

BIOMEDICAL EQUIPMENT Management and Maintenance Program





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Preface

With the launch of National Rural Health Mission in 2005, and then the National Health Mission, substantial investments have been made to strengthen Public Health System in the country. This strengthening has included procurement of hospital equipment in keeping with the needs of healthcare delivery systems that has become increasingly technology intensive. However, keeping equipment functional with minimal 'down-time' has been a challenge especially in remote locations. Available evidence indicates that 30%-60% of medical equipment is non-functional in different states. It is thus important to devise mechanisms to keep medical equipment functional to ensure delivery of quality healthcare. It is proposed to engage one or more maintenance service providers in each state to maintain biomedical equipment, who would receive payment based on the uptime provided for the medical equipment. Many states have requested Government of India to provide model 'Request For Proposal (RFP)' document. It is in this context that Ministry with support from NHSRC has developed the model RFP. States are requested to contextualise the same as may be necessary to be in accordance with states' financial rules and needs.

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Foreword

It is necessary to have well functioning equipment for smooth delivery of quality health services. However, engaging trained engineering human resources adequate to provide maintenance for all the equipment across a state covering all districts and procurement of hundreds of spare parts & associated inventory is a challenge, both in terms of availability and feasibility. To address this, MoHFW organized consultations with officials from states to devise appropriate mechanisms to ensure that medical equipment remain functional. Based on best practices, it was felt that outsourcing of this activity with payment linked to uptime of equipment would improve time bound delivery of maintenance service. The comprehensive program including provision of toll free number for equipment fault registration, preventive and corrective maintenance, supply of spares, providing for trained engineering human resource and training of users on equipment, the comprehensive equipment maintenance program could be ideal solution when correctly operationalised. To facilitate this activity, model document has been prepared. This document is illustrative and states may contextualize this to suit their specific needs. We would be happy to receive feedback and comments from states after usage of this document.

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Definitions:

Recognizing that there are multiple interpretations that exist for the terms listed below, they are defined as follows for the purposes of this technical series.

Health technology: The application of organized knowledge and skills in the form of equipment, medicines, vaccines, procedures and systems developed to solve a health problem and improve quality of life. It is used interchangeably with health-care technology.

Medical device: An article, instrument, apparatus or machine that is used in the prevention, diagnosis or treatment of illness or disease, or for detecting, measuring, restoring, correcting or modifying the structure or function of the body for some health purpose. Typically, the purpose of a medical device is not achieved by pharmacological, immunological or metabolic means.

Medical equipment: Medical equipment requiring calibration, maintenance, repair, user training, and decommissioning – activities usually managed by clinical engineers. Medical equipment is used for the specific purposes of diagnosis and treatment of disease or rehabilitation following disease or injury; it can be used either alone or in combination with any accessory, consumable, or other piece of medical equipment/equipment. Medical equipment excludes implantable, disposable or single-use medical equipment.

Public Private Partnership: A long term contract whereby a public body associates a private sector enterprise in the financing, design, construction and operation of a public structure. The public structure could be provision of a service, maintenance of a system or creation of a new system and/or infrastructure.

Outsourcing: A form of contracting with pre-specified terms of financing, monitoring and supervision. Generally engaged over a longer time period, outsourcing is delegation of responsibility partially or wholly towards performance of a set of

activities to achieve pre-specified results based on a mutually agreed form of reporting, monitoring, evaluation and performance.

Preventive Maintenance: It is an action to eliminate the cause of a potential non-conformity. The care and servicing by personnel for the purpose of maintaining equipment and facilities in satisfactory operating condition by providing for systematic inspection, detection, and correction of incipient failures either before they occur or before they develop into major defects, including tests, measurements, adjustments, and parts replacement, performed specifically to prevent faults from occurring.

Corrective Maintenance: It is an action to eliminate the cause of a detected non-conformity. It is a maintenance task performed to identify, isolate, and rectify a fault so that the failed equipment, machine, or system can be restored to an operational condition within the tolerances or limits established for in-service operations.

Equipment Breakdown Rate: Also known as failure rate it is the frequency with which an engineered system or component fails. It is expressed in failure per equipment per hour /shift/day.

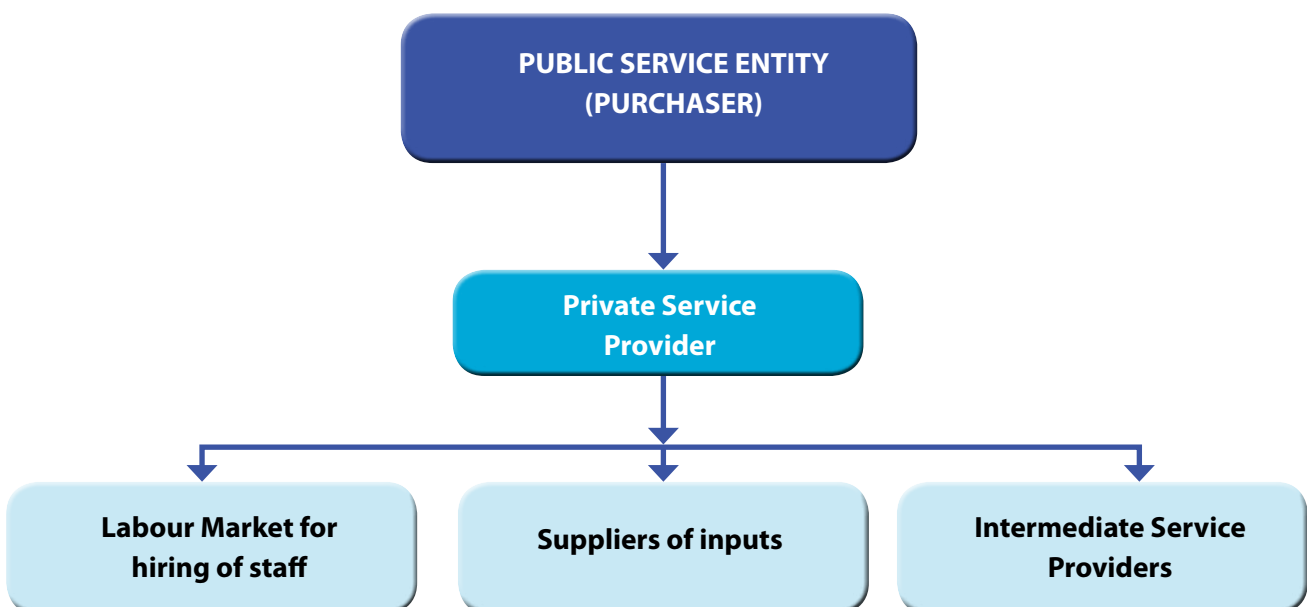
Upkeep time: It is the measure of the time a machine has been working or available.

Downtime: It is the period of time that a maintenance system fails to provide or perform its primary function in other words the time for which the dysfunctional equipment remains dysfunctional.

Maintenance Contracts: It is the legal agreement normally conducted between two parties wherein the latter agrees to render the maintenance service annually to the former in the exchange of a nominal amount. It ensures that the latter promises to provide maintenance services to the former all throughout the year on a regular basis. It includes service charges only. When charges include spare parts also it is termed as Comprehensive Maintenance Contract.

Public Private Partnerships are forms of association or commercial relation between a public entity (generally meaning governmental bodies/ministries/public sector undertaking/nationalized institutions) and a 'for profit' or 'not-for-profit' commercial or private organization. The form of relationship envisaged, shapes the roles and responsibilities of each partner. The goal is to achieve a set of mutually agreed results at specific intervals for a certain period of time. The partnerships of this nature are brought into existence to satisfy provisioning of certain public services. Public services are those services that are marked by continuity of operation, equality towards all classes of recipients and adaptability to cater the needs of the population. It is however,

different from Privatization since property rights and ownership rights are not transferred to the private agency. The staff deployed for providing the service are not those employed by the government, the finance and accounts of the details of the delegated service are maintained at the transactional level by the private agency although the disbursement accounts are maintained also by the public body, the assignee is not subjected to the government rules of procurement of inputs required to deliver the service and has complete influence on the management methods involved with the services that are to be delivered. This does not mean withdrawal of public entity from outcomes of the services. The contractual relation is best described by the following diagram:



The vast number of medical equipment available complicates prioritization, selection and procurement. National guidelines, policies or recommendations on the procurement of medical equipment are not used in a majority of countries either because they are not available or because there is no one recognized to implement them. Approximately a third of all countries lack a designated unit responsible for managing medical equipment. This creates challenges to establish priorities in the selection of medical equipment on the basis of their impact on the burden of disease.

Almost 2/3 of all low-income countries do not have a national health technology policy which could ensure the effective use of resources through proper planning, assessment, acquisition and management of medical equipment.

The organization's medical equipment management policy must cover the provision of maintenance and repair of all medical equipment, including reconditioning and refurbishment.

This includes:

- ❖ How each equipment should be maintained and repaired, and by whom
- ❖ Arrangements for maintenance and repair to be included as part of the assessment process
- ❖ Arrangements for the most suitable persons/providers to carry out the work
- ❖ The timescale for planned maintenance
- ❖ The timescale for repairs to be completed

The frequency and type of planned preventive maintenance should be specified, taking account of the manufacturer's instructions, the expected usage and the environment in which it is to be used. Specific training on particular medical equipment should be based on the manufacturer's instructions. Staff carrying out maintenance, repair, and/or decontamination will require additional technical information or training.

Biomedical equipment maintenance thus presents a challenge for many countries, especially those with low technical resources- both human and infrastructural. These challenges could broadly be classified into four categories:

1. **High rates of dysfunctional medical equipment:** specially in regions that are in rough geography and climate conditions: Medical equipment may become and remain dysfunctional due to several reasons including but not limited to- spare part failure, electrical supply failures, design failures, improper use, wrong diagnosis of equipment errors, use of wrong/incorrect accessories and failure to procure spare parts and/or accessories on time. Due to complexity of equipment and involvement of a large number of spare parts at component level, such barriers have played an obstructive role in denying or delaying access to medical equipment in many countries. As per a study done by National Health Systems Resource Center, the dysfunctional rate in equipment could be as high as 60% in many areas of the world with dysfunctional rate in

equipment averaging about 20%-30% even in areas with a fair medical equipment industry presence. The reason for the later, being in the fact that not all medical equipment at facility level remains or is kept in warranty period/maintenance contract period (AMC/CMC). Only a handful of expensive and complex equipment are preferred for an AMC or CMC, thereby excluding a large proportion of equipment from receiving any form of maintenance.

2. **Low density of biomedical engineering workforce especially in public sector health facilities:** External service providers may perform servicing on site or may remove equipment from the health-care facility to a workshop off site. It is important for the clinical engineering department to track all activity performed by external service providers and to ensure that all records of service performed are added to the equipment history file to maintain an accurate inventory record. A prudent health-care facility clinical engineering department is vigilant in requiring service reports from external service providers detailing, for example, all work performed and spare parts replaced. 85% of 52 hospitals in Africa surveyed about their medical equipment maintenance services had trouble finding qualified engineers locally. The scenario is not different in other countries where trained biomedical engineers are not adequately placed especially within the public health system. Even when placed, the engineering work force gets involved with mere 'management' of maintenance contract and not active repair by themselves, mainly due to lack of adequate training and absence of required tools for testing and calibration of equipment at field level.
3. **Difficulty in procurement of spare and inventory management:** Equipment inventory is an essential part of an effective health-care technology management (HTM) system. In order to be effective in assisting with various HTM activities, the inventory must be updated continually so that it provides at any given moment a correct look at the status of

medical equipment within the health-care facility. Update points include initial data collection; as information is updated, such as when a new piece of equipment arrives or is retired; and during annual inventory audits. The inventory of medical equipment is used in conjunction with inventories of additional supportive assets, such as consumables, spare parts, and testing and safety tools and equipment. Inclusion of equipment in an inventory is decided through a risk-based analysis in order to ensure appropriate time and resource allocation, and to eliminate unnecessary work. The health-care facility decides on the level of detail of data to be included in its inventory, in order to satisfy its own requirements and according to its own capabilities. Once established, the inventory serves as the foundation for moving forward within the system and ensuring safe and effective medical equipment. The inventory may be used to develop budgets for capital purchases, maintenance and running costs; to build and support an effective clinical engineering department, by allowing for workshop planning, hiring and training of technical support staff, and establishing and maintaining service contracts; to support an effective medical equipment management programme, such as planning preventive maintenance activities and tracking work orders; and to plan the stock of spare parts and consumables. A medical equipment inventory can help identify the spare parts and consumables required to keep the equipment running. Spare parts and consumables inventories alert the team to order stock so that current reserves are not depleted and service is not stopped. The main functions here are to determine usage rates (number of parts/time) and to establish a reorder level that is sufficient to maintain service during the time required to order and obtain the new parts. When managed correctly, item stock levels are never depleted and service continues uninterrupted.

