.g. defects, software or machines malfunction) including but not limited to all necessary checking, repairs, fastening / replacement of parts, calibration, adjustments, cleansing and lubrication during production operation. | **(M)** |  |  |
|  | Upon notiﬁcation by the user, the Supplier resident team shall response to the fault / request in 4 hours. This service shall include all necessary repairs, replacement of parts and any necessary technical support to restore the equipment to its normal operational conditions as soon as possible or no more than 24 hours, subject to the availability of spare parts. | **(M)** |  |  |
|  | The Supplier shall be responsible to perform all equipment cleansing at every twelve (12) months. | **(M)** |  |  |
|  | Within thirty (30) days before the end of the Warranty Period, the Supplier shall perform cleansing and maintenance works including but not limited to the following:   * Inspection and rectify all defects; * Replacement of damaged parts. | **(M)** |  |  |
|  | During the DLP / Warranty Period, the Supplier shall perform one preventive maintenance services. | **(M)** |  |  |
|  | The Supplier shall submit a DLP Work Plan at least one (1) month in advance the commencement of Warranty Period. | **(M)** |  |  |
|  | Upon expiry of the Warranty Period, a functional test shall be carried out by the Supplier. Any defects found, except wear and tear, on the Works shall be rectified within a reasonable time by the Supplier without any charge to the CMH. CMH Representative may extend the Warranty Period accordingly to compensate the down time of the defective system components or the Works as a whole. | **(M)** |  |  |
|  | CMH shall get immediate assistance by calling the hotline number provided by the Service Provider. | **(M)** |  |  |
|  | CMH shall receive unlimited problem-solving assistance from the Service Provider. | **(M)** |  |  |
|  | On-site support is required upon request of CMH. | **(M)** |  |  |
|  | In the case of production system support, the following service level shall apply:   |  |  | | --- | --- | |  | **Response time** | | Maintenance Request | 7x24 4 hours response | | System, hardware examination and check-up request | 7x24 24 hours response | | **(M)** |  |  |
|  | The system shall achieve an overall system software availability of 95%, which is equivalent to an unplanned system downtime of less than 18.25 days per annum. Service interruption for each incidence should be less than 5 days.  “Down Time” will be calculated from the point of system break to the point when system service can be resumed. | **(M)** |  |  |
|  | The following shall be provided free of additional charges by the successful Supplier:  (i) All scheduled maintenance and system upgrade.  (ii) All maintenance work carried out during normal working hours  (iii) All repair work carried out even beyond normal working hours.    This shall be free if the successful Supplier is notified of the equipment fault during normal working hours. | **(M)** |  |  |

**Section 9 - Maintenance Services Specifications**

The item could be provided with once per year maintenance services on the expiry of the warrantee services.

Please provide return on column IV & Column V as a point-by-point statement of compliance of the Maintenance Services Specifications or alternative proposal as appropriate as follows:-