Since adequate break-down trends are not recorded and forecasted adequately at field level, it becomes impossible for healthcare facilities to

procure spare parts in advance to meet futuristic needs. Even when procured, these are in small quantities that do not add to efficiency of the system. The costs of running idle inventory makes maintenance done for individual facilities – non cost effective.

4. **Difficulty in budget estimation for maintenance:** The procurement norms and financial rules of procurement in public health systems in many countries do not provide enough flexibility to make on-site purchase of spares and accessories. Most countries still do not have a budget line for medical equipment maintenance thereby making maintenance activities being budgeted on post-expenditure or ad-hoc basis. The accounting and audit restrictions on ad-hoc purchases, makes decision making on spare parts/accessories procurement difficult.

The cost of medical equipment maintenance services generally depends upon the following:

- a. Asset list of devices in public health facilities, i.e. equipment density
- b. Geographic location of the facilities
- c. Cost of biomedical engineering human resource
- d. Life of the equipment
- e. Cost of spares
- f. Origin (domestic/import) of spares
- g. Break down time limits acceptable

To arrive at robust periodic estimates of medical equipment maintenance services, all of them requires to be measured, without which the budget of maintenance could be misleading.

Medical equipment management and maintenance has remained a challenge and in many regions – a failure. It has been understood by the experience of several countries that ‘self-maintenance’ of equipment by users or a pool of government/organization employed engineering staff can no longer be considered as the only component of a sustainable solution.

To address the gap in technology management and maintenance in regional/district and sub-district hospitals in the country, a model has been conceived on the lines of public-private partnership. The model in principle suggested “outsourcing” of equipment management and maintenance functions which includes but is not limited to:

- a. Assessment (periodic and on continuous basis) of all equipment available in regional/district and sub-district public healthcare facilities
- b. Responsibility of calibration, configuration and undertaking “settings” pertaining to all equipment
- c. Preventive and corrective maintenance of equipment on a schedule and on-call basis
- d. Submission of quarterly report on functional status of equipment
- e. Supportive role in site-preparation, installation and commissioning, user-training and overall maintenance of equipment.

To understand the principles mentioned above, to undertake research to speculate “fiscal space”

required for such an undertaking and to develop operational guidelines to establish best-practices in this domain; it is suggested that situational analysis/evaluation studies could be undertaken in various regions within a country. These studies should be designed to generate the following data sets:

The Biomedical Equipment Maintenance Model would generate the following data sources:

1. Empirical Data (from site)
 - ❖ Data 1: Line listing of Medical Equipment or Mapping Technologies in regional/district & sub- district centers
 - ❖ Data 2: Functional Status of every medical equipment
2. Secondary Data (from market research)
 - ❖ Data 3: Cost involved (C1) to make the redundant technology (obtained from Data 2) functional
 - ❖ Data 4: Cost involved per annum (C2) in Comprehensive maintenance of all the medical Equipment (obtained from Data 1)

It is essential that the decision makes review the results of the pilot and have a clear pictures of current status of medical equipment as well as financial requirements if an outsourced model for maintenance is to be envisaged.

A decision to engage in contractual relationships with private agencies for maintenance of medical equipment in public health facilities should ideally result from a detailed analysis in order to ensure that the outsourcing of a service is the best possible solution among a set of alternatives such as employing engineering within public system, undertaking ad-hoc maintenance; dealing independently with manufactures and suppliers on a need basis individually for all necessary equipment, or paying for AMC/CMC for individual machinery. The criteria based on which this decision could be taken would comprise of the following:

- a. **Improvement in Key Performance Indicators:** The private agency receiving a fixed amount of funding for the maintenance, generally tries to reduce breakdown and cost on spares by good preventive maintenance. The proportion of breakdown, downtimes and extent of dysfunctional equipment in the health facilities are key indicators that indicates the status of equipment that are in use and also the access to healthcare technologies that a health system is able to offer to patients at large.
- b. **Cost benefit analysis:** Intermediary service costs may get reduced due to convergence of cost factors such as procurement of spares, hiring of trained, appropriate and adequate human resources, costs on communication and indirect cost due to delay in getting the equipment to a functional state. Since a lump sum amount given to private entity would incorporate all of these and would keep the onus of managing costs on private entity, the net cost savings to

the public entity could be estimated, at least to an extent of approximation.

- c. **Reduction in administrative constraints:** A public entity generally follows a set of commercial code of conduct to encourage transparency, encourage fair competition among private stake holders and comply with standing orders on financial and operational laws and by-laws. These codes of conduct are specific to public entities since such entities deal with public funds. The private agencies however may have their own model codes of conduct and rules that are morally right, however, keeps the priority of maximizing revenue. Thus limitations to encourage competition in the market and reduce monopoly do not apply to private agencies although engaging in fair play should never be compromised. A function of outsourcing gives the public entity to thus reduce administrative hold backs and constraints by bringing operational functions out of the preview of the public entity.
- d. **Reduction in Risk:** The risk arising due to non-delivery of a service is transferred to the private partner by virtue of a commercial partnership engagement. The extent of this reduction in risk to the public agency however depends on the terms and conditions detailed in the contract. In equipment maintenance for example, the extent of risk arising due to non-functional equipment would depend upon whether obligation to provide controls, or accessories was given to the private agency or not. Or whether, any process of maintenance depended on the users

of equipment themselves and that become the reason for error or breakdown.

- e. **Improved focus on actual activities of the public entity:** Since the non-core activity of the health service provider, such as equipment maintenance gets outsourced, the service provider (in this case public health department) can actually direct its resources and efforts into actual patient care, which is the core activity of the health service provider. A fully functional equipment system not only improves the efficiency of the health service provider towards provision of its core activities, it also strengthens the credibility of the health system and good will among the recipients of care.

Each public entity should therefore measure the benefits on the factors mentioned above and

other context specific criteria to come to evidence based decision of contracting out the equipment maintenance. The extent of contracting may vary between outsourcing of procuring spares and accessories; training of users of equipment; preventive maintenance and/or corrective maintenance; hiring of a certain number of biomedical/clinical engineering human resource or complete outsourcing of all equipment maintenance functions and responsibilities for a certain number of facilities or all facilities in a certain region. The extent of outsourcing should ideally depend upon existing capacities in public health system and the costs of substitute functions in the market. In a complex service such as equipment maintenance which utilizes several inputs, it is always easier to test and implement a comprehensive all inclusive contracting arrangement.

The following components could be taken as a suggested pathway for executing the public-private partnership model for the purpose of medical equipment maintenance.

1. **Scope of work:** The following could be considered as scope of work for the suggested model:
 - (i) To maintain Biomedical Equipment in all public healthcare facilities up to the PHC level supported by 24 X 7 call centre ;
 - (ii) To provide 24x7, 365 days uptime of 95% for all medical equipment in District Hospitals, .90%for CHCs and 80% for PHCs. At no point of time in a single breakdown the breakdown should not be more than 7 days from the date and time of registration of fault.
 - (iii) Medical Equipment that are already in AMC or CMC. The service provider shall administer the contract on behalf of state health department. For this purpose, the service provider shall take authorization from services providers for the respective equipment for which AMC/CMC may be in existence.
 - (iv) For Medical Equipment that is currently under warranty. The service provider shall administer all maintenance activities on behalf of the state health department for the entire duration.
 - (v) For all medical equipment that is under any form of AMC/CMC/Spares agreement or under warranty, the state health department shall not be renewing the equipment specific maintenance contracts
 - (vi) The maintenance service provider shall not be including cost of maintaining any equipment which is under any kind of AMC/CMC/warranty in its first proposal and cost of such equipment shall not be included till the time existing contract(s) with other service provider(s) is valid for the respective equipment. The maintenance service provider may choose to take authorization for doing maintenance such equipment from existing AMC/CMC contract holder(s).
 - (vii) Maintenance costs for equipment that are currently in any AMC/CMC/warranty contract shall be added by the service provider only after the expiry of contracts for the respective equipment.
 - (viii) The sole service provider shall however be liable to ensure upkeep time declared in the bid for all equipment irrespective of any AMC/CMC/warranty status for any equipment.
 - (ix) The maintenance service provider shall be identifying and responding to requests seeking maintenance of all Biomedical Equipment available in the district/sub district/state up to the level of Primary Health Center(PHC) through the Maintenance Process Tracking Identification Number (MPT-IDs).
 - (x) Maintenance service provider shall establish and operate an exclusive 24x7-customer care centre for accepting calls and managing the maintenance services.

For purposes of clarity, operationalization will be regarded as:

- (a) Setting up of maintenance workshop for maintenance of medical equipment, and
- (b) Setting up Customer Care Centre to accept user calls
- (c) Appointment and recruitment of trained engineering and administrative human resource and
- (d) To provide Equipment Management Information System and
- (e) To provide categorization of all equipment, clearly identifying critical equipment along with their clinical functions
- (f) To maintain biomedical equipment in all public healthcare facilities in an entire district/ region/ state; and
- (g) To furnish the format of equipment identification code system

The Contracting Authority (Usually a government body/agency) shall have the right to increase the number of equipment beyond the present number from the date of execution of the Agreement. In the event of any such increase in the number and density of equipment by the Authority, the Operator shall operate and maintain the additional equipment till the remaining term/duration of the Agreement in the given year and the monetary value for the maintenance of the added equipment shall be included in the subsequent years; as part of the existing scope of work and upon the same terms and condition specified in the Agreement.

The potential scope of work in a comprehensive equipment maintenance outsourced model has been tabulated below:

Components	Public entity	Private agency
Formulation and agreement of the contract	Yes	Yes
Hiring of the trained human resource	No	Yes
Purchase of inputs for service delivery	No	Yes
Actual provisioning of maintenance services	No	Yes

Components	Public entity	Private agency
Forecasting of Inventory	No	Yes
Forecasting of Budget	Yes	Yes
Training of Users	Yes	Yes
Monitoring of services	Yes	Yes
Evaluation of services	Yes	Yes

2. **Costs of engagement:** Representation of costs of rolling out maintenance program in a partnership model is crucial to understanding the feasibility of it as well as budget estimation. The cost of Maintenance contract in absence of such a model, is reflected in terms of gross value in a certain currency per equipment. The costs of a large number of equipment across certain number of public health facilities or for all facilities in an entire region could be best reflected in terms of percentage of total medical equipment asset value at the time of purchase. If the time of purchase is not known, the value of all medical equipment assets is suggested to be taken at current market value. Depreciated value is not very much useful, since depreciated value would be lesser than the value of a new piece of equipment while maintenance costs would be higher in older equipment than in a new one. Taking a proportion of depreciated value would thus make it financially unattractive for private agencies to come forth to deliver the service. However, in terms of net asset value at the time of purchase or at current market prices for those equipment whose actual procurement value is not known, the comprehensive maintenance value varies from about 2% to 5% in case of technologically less complicated equipment to about 7% to 12% for highly complex equipment. Thus for a mixed group of equipment across several facilities this may be average out to 5% to 10% of the asset value. These values depends upon several factors such as extent of import for spare parts, costs of highly skilled engineering human resources, cost of associated software of equipment and competition among similar maintenance service providers. The actual cost as percentage of total asset value can be arrived at only

after the bidding process is over. However, a public entity may choose to reflect costs of maintenance also in the form of 'Cost per bed per day' or 'Cost per facility'. Although such representations could be useful for estimating budget required to outsource maintenance services, keeping costs dependent on number of beds, may disadvantage the private service providers in cases where number of beds remains the same and equipment density increases and could disadvantage the public entity when the number of beds increases but equipment density largely remains the same. Representing of maintenance as cost per facility may not be a very useful method if the facilities vary greatly and a striking equipment density is apparent between facilities in rural and urban setting or within each of these separately.

Even if outsourced, there would remain a specific element of cost- the 'supervisory costs' apart from the cost of purchasing the service itself. This includes cost of drawing contracts between the public entity and the private agency, cost of conducting pilot studies, of undertaking situational analysis, of tendering and bidding process, of periodic audit of the performance of the private service provider and cost of appraisals and renewals of the contracts.

- 3. Laws & Rules governing equipment maintenance:** The Service Provider (Private agency selected for providing maintenance services) shall at all times comply and ensure compliance by its agents with applicable laws and regulations pertaining to biomedical equipment especially those pertaining to radiation, safety, security, environment, all public general and national laws and the requirements of competent and/or regulatory authority whose jurisdiction applies in the area where services are being provided. The Service Provider shall at its own expense obtain, renew and maintain in full force and effect where appropriate, all approvals, permits, licenses and authorizations necessary to provide the Services including, licenses pertaining to actions specified above.

- 4. Fault registration systems such as Toll free number:** The Service Provider shall establish a well- equipped service network and adequately staffed centralized call centre that is accessible through means such as a toll free number. The selected service provider shall be responsible to operate the Centralized Call Centre with toll free number, 24 hours in a day, 365 (complete year) days in a year to register and make documentation logs for all calls of fault detection. A toll free number shall relieve the caller from any expenditure in reaching out to the provider. The call centre would register the fault, create details as per a format mutually agreed by the engaging agency and service provider, capture relevant fields pertaining to equipment for which call has been made and give the caller and 'maintenance process tracking identification number (MPT-ID)' through which the maintenance call history and action taken could be viewed in at any point of time. For each facility, there should ideally be three nodal officers to whom a confirmation call may be given by the maintenance service provider after acceptance of a breakdown call from any user in the facility. Resolving/fixing of the fault must be followed by the closure of communication loop (call closure) via telephonic guidance to any of the three nodal officers identified or facility on a case to case basis...In cases, where the engaging agency desires so, the link to view this process, could be provide to selected authorities within the agency. The engaging agency as well as the service provider therefore, at the start of the contact would identify and document the levels of users who would be authorized to make a 'fault registration call (FRC)'. In some countries the head of the facility may alone be responsible for making an FRC while in other cases the contract may any user at any level, eligible to make the FRC. The service provider could bring to the notice of the engaging agency on a quarterly basis, the burden of false calls based on which the authorization to make calls could be modified after the pilot phase.
- 5. Time frame for engagement:** The time frame for engaging into a PPP model for maintenance of medical equipment would depend upon the

results of pilot (if conducted), the equipment density, the current costs of maintenance and the estimated costs via a PPP model. A small time frame such as one year may be too small to understand comprehensively the advantages and barriers of such a model. It is therefore suggested that the time frame for engagement be taken as 3 to 5 years extendable to 7 years. The payments however in lieu of the said contract could be made on a periodicity as mutually decided by the engaging agency and the service provider, which may be from a minimum of one month to a one time annual fee. The Request for Proposal (RFP) could be therefore made for a period of 60 months from the Commencement Date or as specified in the Contract Agreement. This may be termed as the "Agreement Period". The partners should also document the date/time frame for the start of the active service contract from the date of signing of the agreement, which is suggested to be a maximum of three months.

- 6. Uptime and downtime limits:** Uptime is a measure of the time a machine, has been working and available. Uptime is the opposite of downtime, which means the measure of time a equipment is unavailable due to breakdown/ failures etc. Breakdown of an equipment would denote disruption in any of the declared functions of the equipment. There are various thresholds desirable and practiced in various parts of the world, however, an uptime of 95% over a one year period is considered to be a reflection of good systems efficiency. However, the criticality of equipment and hours for which a health facility functions at various levels in India public health systems projects varied needs for upkeep time. To provide 24x7, 365 days uptime of 95% for all medical equipment in District Hospitals, 90% for CHCs and 80% for PHCs. At no point of time in a single breakdown the breakdown should not be more than 7 days from the date and time of registration of fault.. The penalty clauses in case of service provider not confirming to threshold as declared in the contract agreement, must be clearly defined. In such cases, a deduction of fees equivalent to double the amount of comprehensive maintenance cost of that equipment over

the period of its downtime could be a good reverse incentive to ensure that equipment are maintained in the desired manner.

- 7. Provision of substitute equipment:** Uptime of up to 95% across 24 hours x 365 days translates as 18 days in a year. However, 18 days at a stretch down time for life saving equipment could be catastrophic to patient care. Hence the service provider must consider this download to be 95%, factored as maximum permissible downtime of 1.5 days per month. If the equipment maintenance provider does not maintain to this threshold, it would be expected to replace the faulty equipment with a substitute equipment providing same functions within a period of 12 hours after expiry of 1.5 days, till the faulty equipment is repaired This would protect patients from being denied critical and life-saving access to medical technology and would also encourage the service provider to have adequate buffer inventory and replacement equipment in cases where repair within a justified time period is not possible due to geographical limitations or other reasons. This is much required since many of complex life-saving equipment do not have spares readily available and many spares needs to be procured from international markets, the logistical time for which could be long and unpredictable.
- 8. Role in life cycle maintenance including condemnation:** Whenever a capital or inventory asset whether large or small is disposed of, a condemnation/disposal form should be completed by the user and counter signed by the head of the healthcare facility. One copy should be sent to Finance and one copy retained for departmental records. The engaging agency and healthcare facility should consult the maintenance agency about safe disposal of obsolete equipment and such disposals must have a clear-off by the service provider of maintenance. Medical equipment may be considered for disposal as a result of its natural obsolescence, failure to meet current treatment standards, uneconomic or poor serviceability etc. Decommissioning and decontamination should be carried out prior to final disposal. The purpose of

decommissioning is to make sure that the equipment is electrically and environmentally safe. A suitably qualified person must carry out decommissioning in presence of a representative of the maintenance service provider for which maintenance agency should give a documented standard operating protocol. Since maintenance prolongs the life of a equipment, it is essential that the agency responsible for this prolongation of equipment life cycle is a party to the consultation that recommends termination of equipment' life-condemnation.

9. **Inventory mapping of equipment:** The service agency should analyze and report medical equipment inventory and map the entire equipment inventory in all health facilities for which the contract has been proposed for. This mapping would include:

- a) Providing an asset identification number to all the equipment
- b) Manage documents such as invoices, warranties/guarantees or safety reports pertaining to all the equipment
- c) Transfer inventory data to other information systems as and when required by the customer
- d) Link office with field staff
- e) Record equipment maintenance activities
- f) Generate status report of all the equipment at a pre-defined periodicity.
- g) Provide a list of consumables (such as tubing for analyzers, electrodes for ECG) before the start of the contract that it agrees to provide as part of the maintenance contract.
- h) Provide a list of consumables used in recurring basis (such as reagents for analyzers, gel for ECG) that it would be providing as part of the maintenance contract.

10. **Performance Evaluation, Safety Testing and Calibration of equipment:** Testing and calibration of equipment is an important element of maintenance and any service contract made towards procuring maintenance services. Once the inventory mapping has been

concluded, the service provider should furnish the list of equipment that requires calibration and testing. The periodicity of calibration, periodicity of testing of equipment, standard operating protocols for both calibration and testing, criteria for submission of test reports, necessity of in-house calibration (if any) by the user and its SOP, hierarchy to furnish test results and means to undertake correction actions in case of test results not found to be appropriate are to be specified by the service provider in concurrence with the engaging agency. During testing and generation of testing reports, special care should be given to ascertain the functionality of alarm systems within the equipment and electrical safety. Annual third party audit by a third party NABL or ILAC accredited laboratory must also be carried out for calibration processes of the maintenance service provider which would look into issues such as calibration of calibrating tools.

11. **Equipment audit:** An audit of all equipment under the service contract gives objective evidence into the nature of faults, cause of faults, correction time, any lapses during use after fault correction, loss of efficiency due to repair/maintenance and measure of upkeep time specific to various categories of all the equipment. It sets information on use of device as well as quality of maintenance services being provided by the service provider. It is therefore necessary to develop a standard template for conduct of equipment audit. Few suggested templates are given below, however the engaging agency may with consultation of service provider accept any other equipment audit sheet formats based on needs and context:

12. **User training:** User training is obviously important for effective and safe use of medical equipment, more importantly since a fair proportion of errors and faults generated in a medical device could be due to user errors. Provision of user training by the maintenance service provider could thus, reduce the fault density, improve the life of the device and the cost incurred by provision of training could be potentially lesser than extra cost on maintenance and change of

History Sheet						
Name Of Equipment :-				Asset. Code :-		
Name of Company/Supplier :-				Location :-		
Model :-				Frequency of Calibration:-		
Date of Installation :-				Frequency of PM :-		
Sr. No :-				Warranty Expiry Date :-		
Maintaince Record						
SL. No.	Date of Complaint	Date of Completion	Time take for PM(Hr)	Breakdown Time (Hr)	Fault	Action Taken
1						
2						
3						
4						
5						

Monthly Breakdown Analysis of All Equipments									
Month:									
Type of Breakdown									
SL. No.	Equipment	User		Technical					
		Nurses	Doctors	Electrical	Mother Board	I/O Device	Other	Mechanical	
				Main Power Supply	Internal Power Supply				

Weekly Analysis on the Breakdown of Critical Equipments									
Week:									
Type of Breakdown									
		User		Technical					
		Nurses	Doctors	Power Supply		Mother Board	I/O Device	Other	Mechanical
				Main Power Supply	Internal Power Supply				
1	Ventilator								
2	Cath Lab								
3	Anesthesia								
4	labp								
5	Defibrillator								
6	Dialysis								
7	Cr Reader								

Weekly Analysis on the Breakdown of Critical Equipments

Week:		Type of Breakdown							
		User		Technical					
		Nurses	Doctors	Power Supply		Mother Board	I/O Device	Other	Mechanical
				Main Power Supply	Internal Power Supply				
8	Mammography								
9	Ot Table								
10	Patient Monitor								
11	Echo/Ultrasound M/C								
12	Heart Lung M/C								
13	Mri								
14	Ct Scan								
15	C-Arm								
16	Eto/Steam Sterlizer								
17	Scopes								
18	Incubator								
19	Tmt/Holter								
20	Cautry								

spares, thus increasing the profitability of the service provider. The engaging agency and maintenance service provider should agree for the maintenance service provider to provide users training on old and new equipment at a pre-defined periodicity. This would promote safe intended use and normal functioning of the device thereby enhancing its efficacy and safety. This training should be considered as a pre-requisite for the new users and as a refreshers course for the others. Where relevant, training should cover:

- ❖ At least two on site trainings a year for the critical equipment
- ❖ Any limitations on use
- ❖ How to fit accessories and to be aware of how they may increase or limit the use of the device
- ❖ How to use controls appropriately
- ❖ The meaning of any displays, indicators, alarms etc., and how to respond to them
- ❖ Requirements for any in house maintenance and decontamination, including cleaning
- ❖ recognize when the device is not working properly and know what to do about it

- ❖ understand the known pitfalls in the use of the device, including those identified in safety advice from the regulators, manufacturers and other relevant bodies
- ❖ Understand the importance of reporting device-related adverse incidents

13. **Competencies of the maintenance service provider:** The eligibility, competency requirements and expected size of a maintenance service provider will largely depend upon the requirements of the engaging agency, the equipment density and the age of the devices that are available in health facilities in the region/state/district for which the contract is being envisaged. However, to be generic, the following criteria could be taken as a modest guideline for engaging and selecting suppliers of maintenance services:

- a) The maintenance service provider may be a sole Provider (Company/Society/Trust) or a maximum of three providers as Consortium to implement the maintenance Project. This would promote small providers to come together in form of partnerships that would improve their

technical capacity as well as credibility. In many countries, a single large provider of maintenance services may not exist; partnerships would thus be a suggested solution. It would also encourage providers that specialize in select services such as Radiology equipment maintenance and laboratory equipment maintenance to part with other maintenance providers to give a comprehensive set of services at district and state level.

- b) The Provider cannot be an individual or group of individuals. The Provider should be registered as a legal entity such as company registered under Companies Act, Societies Registration Act, Trust Act or an equivalent law applicable in the region/ state/country.
- c) The Lead partner Provider should have at least two (2) financial years of experience of (till the date of bidding) maintaining Biomedical Equipment a minimum of 10 Hospitals (public/private) with each hospital having a minimum of 100 beds or a minimum of 2 hospitals with 500 beds or a total of 1000 beds. The bidder may also be a Government enterprise which provides engineering and/or health services.
- d) The Provider should be able to give evidence of existence of a centralized call center of capacity adequate to meet the complaints from the number of facilities as expressed in the contract agreement.
- e) The Provider should have adequate (numbers if required may be inserted by state governments) skill biomedical/ clinical engineering human resource to meet the work load. This may be expressed as minimum number of engineers per facility/zone/district/state.
- f) The Provider must equip the trained biomedical/clinical engineering human resource with required vehicles to reach out to sites as well as vehicles to carry tools and equipment to and from the site. The Provider must also ensure that no equipment is transferred across health facilities to meet requirements at random

as this could disturb patient care and planning.