| **Column I** | **Column II** | **Column III** | **Column IV** | **Column V** |
| --- | --- | --- | --- | --- |
| **Section** | **Maintenance Services** | **(M)**  **/ (D)** | **Please**  **✓**  **if fully comply** | **Alternative proposal if not fully comply or additional Information** |
| **A** | **Preventive Maintenance on Services Scope, Parts, Works and Schedule** | | | |
|  | The Supplier shall perform preventive maintenance serviceOnce per year. The preventive maintenance shall include but not limited to all necessary healthiness check, repairs, fastening / replacement of parts, calibration, adjustments, cleaning and lubrication necessary in accordance with manufacturer’s checklist (if applicable), or procedures outlined in the service manual, etc. | **(M)** |  |  |
|  | The Supplier shall perform preventive maintenance service with the standards or manuals laid down by the equipment manufacturers. | **(M)** |  |  |
|  | The preventive maintenance shall include the following services, unless otherwise specified, to be performed on regular basis as agreed by the operator such as monthly / weekly basis :-   1. impurities and dust removal on the surface and inside the equipment and their associated accessories; 2. inspection of the Systems, the sub-systems and the environmental working conditions, routine cleaning of the cabinets etc.; 3. collection and evaluation of error table / fault printouts which contain the results of self-testing of the Systems and the sub-systems such that preventive actions can be taken at an early stage to avoid major breakdowns; 4. adjustments, calibration, cleansing and lubrication necessary to ensure the performance of the Patient and Asset Tagging Equipment; 5. checks on the operation of the alarms of the Systems and the sub-systems; and 6. the routine safety test as recommended by the manufacturer to verify the satisfactory operation of the Systems and the sub-systems. | **(M)** |  |  |
|  | Preventive maintenance shall be carried out within office hours or any other schedule as agreed with the operator. | **(M)** |  |  |
|  | Annual maintenance charges for comprehensive maintenance service covering labour and all spares. (Exceptions shall be clearly stated with itemized prices, ordering informing details and conditions of warranty). If the Patient and Asset Tagging Equipment on offer containing OEM products, the Supplier shall give a breakdown of the maintenance charges in respect of the main equipment and OEM products. | **(M)** |  |  |
| **B** | **Corrective Maintenance on Services Scope, Parts, Works and Response time** | | | |
|  | Upon notification by the user, the Supplier shall response to the fault/request in less than 4 hours. This service shall include all necessary repairs, replacement of parts and any necessary technical support to restore the equipment to its normal operational conditions as soon as possible or no more than 24 hours. | **(M)** |  |  |
|  | The Supplier shall provide an emergency maintenance services on 24 hours a day, 7 days a week basis. | **(M)** |  |  |
|  | The Supplier shall analyse all faults/problems and find out the underlying cause(s). Based on the findings, the Supplier shall propose appropriate measure(s) to CMH to prevent re-occurrence of the similar faults/problems. | **(M)** |  |  |
|  | The system shall achieve an overall system software availability of 95%, which is equivalent to an unplanned system downtime of less than 18.25 days per annum. Service interruption for each incidence should be less than 5 days.  “Down Time” will be calculated from the point of system break to the point when system service can be resumed. | **(M)** |  |  |
|  | The Supplier shall submit the maintenance workflow and escalation path for alarm and alert generated from the Systems. The workflow shall include the entire mechanism starting from receiving of alarm notification to fault rectification. Procedures and responsible person shall be clearly indicated in the plan. | **(M)** |  |  |
|  | Upon completion of thecorrective maintenancework, the Supplier shall submit a report on the equipment breakdown investigation result and corrective action taken completed with a service. | **(M)** |  |  |
|  | The Supplier shall quote as an essential part of the offer a yearly warranty maintenance service proposal for an equipment lifespan up to at least 7 years. The number of preventive maintenance services to be provided annually shall be the same as that specified for warranty maintenance. | **(M)** |  |  |
|  | The Supplier shall confirm that spare parts and supporting service can be obtained over-the-counter in Hong Kong for the expected life of the equipment. | **(M)** |  |  |

**Section 10- Implementation Plan Specifications**

Please provide the time interval in months to be required of each critical task from the Order Date when placement of order of the item is made to the completion of individual tasks. “System Ready for Use” is attained when the item has been successfully and fully installed, successfully passed the acceptance tests and tests and assessment as required by the regulatory authority and obtained the required licence for use in Hong Kong.

|  |  |  |  |
| --- | --- | --- | --- |
| **Tasks** | | | **Months**  (Completion from the  Order Date) |
|  | Order Date as the starting point of the implementation plan | | 0 |
|  | | Submission of master working program including system design, design and ordering of system components’ supporting frames, site installation preparation and coordination of various interface works with building main contractor and other sub-contractors, supply and installation of the System components, supporting frames (including sub-structural elements) and the associated cabling works, testing and commissioning. |  |
|  | | Submission of Shop Drawings of design, supply and installation of the supporting frames and/or sub-structural elements from the building parent structures for all concerned patient and asset equipment, including interface details with all building/ interior fitting-out works and building services provisions upon coordination with building contractor. |  |
|  | | Finalization of system design upon CMH approval/ agreement of Shop Drawing submissions for placing manufacturing orders. |  |
|  | | \*First fix |  |
|  | | \*\*Final fix   1. Delivery of Equipment 2. Installation of Equipment |  |
|  | | Acceptance Test |  |
|  | | Delivery of Documentation |  |
|  | | Training |  |
|  | | System Ready for Use |  |

Definition

**\*** Site access allowed for installation works without involving valuable equipment and final finishes. (e.g. installation of sub-frames or mounting brackets, conduits and cables for electrical system, air ducts for heating or air-conditioning, pipework for water and gas distribution)

**\*\*** Site handed over to the Hospital for delivery and installation of equipment, works for final finishes, testing and commissioning

Note:

1. No installation works allowed during Feb – Mar 2025 due to fire services inspection
2. “First fix” – not earlier than October 2024
3. “Final fix” – not earlier than May 2025