- g) The Provider should have robust financial capacity (a minimum of 3 times the value of the proposed contract in each of the previous two financial years) and have an average annual turnover/ gross receipts of a minimum amount as desired by the engaging agency. The financial credibility must be expressed by the service provider and the Provider could be expected to have deposited 10% of the contract value (may be changed as per state government/ corporation/society procurement rules) in the form of Bank Guarantee prior to the commencement of the contract.
 - h) In case of a consortium seeking to be a provider of maintenance services, the lead member shall have at least 51% ownership of the financial capital for the entire duration of the contract.
14. **Adverse event Reporting:** The service agency will have the overall responsibility of implementing and managing the hospital's medical device reporting program. This includes establishing and maintaining a facility wide system for documenting medical device incidents, reviewing and analyzing all reportable incidents, and completing and submitting appropriate reports to appropriate legal/regulatory authority responsible for adverse event reporting program in the state/ region/country. Following an incident, Clinical/ paramedical staff will attend to the injured patient or employee as appropriate and information on all equipment involved in the incident including accessories, packaging, etc. would be given by the staff/user to the service agency through their immediate supervisor for reporting in the adverse event program.
15. **Radiation Safety & Disaster Management:** In many countries, radiological equipment is within the jurisdiction of a separate entity outside Ministry/Department of Health or even the regulator of health products. In such cases, usually type approval certification awarded to manufacturers of radiological devices with an undertaking that they would be responsible for

safety and good maintenance of the devices, installed by them or their subsidiaries in various healthcare facilities. In such cases it is advisable that radiological medical equipment could be kept out of purview of any third party maintenance contract. However, the nuclear medicine and diagnostic radiological equipment (e.g. general/fluoroscopy x-ray, CT scan, mammography, dental, BMD etc.) which are in an existing maintenance contract with the authorized supplier/manufacturer, the third party would be permitted to “administer the contract only” for and on behalf of the concerned hospital/health facility/engaging agency. In such contracts, the third party maintenance service provider must obtain necessary authorization from the concerned health facility/engaging agency stating that the manufacturer/supplier who is holder of an existing maintenance continue to be responsible for upkeep and safety of the equipment, for the full period of the valid maintenance contract. For diagnostic radiological equipment and nuclear medicine equipment that are not in an existing maintenance contract with the authorized supplier/manufacturer: in these cases, third party maintenance provider could be permitted to undertake maintenance services. The eligibility for this function would be gained by the third party maintenance agency only if the agency obtains authorization from the Atomic Energy Regulatory Board or appropriate radiological safety authority in the state/region/country. For complex high end radiological equipment, it is suggested that the accountability of manufacturers be retained and the service provider only administers the contract on behalf of the health facility/engaging agency.

16. **Code for uniforms, vehicles and other administration issues:** The maintenance service provider shall establish codes for uniform, vehicles including service vehicles as administrative protocols in consensus with the engaging agency and would have it approved by the engaging agency. A compliance report to these standard operating protocols is suggested to be submitted to the engaging agency on a periodic basis.

17. **Quality systems and accreditation:** Although medical devices follow quality systems mostly under national regulatory agencies, the private providers of maintenance services could be considered as providers of a specialized set of ‘services’. Hence it would be desirable that such providers follow a set of best practices that undergo a third party audit at specified time intervals. Quality systems for process such as ISO 9001:2008 are examples of some certifications that help providers display conformity to series of requirements aimed to reduce error and promote excellence. Third part audit must be carried out to assess the quality system of the company and to not only prove it’s consistency but also improvement in it’s performance over time. The service provider must also submit monthly performance reports to the District Health Authority.

18. **Monitoring Mechanisms:** Audits are only one of the methods for monitoring. Other monitoring tools and checklists are desirable based on contexts where these models are practiced. They have even include qualitative methods such as focused group discussions with the users, surprise visits, monthly/quarterly reports from facility supervisors, and periodic visits to facilities where breakdown rates are high. The constant tool is however an automatically generated E-report (provided by the service providers maintenance systems software) on the number of breakdowns, time taken for rectification, upkeep time and extension achieved in the life of the equipment, on a periodic basis for the entire inventory for which an outsourced model has been brought in existence. It is also recommended that the health administration, particularly at the central but also at the regional level, establish a structure to monitor the main contractual arrangements, and which can also make evaluations for the purpose of reporting to the decision making authorities, The ongoing contracting process will cause changes in some of the procedures habitually followed by administration, which must take into account the legal and administrative implications induced by contracting, and implement the necessary acts that support this process .

Generally a review meeting with interested parties also called as a pre-bid meeting is desirable prior to the formulation of a contract. This helps the public entity to understand the extent to which market competencies could satisfy a proposed need and also helps public service providers to understand and get answers to technical queries regarding a proposed contract. Such a process encourages transparency and competition.

A contract is a framework elaborating the essential and non-negotiable elements of a professional relationship detailing the roles and responsibilities of each partner. It also helps answer operational questions that may arise during the fulfillment of the professional relationship during the time period for which the contract is deemed valid. These may include legal disputes, financial clarifications, scope of dispute resolution and arbitration, as well as modalities for termination of professional relationship due to any seen or unforeseen events in the structure of either partner or in the region at large. Although, the content of such a contract should ideally be prepared by domain experts, vetted by legal experts and approved by at least three layers of administrative authority, for equipment maintenance contract, the content should generally include:

- a. Preamble detailing the object of the contract.
- b. Process for registration of the contract.
- c. All components as given in this document under the theme 'Components of a PPP'
- d. Obligations, roles and responsibilities of all partners involved with the contract.
- e. Duration of the contracts with details on terms and conditions of extension, dissolution and termination.
- f. Details of all financial and administrative resources that either partner would be committed to contribute for the successful operation of the contractual relationship.
- g. Key performance indicators based on which performance of the service provider would be measured.
- h. Periodicity and methodology for monitoring and evaluation.
- i. Mechanisms for monitoring of the contract.
- j. Eligibility criteria for the bidder to qualify for selection as maintenance service provider.
- k. Framework for prevention and resolution of disputes with details of regulatory/legal jurisdiction for appeals and conditions for arbitration.
- l. Identification of persons/entities responsible for commencement and functioning of the contract
i.e. authorized signatories of the contract.

Partnerships are marked by certain specific stages. Life cycle of a contractual partnership is fairly predictable and each stage has certain specific outcomes expected to be achieved. Each stage however, must comply with the regulations and rules as desired by appropriate national/regional authority. The stages are summarized below:

- a. **Preparation of the Contract:** This includes discussion amongst the technical, financial, legal and administrative teams of the inviting

public entity on the scope and structure of the contract. The draft contract along with time lines for implementation of the partnership are the primary outcomes of this stage. It is also desirable results of needs assessment, pilot studies if any, user experiences from any similar existing practice are considered as important inputs at this stage. Criteria for eligibility of competitive bidders and pre-qualification requirements must be clearly stated to avoid any delay or difficulty in progressing towards the later stages of the contract process.

- b. **Tendering Process:** This stage is executed usually under the rules of the concerned public entity and usually consists of advertisement, receipt of technical and financial bids, technical bid opening to identify qualifying agencies and financial bid opening to identify appropriate bidders.
- c. **Formalization of 'Contractual Relation':** Authorizing the commencement of a contract and dissemination of the contract amongst various stake holders are primary components of this stage. Approval of the terms and conditions of the contract by technical teams of both parties (the public entity and the private agency) are necessary elements in the task for formalization. It is also advisable that the legal experts check the consistency in contract document from the bidding stage to the signing stage.
- d. **Registration of the Contract:** Registration is formal processes of letting an appropriate authority know of the commencement of the contract. This stage ensures that a neutral third party has registered the existence of a professional contractual relationship between the 'receiver of service- the public entity' and 'provider of service- the private agency'.
- e. **Commencement of the Contract:** The contract begins with a formal introduction of

stakeholder from both parties with various user and service provider teams. Reviewing of existing condition at sites where services are to be ensured as part of the contract is the first step. This would include visits of sites where services are to be provided, assessment of initial work, submission of details short-term and long term work plans as well as visit of public entity officials to various service sites such as concerned health facilities as well as service centers of the service providers.

Donors and multilateral organizations can play an important role in nurturing public sector engagement of the private sector. A donor policy that includes strengthening health systems by supporting maintenance of medical equipment – that being a necessary element for access to healthcare could be an encouraging approach. The principles of engagement detailed above should be considered only as a suggestive broad framework and must be contextualized based on engineering, regulatory and occupational requirements of the contexts where this model is piloted or practiced. There should be relevant documents explaining the terms of reference of the proposed contract along with a Tender/Bid document that should ideally be brought out by the engaging agency to encourage a competitive and cost-effective process for selection the maintenance provider with adequate competencies and financial credibility. The decision to hold a pre-bid conference of proposed service providers/bidders could help in identifying bottlenecks and to resolve queries of proposed service providers. There could be more areas where specific guidance could help, however, the fifteen domains mentioned in this report only lays a roadmap to envisage a partnership model for maintenance of medical devices with the sole aim to improve access to medical equipment that are safe, accurate and effective.

- i. WHO Medical Equipment Homepage, accessed on 7th April, 2014
- ii. MHRA Equipment Bulletin, Managing Medical Equipment, Nov, 2006
- iii. Medical equipment - managing the mismatch, 2010
- iv. Introduction to Medical Equipment Inventory Management, WHO, 2011
- v. Perrot and Roodenbeke, Strategic Contracting for health systems and services, 2009

REQUEST FOR PROPOSAL

FOR

HIRING OF SERVICE PROVIDER FOR BIOMEDICAL
EQUIPMENT MAINTENANCE

TENDER NO. _____

ADDRESS: _____

PHONE: _____

URL: _____

EMAIL: _____

(Insert: Name of State)

ADDRESS: _____

PHONE: _____

URL: _____

EMAIL: _____

Tender Enquiry No. _____

Dated: ____/____/____

1.1 Data Sheet

Name of the Project Project Objectives	Biomedical Equipment Maintenance in (insert: name of state).
Required Proposals	i. Technical Bid (as per details in 3.6.2). ii. Financial Bid (as per details in 3.6.3).
Pre-Bid conference	A pre-bid conference is proposed on (insert: date) at (insert: time) in the (insert: address).
Queries for the Pre Bid Conference	The prospective Bidders shall submit their queries on or before (insert: time) (insert: date).
Contact details for all queries	(Insert: Address, phone no., email, fax)
Language in which proposals should be submitted	Language- English or any one local/regional language)
Currency of Quote	Specify Currency

Eligibility to bid	<ul style="list-style-type: none"> i. The Bidder may be a sole Bidder or a group (maximum 3) coming together as Consortium to implement the Project. ii. The Bidder cannot be an individual or group of individuals. The Bidder should be registered as a legal entity. iii. Technical Capacity: <ul style="list-style-type: none"> a. The Lead partner/sole bidder should have at least two (2) financial years of experience of (till the date of bidding) maintaining Biomedical Equipment at a minimum of 10 hospitals (including public/private) with each hospital having a minimum of 100 beds or a minimum of 2 hospitals with 500 beds or a total of 1000 beds. The bidder may also be a Government enterprise which provides engineering and/or health services.
	<ul style="list-style-type: none"> b. The Bidder should be able to give evidence of existence of a centralized call center of capacity adequate to meet the complaints from the number of facilities as expressed in the contract agreement. c. The Bidder should have adequate (numbers if required may be inserted by state governments) skilled Biomedical/Clinical engineering human resource to meet the work load. This may be expressed as minimum number of engineers per facility/zone/district/state. d. The Bidder must give an undertaken to equip its trained Biomedical/Clinical engineering human resource with required vehicles to reach out to sites as well as vehicles to carry tools and equipment to and from the site. The bidder must also ensure that no equipment is transferred across health facilities to meet requirements at random as this could disturb patient care and planning at a given facility. iv. Financial Capacity: The Provider should have robust financial capacity (a minimum of 3 times the value of the proposed contract in each of the previous two financial years) and have an average annual turnover/gross receipts of a minimum amount as desired by the government. The financial credibility must be expressed by the service provider and the provider would be expected to have deposited 5% of the contract value/as desired by the state government in the form of Bank Guarantee prior to the commencement of the contract.
Bid Security	Rs. 5 lakhs/as desired by the state government The Bid Security shall be kept valid for 180 days from the date of submission of bids (the "Proposal Due Date").
Performance Security	1% of the value of proposed contract/as desired by the state government. The performance security will be valid up till 6 months after the expiry of agreement period.
Agreement Period	5 years extendable to a maximum of another term of 5 years subject to annual performance appraisal
Address for Proposal submission	(Insert: Address)

1.2 Important Dates and Information

Si. No.	Description	Schedule
i.	Date of sale of Proposal Documents	_____ to _____, during _____ Hrs. to _____ Hrs. (IST)
ii.	Place of sale of Proposal Documents	Address _____
iii.	Cost of Proposal Document	Rs. _____
iv.	Issue of RFP to Prospective Bidders	
v.	Pre Bid Conference Date and Time	Date _____, _____ Hrs. (IST)
vi.	Pre Bid Conference Meeting venue	Same as mentioned in _____
vii.	Closing Date and Time for receipt of Bids	Date _____ Hrs. (IST)
viii.	Time and Date of opening of Technical Bid	Date _____ Hrs. (IST)
viii.	Venue of opening of Technical Bid	Same as mentioned in _____

The information contained in this Request for Proposal document (the "RFP") or subsequently provided to the Bidder(s), in documentary or any other form by or on behalf of the Authority or any of its employees or advisors, is provided to Bidder(s) on the terms and conditions set out in this RFP and such other terms and conditions subject to which such information is provided to the Bidder.