**Part 3 – Price Schedule**

**Equipment Price Information**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Item** | **Description** | **Estimated**  **Quantity** | **Unit Price** | **Estimated Goods Price** |
| **One-time Unit Price (HK$)** | **Estimated Goods Price for the Item specified opposite**  **(HK$)** |
| **(a)** | **(b)** | **(c) = (a) x (b)** |
|  | **Patient and Asset Tagging System** |  |  |  |
|  | System software | 1 set |  |  |
|  | Hardware: |  |  |  |
| 2.1 | RFID 2-way Sensing Gateway/ Antenna (“Gates”) | 1. sets |  |  |
| 2.2 | RFID Handheld Reader | 42 pcs |  |  |
| 2.3 | RFID Wristband Tag (Patient Tag) | 500 pcs |  |  |
| 2.4 | RFID Paper Tag (Asset Tag) | 2000 pcs |  |  |
| 2.5 | RFID Tag Label Printer | 42 pcs |  |  |
|  | Equipment or accessories not included in 1 and 2 above (if any) (to be specified in detail and with price breakdown by supplier) | 1 lot |  |  |
|  | Implementation Services | 1 job |  |  |
|  | Installation Services | 1 job |  |  |
|  | Documentation and Publications | 1 job |  |  |
|  | Miscellaneous (please specify) | 1 lot |  |  |
| **Total:** | | | |  |
|  | | | | |

**Maintenance Price Information**

Annual maintenance services to be provided on the expiry of the warrantee period

| **Item** | **Description** | **Quantity** | **Annual**  **Maintenance**  **Charge**  **(HK$)** |
| --- | --- | --- | --- |
|  | Year 1 | Per annum |  |
| Year 2 | Per annum |  |
| Year 3 | Per annum |  |
| Year 4 | Per annum |  |
| Year 5 | Per annum |  |
| Year 6 | Per annum |  |

**Part 4 – Particulars of Goods Schedule**

(To be completed and returned by the Suppliers)

Item No. (as shown in the Price Schedule) or the relevant component of the Item No.:

Information required (such as Place of Origin, Name of Manufacturer, Product Name of the Goods, Packing, Delivery method, etc.)

| Paragraph No. | Information required | Information to be completed by the  Supplier |
| --- | --- | --- |
| 1. | Place of Origin |  |
| 2. | Name of Manufacturer |  |
| 3. | Address of the Manufacturer’s factory or plant (“Manufacturing Plant”) |  |
| 4. | Product Name of the Goods |  |
| 5. | Model Number/name/version number of the Goods |  |
| 6. | Specifications of the Goods |  |
| 7. | Product literature, equipment data sheet and catalogues |  |
| 8. | Authorised agent or distributor of the Manufacturer in Hong Kong |  |
| 9. | Packing |  |
| 10. | Delivery method and route (where the Place of Origin is outside Hong Kong) |  |
| 11. | Committed Warranty Period (if longer than the minimum 12 months |  |

[Editorial Note: *Please duplicate the above table for another Item or another part of the same Item which requires provision of the same information and provide a separate table number.*]

|  |  |  |
| --- | --- | --- |
| Notes: | (i) | Please use separate sheets if space is inadequate. |
|  | (ii) | Please input N/A if the information is not applicable. |
|  | (iii) | If the Supplier is the Manufacturer, the Supplier shall enter its own name in paragraph 2. |

**Part 5 – Sales Volume of the Offered Goods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | **Description** | **Annual Sales for the past three years** | **Remarks** |
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**Part 6 – Questionnaires**

|  |  |
| --- | --- |
| Information Required | To be completed by Tenderers  (use separate sheet, if needed) |
| 1. Are there any suggested measures of system design implementation to increase the successful RFID tag reading rate? Eg. specific arrangement of RFID paper tags for asset vs. the tag readers/ antenna, alternative patient tag solution on clothes/ patient uniform instead of the commonly adopted wristband tag. |  |
| 1. Please provide the preliminary method statement/ working framework and schedule of compiling the systems’ design requirement from user input on operation consideration and HIS/ ERP interface requirement until completion of the system design proposal. |  |
| 1. Please advise the payment schedule generally adopted in the corresponding trade industry. |  |
| 1. Please provide tasks that are not identified in the Implementation Plan Specification of the equipment and system. |  |
| 1. Please provide works that are not identified in the Warrantee Services and Maintenance Services Specification of the equipment and system |  |
| 1. Please advise all relevant statutory and licensing requirements for the systems to be properly operated in Hong Kong, which are not identified in the Technical Specifications. |  |
| 1. What is the Serviceable Life of the overall components? (Please provide supporting documents) |  |
| 1. Please provide items and details of frequently used consumables and the lead time of delivery for replacement (eg. RFID wristband/ paper tags) |  |
| 1. What are the difference in the scope of maintenance services / program provided by your company during the warranty period of 12 months and the maintenance period after expiry of free warranty? |  |

**Part 7 – Other Information Provided by the Supplier Useful for the Consideration of the Government**

|  |  |
| --- | --- |
| **Information Provided** | **Details** |
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|  |  |
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**E N D**