Whilst the information in this RFP has been prepared in good faith and contains general information in respect of the Proposed Project, the RFP is not and does not purport to contain all the information which the Bidder may require.

Neither the Authority, nor any of its officers or employees, nor any of their advisers nor consultants accept any liability or responsibility for the accuracy, reasonableness or completeness of, or for any errors, omissions or misstatements, negligent or otherwise, relating to the proposed Project, or makes any representation or warranty, express or implied, with respect to the information contained in this RFP or on which this RFP is based or with respect to any written or oral information made or to be made available to any of the recipients or their professional advisers and liability therefore is hereby expressly disclaimed.

This RFP document is not an agreement and is not an offer or invitation by the Government of **(insert: Name of State)** (hereinafter referred to as "Authority") or its representatives to the prospective Bidders or any other person. The purpose of this RFP document is to provide interested parties with information to assist the formulation of their

Proposal. The information contained in this RFP is selective and is subject to updating, expansion, revision, and amendment. Each recipient must conduct its own analysis of the information contained in this RFP or to correct any inaccuracies therein that may be in this RFP and is advised to carry out its own investigation into the proposed Project, the legislative and regulatory regime which applies thereto and by and all matters pertinent to the proposed Project and to seek its own professional advice on the legal, financial, regulatory and taxation consequences of entering into any agreement or arrangement relating to the proposed Project.

This RFP includes certain statements, estimates and targets with respect to the Project. Such statements, estimates and targets reflect various assumptions made by the management, officers, and employees of the Authority, (and the base information on which they are made) which may or may not prove to be correct. No representation or warranty is given as to the reasonableness of forecasts or the assumptions on which they may be based and nothing in this RFP is, or should be relied on as, a promise, representation, or warranty.

RFP document and the information contained therein is meant only for those applying for this Project, it may not be copied or distributed by the recipient to third parties, or used as information source by the Bidder or any other in any context, other than applying for this proposal.

The Authority, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Bidder under any law,

statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way for participation in this Bidding process.

The Authority also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this RFP.

The Authority may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this RFP.

The issue of this RFP does not imply that the Authority is bound to select a Bidder or to appoint the Selected Bidder or Bidder, as the case may be, for the Project and the Authority reserves the right to reject all or any of the Bidders or Bids at any point of time without assigning any reason whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its Bid including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the Authority or any other costs

incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Bidder and the Authority shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the Bid, regardless of the conduct or outcome of the Bidding process.

Any information/documents including information/ documents pertaining to this RFP or subsequently provided to Bidder and/or Selected Bidder AND information/ documents relating to the Bidding process; the disclosure of which is prejudicial and/or detrimental to, or endangers, the implementation of the Project IS NOT SUBJECT TO DISCLOSURE AS PUBLIC INFORMATION/ DOCUMENTS.

For and on behalf of

Department Of Health and Family
Welfare, Government Of (Insert: Name Of State)

Address: _____

Si. No.	Topic	Page No.
A	PREAMBLE	
3.1	Definitions and Abbreviations	
3.2	Language of Tender	
3.3	Background information- Request for Proposal	
3.4	Instructions to Bidders	
B	RFP DOCUMENTS	
3.5	Contents of RFP Documents	
C	Bid Preparation and Submission	
3.6	Documents Comprising Preparation and Submission of Bids	
3.7	Preparation and Submission of Proposals	
3.8	Additional Requirements for Proposals from a Consortium	
3.9	Bid Security	
3.10	Sealing and Signing of Proposal	
3.11	Proposal Due Date and Time	
3.12	Late Proposal	
3.13	Modifications/Substitution/Withdrawal of Proposals	
3.14	Clarifications and Pre-Bid Conference	
3.15	Amendment of RFP	
3.16	Proposal Validity period	
3.17	Extension of Proposal Validity Period	
3.18	Right to accept or Reject Proposal	
3.19	Confidentiality	
3.20	Acceptance of LOI and Execution of Agreement	
3.21	Performance Security	
3.22	Return of Proposal and Bid Security	

A. PREAMBLE

3.1 Definitions and abbreviations

The following definitions and abbreviations, which have been used in this RFP shall have the meanings as indicated below:

3.1.1 Definitions:

- i. "Request for Proposal" means a solicitation made through a bidding process by the contracting Authority (Usually a government body/agency) for procurement of a service.
- ii. "Proposal/Bid" means Quotation/Tender received from a Sole Bidder/Consortium.
- iii. "Bidder" means the Sole (Company/Society/ Trust) or Consortium (a group of 3) submitting Bids/Quotation/Tender.
- iv. "Supplier" means the sole individual/consortium supplying the services as incorporated in the RFP.
- v. "Services" means services allied and incidental to the supply of goods and services, such as transportation, installation, commissioning, provision of technical assistance, training, maintenance service and other such obligations of the supplier covered under the RFP.
- vi. "Earnest Money Deposit" (EMD) means Bid Security/ monetary or financial guarantee to be furnished by a Bidder along with its Bid
- vii. "Contract" means the written agreement entered into between the purchaser and/or consignee and the supplier, together with all the documents mentioned therein and including all attachments, annexure etc. therein.
- viii. "Day" means Calendar Day.
- ix. Associate means, in relation to the applicant/ bidder / consortium member, a person who controls, is controlled by, or is under the common control with such applicant/bidder/ consortium member (the "Associate").
- x. "Control" means, with respect to a person which is a company or corporation, the ownership, directly or indirectly, of more than 50% (fifty per cent) of the voting shares of such person, and with respect to a person which is not a

company or corporation, the power to direct the management and policies of such person by operation of law.

- xi. "Authority" means state government or any agency authorized by state government.

3.2.1 Abbreviations:

- i. "RFP" means Request for Proposal
- ii. "MoU" means Memorandum of Understanding
- iii. "PHC" means Primary Health Centre
- iv. "CCC" means Centralised Call Centre
- v. "CHC" means Community Health Centre
- vi. "LOI" means Letter of Intent

3.2 Language of Tender

3.2.1 The Bid submitted by the Bidder and all subsequent correspondence and documents relating to the tender exchanged between the Bidder and the purchaser, shall be written in the English language, unless otherwise specified in the RFP. However, the language of any printed literature furnished by the Bidder in connection with its Bid may be written in any other language provided the same is accompanied by a notarised English translation and, for purposes of interpretation of the tender, the English translation shall prevail.

3.2.2 The Bid submitted by the Bidder and all subsequent correspondence and documents relating to the tender exchanged between the Bidder and the "Contracting Authority", may also be written in the Hindi language, provided that the same are accompanied by notarised English translation, in which case, for purpose of interpretation of the tender etc, the English translations shall prevail.

3.3 Background Information Request for Proposal

3.3.1 Background Information

3.3.1.1 Department of Health, Government of (insert: name of state), (the "Authority")

seeks to engage supplier of services for maintenance of biomedical equipment in **(insert: name of districts of name of state)**.

- 3.3.1.2 This Request for Proposal (RFP) is for "Medical Equipment Maintenance Services" (hereinafter referred to as "Project") for a period of 5 years.
- 3.3.1.3 This RFP consists of two Parts as listed below and would include any Addenda issued in accordance with Clause 3.15 of this RFP:
 - i. Instruction to Bidders.
 - i. Draft Agreement along with its schedule.
- 3.3.1.4 Interested parties may obtain the RFP document from **(insert: address)**, on all working days between by written request on submission of a non-refundable fee of **(insert fee value)**, by way ofin favour of**(insert name of authority)**... payable on any scheduled bank in **(insert: name of city)**. The Authority will not be responsible for any delay, loss, or non-receipt of RFP document sent by post / courier.
- 3.3.1.5 The RFP document is also available on the website **(insert: name of website)**. Bidders, who download the RFP document from the website, will be required to pay the non-refundable fee **(insert fee value)** by way ofin favour of **(insert name of authority)**..... payable on any scheduled bank in **(insert: name of city)**, at the time of the submission of the Proposal.
- 3.3.1.6 The purchaser of the RFP document must be the Bidder itself or a member of the consortium submitting the Proposal, authorized by the consortium.
- 3.3.1.7 A single stage bidding process will be followed to decide the Selected Bidder. There shall not be any separate Pre-Qualification Stage for short-listing of Bidders. Bids will be evaluated in two steps. In the first step, the bids will be assessed for responsiveness to

the qualification and eligibility criteria. Those Bidders who meet the minimum eligibility criteria and are found to be responsive shall be shortlisted and only their Financial Bids shall be opened for evaluation. The Financial Bids of the Bidders not qualifying through the technical bid process shall not be opened.

- 3.3.1.8 The Authority will enter into an Agreement with the by the selected Bidder.
- 3.3.1.9 Further, all the parts of the Proposal (PART 1: Qualification Bid, PART 2: Financial Bid) must be submitted in a hard bound form with all pages numbered serially, along with an index of submissions. The key figures quoted in the Financial Bid should be mentioned in words also. In the event of any deviation from any of the instructions mentioned herein have not been adhered to, the Authority may at its sole discretion reject the bid.
- 3.3.1.10 RFP submissions by Bidders must be done positively by **(insert: time and date)** in the manner specified in the RFP document at the address given in clause 3.3.1.12 and the Authority shall not be responsible for any delay in receiving the Proposal.
- 3.3.1.11 The dates and other particulars relating to the RFP are given in the Data Sheet attached at the beginning of the RFP document. The Authority may at its sole discretion alter the schedule anytime during the process by giving due notice
- 3.3.1.12 Address for Submission of Proposal:

(INSERT ADDRESS)

3.4 Instructions to Bidders

3.4.1 General Terms of Bidding

- 3.4.1.1 All the Bidders are required to submit their Proposal in accordance with the terms set forth in this RFP.
- 3.4.1.2 The Authority reserves the right to invite fresh bids with or without amendment of

the RFP at any stage or to terminate at any time the entire bidding/selection process without any liability or any obligation to any of the Bidders and without assigning any reason whatsoever.

3.4.1.3 The Bidders shall enclose its Proposal, complete with its Formats, all the relevant documents to support information provided in the Proposal.

3.4.1.4 The Bidder should submit a Power of Attorney as per the format mentioned in FORMAT 2, authorizing the signatory of the Proposal to commit the Bidder. In the case of a consortium, the Members should submit a Power of Attorney in favour of the Lead Member as per FORMAT 3.

3.4.1.5 An individual Bidder cannot at the same time be member of a Consortium submitting a bid for the Project. Further, a member of a particular Bidder consortium cannot be a member of any other Bidder consortium submitting a bid;

3.4.1.6 Members of the Consortium shall enter into a binding Memorandum of Understanding, in the form specified at FORMAT 7 (the "MoU"), for the purpose of submitting a bid. The MoU, to be submitted along with the Bid, shall, inter alia:

3.4.1.7 Any entity which has been barred/blacklisted by the Government of (**insert: state**), any other State Government or Government of India from participating in any project, and the bar/blacklisting subsists as on the Proposal Due Date, the concerned entity would not be eligible to submit the Proposal, either individually or as member of a Consortium. The Bidder or each Consortium member, as the case may be, shall have to submit an affidavit to this effect as per FORMAT 4 as part of the Qualification Proposal.

3.4.1.8 While bid is open to bidders from any other country, the bidder shall work through a subsidiary or a registered company based in India

3.4.2 Scope of Work

3.4.2.1 Government of (**insert: name of state**) seeks to engage Service Provider for Maintenance of Biomedical Equipment with an aim:

- (i) To maintain Biomedical Equipment in all public healthcare facilities up to the PHC level supported by 24 X 7 call centre ;
- (ii) To provide 24x7, 365 days uptime of 95% for all medical equipment in District Hospitals, . 90%for CHCs and 80% for PHCs. At no point of time in a single breakdown the breakdown should not be more than 7 days from the date and time of registration of fault.
- (iii) Medical Equipment that are already in AMC or CMC. The service provider shall administer the contract on behalf of state health department. For this purpose, the service provider shall take authorization from services providers for the respective equipment for which AMC/CMC may be in existence.
- (iv) For Medical Equipment that is currently under warranty. The service provider shall administer all maintenance activities on behalf of the state health department for the entire duration.
- (v) For all medical equipment that is under any form of AMC/CMC/Spares agreement or under warranty, the state health department shall not be renewing the equipment specific maintenance contracts
- (vi) The maintenance service provider shall not be including cost of maintaining any equipment which is under any kind of AMC/CMC/warranty in its first proposal and cost of such equipment shall not be included till the time existing contract(s) with other service provider(s) is valid for the respective equipment. The maintenance service provider may choose to take authorization for doing maintenance such equipment from existing AMC/CMC contract holder(s).
- (vii) Maintenance costs for equipment that are currently in any AMC/CMC/warranty

contract shall be added by the service provider only after the expiry of contracts for the respective equipment.

- (viii) The sole service provider shall however be liable to ensure upkeep time declared in the bid for all equipment irrespective of any AMC/CMC/warranty status for any equipment.
- (ix) The maintenance service provider shall be identifying and responding to requests seeking maintenance of all Biomedical Equipment available in the district/sub district/state up to the level of Primary Health Center(PHC) through the Maintenance Process Tracking Identification Number (MPT-IDs).
- (x) Maintenance service provider shall establish and operate an exclusive 24x7-customer care centre for accepting calls and managing the maintenance services.

Operationalisation of Maintenance services will be regarded as:

- (a) Maintenance activities conducted on all Biomedical equipment.
- (b) Setting up Customer Care Centre to accept calls for fault registration.
- (c) Recruitment of trained engineering and administrative human resource.
- (d) Provide Equipment Management Information System.
- (e) To provide categorization of all equipment, clearly identifying critical equipment.
- (f) Provide preventive and corrective maintenance for all biomedical equipment in all public healthcare facilities in an entire region/state up to the level of PHCs .
- (g) To furnish the format of equipment identification code system. The Authority shall have the right to increase the number of Equipment beyond the present number from the date of execution of the Agreement. In the event of any such increase in the number and density of equipment/ by the Authority, the Bidder shall operate and maintain the additional equipment/ till the remaining

term/duration of the Agreement in the given year and the monetary value for the maintenance of the added equipment shall be included in the subsequent years, as part of the existing scope of work and upon the same terms and condition specified in the Agreement.

3.4.2.2 The CMC Service Provider shall at all times comply with applicable laws and regulations pertaining to the Biomedical equipment especially those pertaining to radiation, safety, security, environment, all general public general and national laws and the requirements of competent and/or Regulatory Authority whose jurisdiction applies in the area where the services are being provided.

3.4.2.3 The service provider shall establish a well-equipped service network and adequately staffed Centralized Call Centre (CCC) that is accessible through "Centralized toll free number". For each facility, there would be a nodal officer(s) to whom a confirmation call may be given by the maintenance service provider after acceptance of a breakdown call from any user in the facility. Resolving/fixing of the fault must be followed by the closure of communication loop (call closure) via telephonic guidance to nodal officer(s) identified on a case to case basis. Annual third party audit NABL accredited laboratory be carried out for all calibration processes provided by the maintenance service provider

3.4.2.4 The service provider shall be responsible to operate the Centralised Call Centre with toll free number, 24 hours in a day, 365 (complete year) days in a year and to maintain all Biomedical Equipment in the public Healthcare facilities upto the PHC level.

3.4.2.5 The Bidder shall be entitled to receive the penalty charges from the Authority for not confirming to the obligations and services as per provisions of the Agreement.

3.4.2.6 The service provider will be responsible for procuring all the necessary tools, spare parts, manpower, vehicles and other services

required for the satisfactory completion of the contract. The service provider shall be responsible for the safety and occupational health of its staff involved with performance of various duties towards the fulfillment of this contract.

3.4.2.7 The Authority will be responsible for providing all necessary support to provide the access to all the Biomedical equipment available in the healthcare facilities.

3.4.2.8 The bidder shall specify color codes and uniform for all its employees visiting the sites for maintenance. Here, the word uniform includes identification badge, clothing, protection gear, boots, cap and any other item required for safe delivery of the devices.

3.4.2.9 Condemnation of the Biomedical Equipment:

- (a) The condemnation committee appointed by the authority at the district/ state level from time to time for identification of equipment suitable for condemnation of the equipment shall have a representative of the service provider.
- (b) A report indemnifying equipment requiring condemnation should be submitted by the Maintenance Service provider once every year preferably before the renewal of the contract for the subsequent year.
- (c) The maintenance Service Provider should not under any circumstances be the purchaser of spare part or components of any equipment resulting out of condemnation.
- (d) For condemnation of Radiological devices, approval from appropriate authority must be taken and condemnation be done as per guidelines issued by the appropriate authority.

3.4.2.10 User Training:

- (a) A trained representative of the maintenance Service Provider shall be available during installation,

commissioning and associated trainings provided by the suppliers of new equipment during all new installations and commissioning.

- (b) The service provider shall arrange for periodic user trainings of all equipment not less than twice times a year irrespective of the equipment being within/outside the warranty period.

3.4.2.11 The maintenance service provider shall have no obligation to repair any equipment damaged by the user either accidentally (such as falling of equipment on ground) or willfully at the facility. If requisition for repair of such equipment is made, the maintenance service provider shall have the right to invoice it to the contracting authority annually or on case to case basis as mutually decided.

3.4.4 Site visit and verification of information

3.4.4.1 The Bidders are encouraged to submit their respective bids after visiting the State of (**insert: name of state**) (hereinafter referred to as "State") and ascertaining for themselves of the health profile, health facilities in the State, the road conditions, traffic, conditions affecting transportation, access, applicable laws and regulations, and any other matter considered relevant by them. For ascertaining the condition of the existing equipment, the Authority may permit the Bidder to inspect the position of the said equipment.

3.4.4.2 The Bidder is expected to examine carefully the contents of all the documents provided. Failure of the proposal to comply with the requirements of Request For Proposal (RFP) will be at the Bidders' own risk and make the bid non-responsive.

3.4.5 Acknowledgement by Bidder

3.4.5.1 It shall be deemed that by submitting the bid, the Bidder has:

- (a) made a complete and careful examination of the RFP;

- (b) received all relevant information requested from the Authority;
- (c) satisfied itself about all matters, things and information required for submitting an informed bid, execution of the Project in accordance with the bidding documents and performance of all of its obligations there under;
- (d) acknowledged and agreed that inadequacy, lack of completeness or incorrectness of information provided in the RFP or ignorance of any of the matters referred shall not be a basis for any claim for compensation, damages, extension of time for performance of its obligations, loss of profits etc. from the Authority, or a ground for termination of the Agreement;
- (e) acknowledged that it does not have a Conflict of Interest; and
- (f) agreed to be bound by the undertakings provided by it under and in terms hereof

3.4.5.2 The Authority shall not be liable for any omission, mistake or error in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to the RFP or the bidding process, including any error or mistake therein or in any information or data given by the Authority.

3.4.6 Right to accept or reject any or all bids

3.4.6.1 Notwithstanding anything contained in this RFP, the Authority reserves the right to accept or reject any Bid and to annul the Bidding process and reject all bids, at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons thereof. In the event that the Authority rejects or annuls all the bids, it may, in its discretion, invite all bidders to submit fresh Bids hereunder.

3.4.6.2 The Authority reserves the right to reject any bid if:

(a) at any time, a material misrepresentation is made or uncovered,

or

(b) the Bidder does not provide, within the time specified by the Authority, the supplemental information sought by the Authority for evaluation of the Bid.

3.4.6.3 In case it is found during the evaluation or at any time before signing of the Agreement or after its execution and during the period of subsistence thereof, that one or more of the qualification conditions have not been met by the Bidder, or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith and notwithstanding anything to the contrary contained in this RFP, be liable to be terminated, by a communication in writing by the Authority to the Bidder, without the Authority being liable in any manner whatsoever to the Bidder and without prejudice to any other right or remedy which the Authority may have under this RFP, the bidding documents, the Agreement or under applicable law.

3.4.6.4 The Authority reserves the right to verify all statements, information and documents submitted by the Bidder in response to the RFP. Any such verification or lack of such verification by the Authority shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Authority there under.

B RFP DOCUMENTS

3.5 Contents of RFP Documents

- i. Data Sheet
- ii. Disclaimer
- iii. Request for Proposal

- iv. Instructions to Bidders
- v. Evaluation Process
- vi. Fraud and Corrupt Practices
- vii. Pre-Bid Conference
- viii. Miscellaneous Formats for Proposal
- ix. Draft Agreement along with Schedules

C BID PREPARATION AND SUBMISSION

3.6 Documents comprising Preparation and Submission of Bids

3.6.1 The Proposal in response to the RFP should be in English and is to be submitted in two (2) parts:

PART 1: Technical/ Bid

PART 2: Financial Bid

3.6.2 PART 1: Technical/ Bid

The Bidder is expected to provide details of its registration as per FORMAT 10 and furnish documents to support its claim. A summary of relevant information should be provided as per FORMAT 10. Details of all information related to the past experience and background should describe the nature of work, name and address of client, date of award of assignment, size of the project etc. as per FORMAT 11. The Bidder should submit details of financial capability for the last three (3) financial years (i.e. FY 2010-11, 2011-12 and 2012-2013) as per. The Qualification bid should be accompanied with the Audited Annual Reports including all financial statements of the Bidder. In case of a Consortium, Audited Annual Reports of all the lead partner of the consortium should be submitted.

The checklist for information to be submitted (in prescribed formats) for the Qualification Proposal is provided in the table below:

Information to be Provided	Format No.
Covering Letter for Proposal Submission	Format 1
Power of Attorney for Signing of Proposal	Format 2

Information to be Provided	Format No.
Power of Attorney for Lead Member of Consortium (If Applicable)	Format 3
Affidavit	Format 4
Anti- Collusion Certificate	Format 5
Project Undertaking	Format 6
Memorandum of Understanding	Format 7
Board Resolutions for Bidding Entities	Format 8
Undertaking for Individual Members	Format 9
Information Regarding Bidder	Format 10
Details of Eligible Experience	Format 11
Financial Capability of the Bidder/ Member (to Be Submitted for Each Member in Case of Consortium)	
Financial Bid (on the Letter Head of the Bidder/ Lead Member)	
Letter of Comfort and Undertaking from Associate (on the Letter Head of the Associate)	
Certificate from Statutory Auditor/ Company Secretary Regarding Associate	
Tor for Maintenance, Billing Schedule and Warranty Policy	
Copy of Draft Agreement Alongwith Schedules Initialed by the Bidder	

3.6.3 PART 2: Financial Bid

The Bidder should quote the rates as percentage of the Equipment Inventory for undertaking the aforesaid Project across the State in accordance with this Bidding Document and the Agreement.

3.7 Preparation and Submission of Proposals

3.7.1 All Proposals submitted must be duly signed in blue ink and stamped by the Authorised representative of the Bidder.

3.7.2 The Bidder should submit a Power of Attorney as per FORMAT 2, authorising the signatory of the Proposal to execute the Proposal. In case the Bidder is a Consortium, the Bidder must submit a Power of Attorney as per FORMAT 3

and comply with the additional requirements for bidding as a Consortium as specified in Clause 3.8 of this RFP.

3.7.3 The Proposal along with the copy of instruction to Bidders as Part I and Agreement with Schedules as Part II as mentioned in clause 3.3.1.3 shall be signed and each page of the said documents shall be initialed by a person /persons duly authorised to sign on behalf of the Bidder and holding the Power of Attorney.

3.7.4 An Affidavit (non conviction) as per FORMAT 4 should be submitted along with the Proposal.

3.7.5 The Proposal shall be accompanied with an Anti-Collusion Certificate on the letter head of the Bidder or each of the Member (in case of a Consortium) as the case may be as per FORMAT 5.

3.7.6 The Proposal shall also be accompanied with a Project Undertaking on the letter head of the Lead Member (in case of a Consortium) or the single entity as the case may be as per FORMAT 6.

3.7.7 The Proposal shall be accompanied by the Resolutions from the Bidder / Member for submitting the Proposal and, if successful, to participate and undertake the Project. The format for the Board Resolutions / Undertaking that shall be submitted is given in FORMAT 8.

3.7.8 The Proposal shall be submitted by the Bidder in the adequate, complete and correct form as per the Formats prescribed in the RFP. The Proposal / bid submitted by the Bidder in the form other than the prescribed Formats shall not be considered for evaluation by the Authority. In such an event, the Authority shall not be responsible for any loss or damage whatsoever that may be incurred by the concerned Bidder. However, the Authority may, in its sole discretion, require the Bidder to rectify the discrepancies in the bid submitted by the Bidder pursuant to this RFP.

3.8 Additional Requirements for Proposals from a Consortium should comply with the following requirements:

(a) Wherever required, the Proposal should contain the information required for each Member of the Consortium and the Members should acknowledge the collective responsibility and the respective roles as Consortium members;

(b) The Proposal should include a description of the roles and responsibilities of each of its Members;

(c) Members of the Consortium shall nominate one member as the Lead Member.

(d) The Lead Member will be nominated by the members of the Consortium through a power of attorney as per FORMAT 3.

(e) Subject to the sub-clause (a) above the Lead member shall authorise a representative ("Authorized Signatory") on behalf of the Consortium, through a power of Attorney as per FORMAT 2. The authorised representative will sign the proposal which would be legally binding on all the members of the Consortium.

(f) All the Power of Attorney shall be furnished on a non-judicial stamp paper of Rs. 100/- and duly attested by a notary public.

(g) A Bidder applying as a single entity cannot at the same time be a member of a Consortium applying for this Project. Further, a member of a particular Consortium cannot be a member of any other Consortium applying for this Project.

3.8.1 Members of the Consortium shall submit a Memorandum of Understanding (MoU) specific to this Project, for the purpose of submitting the Proposal as per FORMAT 7. The MoU shall be furnished on a non-judicial stamp paper of Rs. 100/-, duly attested by a notary public.

3.8.2 The bid shall be accompanied by the Resolutions from the Bidder / Member of the Consortium for submitting the Proposal and, if successful; to participate and undertake the Project. The format for the Board Resolutions

/ Undertaking that shall be submitted is given in FORMAT 8.

3.8.3 The Proposal shall be accompanied by the Project Undertaking on the letter head of the Lead Member (in case of Consortium) or single entity as the case may be as per FORMAT 6.

3.8.4 All witnesses and sureties shall be persons of status and probity and their full names, addresses and telephone numbers/mobile numbers shall be stated below their signature. All signatures in the Proposal documents shall be dated.

3.9 Bid Security

3.9.1 The Bidder is required to deposit, along with its bid, a bid security of Rs. **(Insert Amount)** (the "Bid Security"), refundable not later than 180 days from the Proposal Due Date, except in the case of the Selected Bidder whose Bid Security shall be retained.

3.9.2 The Bid Security should be in the form of demand draft. Demand draft should be in favour of **(insert: name of authority)**, payable on any Scheduled Bank in **(insert: name of city)**.

3.9.3 The Bid Security shall be forfeited as damages without prejudice to any other right or remedy that may be available to the Authority under the Bidding Documents and/or under the Agreement, or otherwise, under the following conditions:

- (a) If any Bidder engages in a corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice as specified in Section 4 of this RFP;
- (b) If any Bidder withdraws its Bid during the period of Bid validity as specified in this RFP and as extended by mutual consent of the respective Bidder(s) and the Authority;
- (c) In case of the Selected Bidder, if there is failure within the specified time limit to –

(i) sign and return the duplicate copy of Letter Of Intent (LOI);

(ii) to sign the Agreement; or

(iii) to furnish the Performance Security within the period of 30 (Thirty) days from the date of issue of LOI; or

(d) As per the relevant provisions of this RFP and Agreement.

3.10 Sealing and Signing of Proposal

3.10.1 The Bidder shall submit one original and two copies of Qualification Bid in the format as provided in clause 3.6.2 and shall mark the original qualification Bid as "Original" and the two copies as "Duplicate". Duplicate Proposals may contain all pages as in Original Proposal. The Bidder should also submit these documents in electronic form on a CD and seal it in an envelope and mark the envelope as

"PART 1: Qualification Bid for Maintenance of Biomedical Equipment in the state of (Insert: Name of State)".

3.10.2 The envelope shall contain all the FORMATS provided in clause 3.6.2 along with the supporting documents.

3.10.3 The Bidder shall submit and mark one original copy of Financial Bid in a separate sealed envelope. The envelope containing Financial Bid shall clearly bear the following identification

"Part 2: Maintenance of Biomedical Equipment in the sate of (Insert: Name of State)".

3.10.4 The Bidder shall submit the Bid Security in a sealed envelope and mark the envelope as "Bid Security".

3.10.5 The four envelopes specified in Clauses 3.10.1, 3.10.2, 3.10.3 and 3.10.4 shall be placed in an outer envelope, which shall be sealed and marked as "Proposal for Maintenance of Biomedical Equipment in the state of **(Insert: Name of State)**".

3.10.6 The Bidder shall provide all the information sought under this RFP. The Authority

will evaluate only those Proposals that are received in the required formats and complete in all respects. Incomplete and / or conditional Proposals shall be liable to rejection.

- 3.10.7 The Proposals and its copy shall be typed or written in indelible ink and signed by the authorised signatory of the Bidder who shall also initial each page, in blue ink. All the alterations, omissions, additions or any other amendments made to the Proposal shall be initialed by the person(s) signing the Proposals.
- 3.10.8 The pages of each part of the Proposal shall be clearly numbered, indexed and stamped with the office seal of the Bidder.
- 3.10.9 All documents should be submitted in a hard bound form. The Proposal should not include any loose papers.
- 3.10.10 The Proposal shall be signed and each page of the Proposal shall be initialed by a person or persons duly authorised to sign on behalf of the Bidder and holding the Power of Attorney.
- 3.10.11 Each of the envelopes shall indicate the complete name, address, telephone number (with country and city code), e-mail, and facsimile number of the Bidder.
- 3.10.12 Each envelope shall be addressed to: (**Insert Address of Authority**)
- 3.10.13 The Authority reserves the right to reject any Proposal which is not sealed and marked as instructed above and will assume no responsibility for the misplacement or premature opening of the Proposal.

3.11 Proposal Due Date and Time

- 3.11.1 Proposal should be submitted positively by (Insert Date), (the "Proposal Due Date"), at the address given in Clause 3.10.2 in the manner and form as detailed in this RFP.

Proposals submitted in any other manner will not be accepted.

- 3.11.2 The Authority may at its sole discretion, extend the Proposal Due Date by issuing an Addendum uniformly for all bidders. All such addendum shall be released on the website (**insert: name of website**) and the Bidders are requested to check the site regularly for updates. The Authority shall not undertake any responsibility, if any, Bidder fails to regularly check the website for addendums.

3.12 Late Proposals

- 3.12.1 Proposals received by the Authority after the specified time on the Proposal Due Date shall not be eligible for consideration and shall be returned unopened.

3.13 Modifications / Substitution / Withdrawal of Proposals

- 3.13.1 The Bidder shall submit the final proposal by the Proposal Due Date and Time. No Proposal shall be modified, substituted or withdrawn by the applicant/bidder after the submission of the proposal.

3.14 Clarifications and Pre-Bid Conference

- 3.14.1 A prospective Bidder requiring any clarification on the RFP documents may submit their queries and suggestions prior to the last date for receiving queries.
- 3.14.2 The Authority shall schedule a pre bid conference to discuss the issues related to the Project with all the prospective Bidders. The prospective Bidders may raise any queries during the pre bid conference, in addition to those submitted earlier. The Authority on its discretion may also hold further discussions with the prospective Bidders to finalise any other related issues to the Project, before final submission of the Proposals. This would be common for all the Bidders.

- 3.14.3 The Authority will respond to all the queries submitted by the prospective Bidders on or before the date specified in the "Data Sheet". Such a response will be sent in writing to all the prospective Bidders who have purchased the RFP and will qualify as an "Addendum." Such Addendum shall also be hosted on the following website: **(Insert: name of website)**.
- 3.14.4 Bidders may note that the Authority will not entertain any deviations to the RFP at the time of submission of the Proposal or thereafter. The Proposal to be submitted by the Bidders will be unconditional and unqualified and the Bidders would be deemed to have accepted the terms and conditions of the RFP with all its contents including the draft Agreement. Any conditional Proposal shall be regarded as non-responsive and would be liable for rejection.
- 3.14.5 All correspondence/ enquiries should be submitted to the following address in writing by fax/ post/ email courier: **(Insert Address)**
- 3.14.6 No interpretation, revision, or other communication from the Authority regarding this solicitation is valid unless in writing and signed by appropriate authority.

3.15 Amendment of RFP

- 3.15.1 The Authority may modify the RFP by issuing an Addendum before the Proposal Due Date.
- 3.15.2 Any Addendum thus issued shall be part of the RFP and shall be communicated in writing to all the purchasers of the RFP and will also be hosted on the following website:**(insert Name of website)**.
- 3.15.3 To give prospective Bidders reasonable time in which to take Addendum into account in preparing their bids, the Authority may, at its sole discretion, extend the Proposal Due Date.

3.16 Proposal Validity period

- 3.16.1 Proposal submitted by bidders shall remain valid for a period of 180 (one hundred and eighty) days from the Proposal Due Date. The Authority reserves the right to reject any Proposal, which does not meet the requirement.

3.17 Extension Of Proposal Validity Period

- 3.17.1 In exceptional circumstances, prior to expiry of the original Proposal Validity Period, the Authority may request the Bidders to extend the period of validity for a specified additional period which shall not exceed 90 days from the Proposal Validity Date. The request and the Bidder's responses shall be made in writing. The Authority reserves the right to reject the Proposal submitted by any Bidder who fails to extend the period of validity of its Proposal in line with the provisions of this clause.
- 3.17.2 The Proposal Validity period of the Selected Bidder shall be automatically extended till the date on which the Agreement is signed.
- 3.17.3 The Authority reserves the right to accept or reject any or all of the Proposals without assigning any reason and to take any measure as the Authority may deem fit, including annulment of the bidding process, at any time prior to execution of the Agreement, without liability or any obligation for such acceptance, rejection or annulment.

3.18 Acceptance of Letter of Intent (LOI) and Execution of Agreement

- 3.18.1 The Authority shall issue a Letter of Intent (LOI) to the Selected Bidder.
- 3.18.2 Within 15 days from the date of issue of the LOI, the Selected Bidder shall accept the LOI and return the same to the Authority.
- 3.18.3 Stamp duty, if any, payable on the Agreement will be borne by the Bidder.

3.18.4 The Selected Bidder shall be party to the Agreement as a confirming party. The Selected Bidder shall also execute such further documents and deeds as may be required (the "Contract Documents"). The Bidders by submitting the bid shall be taken to have accepted the terms and conditions of the Agreement and Schedules to the Agreement and modifications and changes, as may be communicated in writing by the Authority at least 3 business days before the Proposal Due Date, without any reservation or condition.

3.18.5 In case, the Agreement does not get executed within 30 (thirty) days of acceptance of LOI, the Authority reserves the right to annul the bidding process and may invite fresh bids for the Project. In such a case the entire bid security submitted by the Selected Bidder shall be forfeited.

3.18.6 The Authority will notify the Bidders whose Proposals have been unsuccessful.

3.19 Performance Security

3.19.1 The Bidder shall for due and faithful performance of its obligations during the Project duration furnish Performance Security by way of an unconditional, unequivocal and irrevocable Bank Guarantee issued by

a Schedule Bank, in favour of appropriate authority (Insert Name of State)' of value of Rs (Insert: Value) The Bidder shall provide the Performance Security before executing the Agreement.

3.19.2 Till such time the Bidder provides to Authority the Performance Security, the Bid Security shall remain in full force and effect. The Performance Security shall remain in force and effect up till six (6) months after the expiry of the Agreement Period as defined in the Agreement. The Bid Security of the Selected Bidder shall be returned within 15 days of submission of the Performance Security by the Bidder.

3.19.3 Failure of the Bidder to comply with the requirements shall constitute sufficient grounds for the nullification of the Agreement and forfeiture of the Bid Security.

3.19.4 The Bid Security shall be returned, to unsuccessful Bidders within a period of 30 days from the date of announcement of the Selected Bidder. In addition to the above, the Authority will promptly release all Bid Securities in the event the Authority decides to terminate the bidding process/proceedings or abandon the Project.

4.1 Evaluation of Proposals

- 4.1.1 The Authority would open the PART 1: Technical Qualification Proposal on the Proposal Due Date, at the specified place.
- 4.1.2 Financial Proposals will remain sealed and unopened in the possession of the Authority until the PART 1 of the proposals has been evaluated and checked for its responsiveness to the RFP.
- 4.1.3 The Authority will subsequently examine and evaluate the Qualification Proposals in accordance with the provisions set out in Section 3.
- 4.1.4 The Authority will form a Proposal Evaluation Committee consisting of experts in the field of Biomedical Engineering, Public Health, Management and Representatives of the Authority.
- 4.1.5 The Authority will open sealed Envelope containing 'Financial Bid' of only those Bidders, whose "Technical proposal" qualify
- 4.1.6 The Financial Bid should be furnished clearly indicating the bid amount in both figures and words in Indian Rupees and signed by Bidder's authorized signatory. In the event of any difference between figure and word, the amount indicating in words shall be taken into account.
- 4.1.7 The Financial Bids are invited for the Project on the basis of the lowest percentage of the asset value as declared by the Authority. The absolute amount in Indian Rupees should also be quoted by the bidders. The Bid Amount shall constitute the sole criteria for evaluation of Financial Bids.
- 4.1.8 The Financial Bid should be inclusive of all applicable taxes other than the Service Tax. Service Tax, if any, shall be payable by the Authority as per rules.
- 4.1.9 The Bidder who quotes the lowest Bid Amount shall be declared as the Selected Bidder (the "Selected Bidder").
- 4.1.10 Escalation Clause: The Bid Amount shall be annually escalated by a simple interest of 5% (Five percent) for each subsequent year. For the avoidance of doubt, if the Bid amount quoted by Bidder in the Financial Bid is Rs. 1000, then the Fee for each subsequent year shall be increased by Rs. 500 (i.e 5% of Rs. 1000) as compared to the immediate preceding year. The first annual escalation shall be applicable on the first anniversary of the Final Commissioning Date as defined in the Agreement.
- 4.1.11 After selection, a Letter of Intent (the "LOI") shall be issued, in duplicate, by the Authority to the Selected Bidder.
- 4.1.12 To facilitate evaluation of Proposals, the Authority may, at its sole discretion, seek clarifications in writing from any Bidder regarding its Proposal. Notwithstanding anything contained in the RFP, the

Authority reserves the right not to take into consideration any such clarifications sought for evaluation of the Proposal. At any point in time during the bidding process, if required by the Authority, it is the Bidders' responsibility to provide required evidence of their eligibility as per the terms of the RFP, to the satisfaction of the Authority. The Authority can verify the facts and figures quoted in the proposal.

4.1.13 Bids shall be deemed to be under consideration immediately after they are opened and until such time the Authority makes official intimation of award/rejection to the Bidders. While the bids are

under consideration, the Bidders and/ or their representatives or other interested parties are advised to refrain, save and except as required under the Bidding Documents, from contacting by any means, the Authority and/ or their employees/ representatives on matters related to the Bids under consideration.

4.1.14 In the event that two or more Bidders quote the same Bid Amount which results in a tie between such Bidder ("Tie Bidders"), the Authority shall identify the Selected Bidder by draw of lots, which shall be conducted, with prior notice, in the presence of the Tie Bidders who may choose to attend.

- 5.1 The bidding process shall be governed by, and construed in accordance with, the laws of India and the Courts in the state of _____ shall have exclusive jurisdiction over all disputes arising under, pursuant to and/ or in connection with the Bidding process.
- 5.2 The Authority, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to;
- (a) cancel the Bidding process and/ or amend and/ or supplement the bidding process or modify the dates or other terms and conditions relating thereto;
 - (b) consult with any Bidder in order to receive clarification or further information;
 - (c) retain any information and/ or evidence submitted to the Authority by, on behalf of, and/ or in relation to any Bidder; and/
- or
- (d) independently verify, disqualify, reject and/ or accept any and all submissions or other information and/ or evidence submitted by or on behalf of any Bidder.
- 5.3 It shall be deemed that by submitting the Bid, the Bidder agrees and releases the Authority, its employees, agents and advisers, irrevocably, unconditionally, fully and finally from any and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any rights and/ or performance of any obligations hereunder, pursuant hereto and/ or in connection with the bidding process and waives, to the fullest extent permitted by applicable laws, any and all rights and or claims it may have in this respect, whether actual or contingent, whether present or in future.

FORMATS FOR PROPOSAL SUBMISSION

Format 1 Covering Letter for Proposal Submission (on the Letter Head of the Bidder or Lead Member In Case of A Consortium)

Mr/Ms _____

Phone: Fax: _____

Email: _____

Date: _____

Subject: Proposal To provide Biomedical Equipment Maintenance Services through Service Provider across (insert: name of state) that would be accessible through a 24-hour toll free number (Centralized Call Center).

Dear Sir/Madam,

With reference to your RFP document dated ***** I/we, having examined the Bidding Documents and understood their contents, hereby submit my/our Proposal for the aforesaid Project. The Proposal is unconditional and unqualified.

I/ We acknowledge that the Authority will be relying on the information provided in the Proposal and the documents accompanying the Proposal for selection of the Bidder for the aforesaid Project, and we certify

that all information provided therein is true and correct; nothing has been omitted which renders such information misleading; and all documents accompanying the Proposal are true copies of their respective originals.

This statement is made for the express purpose of our selection as Bidder for the operation of the aforesaid Project.

I/ We shall make available to the Authority any additional information which may found to be necessary or required to supplement or authenticate the Proposal.

I/We acknowledge the right of the Authority to reject our Proposal without assigning any reason or otherwise and hereby waive, to the fullest extent permitted by applicable law, our right to challenge the same on any account whatsoever.

I/We certify that in the last three years, we/ any of the Consortium Members or our/their associates have not been barred by the Government of (**Insert: Name of state**), any other State Government or Government of India from participating in any project, and the bar does not subsists as on the Proposal Due Date,

I/ We understand that you may cancel the bidding process at any time and that you are neither bound to accept any bid that you may receive nor to invite the Bidders to bid for the Project, without incurring any liability to the Bidders, in accordance with the terms and conditions laid out in the RFP document.

I/ We believe that we/ our consortium satisfy(s) the Financial criteria and meet(s) the requirements as specified in the RFP document.

I/ We declare that we/ any member of the consortium, or our/ its associates are not a member of any other consortium submitting a Proposal for the Project.

I/ We certify that in regard to matters other than security and integrity of the country, we/ any member of the consortium or any of our/ their associates have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory authority which could cast a doubt on our ability to undertake the Project or which relates to a grave offence that outrages the moral sense of the community.

I/ We further certify that in regard to matters relating to security and integrity of the country, we/any member of consortium or any of our/ their associates have not been charge-sheeted by any agency of the Government or convicted by a Court of Law.

I/ We further certify that no investigation by a regulatory authority is pending either against us or against our Associates or against our CEO or any of our Directors/ Managers/ employees.

I/ We undertake that in case due to any change in facts or circumstances during the bidding process, we are attracted by the provisions of disqualification in terms of the guidelines referred to above, we shall intimate the Authority of the same immediately.

I/ We understand that the Selected Bidder shall incorporate a Company under the Companies Act, 1956 prior to execution of the Agreement.

I/We hereby irrevocably waive any right or remedy which we may have at any stage at law or howsoever otherwise arising to challenge or question any decision taken by the Authority in connection with the selection of the Bidder, or in connection with the bidding process itself, in respect of the above mentioned Project and the terms and implementation thereof.

In the event of myself/ ourselves being declared as the Selected Bidder, I/We agree to enter into an Agreement in accordance with the draft that has been provided to me/us prior to the Proposal Due Date. We agree not to seek any changes in the aforesaid draft and agree to abide by the same.

I/We have studied all the bidding documents carefully. We understand that except to the extent as expressly set forth in the Agreement, we shall have no claim, right or title arising out of any documents or information provided to us by the Authority or in respect of any matter arising out of or relating to the bidding process including the award of Project.

I/We offer a Bid Security of Rs. **(Insert Amount)**/- (Rupees (in words)) only to the Authority in accordance with the RFP Document.

The Bid Security in the form of a demand draft is attached.

I/We agree and understand that the Bid is subject to the provisions of the Bidding Documents. In no case, I/We shall have any claim or right of whatsoever nature if the Project is not awarded to me/us or our Bid is not opened or rejected.

I/ We agree and undertake to abide by all the terms and conditions of the RFP document.

I/We shall keep this offer valid for 180 (one hundred and eighty days) from the Proposal Due Date as specified in the RFP. I/We shall keep this offer valid for a specified additional period, not exceeding 90 days from the Proposal Validity Date, on the request of the Authority.

I/We undertake that no fees, gratuities, rebates, gifts, commissions, or other payments, except those shown in the bid, have been given or received in connection with the procurement process or contract execution.

In witness thereof, I/we submit this Bid under and in accordance with the terms of the RFP document.

Date:

Place:

Yours faithfully,
(Signature of the Authorised signatory)

(Name & Designation of the Authorised signatory)

Name & Seal of the Bidder/ Lead Member

If the Bidder is not a consortium, the provisions applicable to consortium may be omitted.

Format 2

Power of Attorney for Signing of Proposal (on Non – Judicial Stamp Paper of Rs 100 Duly Attested by Notary Public)

Power of Attorney

Know all men by these present, we (name and address of the registered office of the Single Entity / Lead Member) do hereby constitute, appoint and authorise Mr. / Ms. _____ R/o _____ (name and address of residence) who is presently employed with us and holding the position of _____

_____ as our authorised representative, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to the bid of the consortium consisting of, ___ _____ and _____ (please state the name and address of the members of the consortium) for “providing Maintenance Services across (**insert: name of state**) (the “Project”), including signing and submission of all documents and providing information / responses to Department of Health & Family Welfare, Government of (insert: name of state), representing us in all matters in connection with our bid for the said Project.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

This Power of Attorney shall be effective, binding, and operative till _____, if not revoked earlier or as long as the said Attorney is in the service of the Company, whichever is earlier.

(Name, Title and Address of
the authorised representative)

For _____ (Signature)

Accept _____ (Signature)

Notes:

1. To be executed by the single entity or the Lead Member in case of a consortium.
2. The mode of execution of Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.
3. Also, wherever required, the executant(s) should submit for verification the extract of the charter documents and documents such as a resolution / Power of attorney in favour of the Person executing this Power of Attorney the delegation of power hereunder on behalf of the executant(s).
4. For a Power of Attorney executed and issued overseas, the document shall be authenticated by the Indian Embassy and notarised in the jurisdiction where the Power of Attorney is being executed. However, a Power of Attorney executed in a country that has signed the Hague Legislation Convention, 1961 is not required to be authenticated by the Indian Embassy if it carries a conforming Apostille certificate.

Format 3 Power of Attorney for Lead Member of Consortium Power of Attorney

(On Non – judicial stamp paper of Rs 100 duly attested by notary public)

Whereas the Department of Health & Family Welfare, Government of **(Insert: Name of State)** (the Authority) has invited bids from interested parties for “providing Biomedical Equipment Maintenance Services across **(insert: name of state)** for a specified Agreement Period.

Whereas, M/s _____, M/s _____, M/s _____ and M/s _____ (the respective names of the members along with address of their registered offices) have formed a consortium and are interested in bidding for the Project and implementing the Project in accordance with the terms and conditions of the Request for Proposal (RFP), Agreement and other connected documents in respect of the Project, and Whereas, it is necessary under the RFP for the members of the Consortium to designate one of them as the Lead Member with all necessary power and authority to do for and on behalf of the consortium, all acts, deeds and things as may be necessary in connection with the consortium’s bid for the Project or in the alternative to appoint one of them as the Lead Member who, acting jointly, would have all necessary power and authority to do all acts, deeds and things on behalf of the Consortium, as may be necessary in connection with the consortium’s bid for the Project.

NOW THIS POWER OF ATTORNEY WITNESSET THAT:

We, M/s _____, M/s _____, M/s _____ and M/s _____ (the respective names of the members along with address of their registered offices) do hereby designate M/s _____ (name along with address of the registered office) being one of the members of the Consortium, as the Lead Member of the consortium, to do on behalf of the consortium, all or any of the acts, deed or things necessary or incidental to the consortium’s bid for the Project, including submission of Proposal, participating in conference, responding to queries, submission of information / documents and generally to represent the consortium in all its dealings with the Authority, or any person, in connection with the Project until culmination of the process of bidding and thereafter till the Agreement is entered into with the Authority.

We hereby agree to ratify all acts, deeds and things lawfully done by Lead Member our said attorney pursuant to this Power of Attorney and to all acts, deeds and things done by our aforesaid attorney.

Dated this _____ day of _____ 201____.

[Executant(s)] (To be executed by all the members in the Consortium) Note:-

- 1.
- 2.
- 3.

NOTE

1. The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.
2. Also wherever required, the executant(s) should submit for verification the extract of the charter documents and documents such as resolution/ Power of attorney in favour of the person executing this Power of attorney for the designation of power hereunder on behalf of the Bidder.
3. For a Power of Attorney executed and issued overseas, the document shall be authenticated by the Indian Embassy and notarised in the jurisdiction where the Power of Attorney is being executed. However, a Power of Attorney executed in a country that has signed the Hague Legislation Convention, 1961 is not required to be authenticated by the Indian Embassy if it carries a conforming Apostille certificate

Format 4 Affidavit (Non Conviction)

(To be furnished by the Bidder In case of consortium to be given separately by each member)
(On Non – judicial stamp paper of Rs 100 duly attested by notary public)

1. I, the undersigned, do hereby certify that all the statements made in our proposal are true and correct.
2. The undersigned hereby certifies that M/s_____ have not abandoned any work for the Government of **(Insert: Name of State)** or any other State Government during last five years prior to the date of this Bid.
3. The undersigned also hereby certifies that M/s_____ have not been debarred/blacklisted by Government of **(Insert: Name of State)**, or any other State Government or Government of India for any work.
4. The undersigned further certifies that
 - a) Our M/s has not been punished for any offence and
 - b) The M/s.....have/has neither been convicted of any offence nor any criminal case(s) is/are pending before any Competent Court.
5. The undersigned hereby authorise(s) and request(s) any bank, person, firm, Competent Authority or corporation to furnish pertinent information deemed necessary and requested by Department of Health & Family Welfare, Government of (Insert: Name of state), to verify this statement or regarding competence and general reputation of M/s.....
6. The undersigned understands and agrees that further qualifying information may be requested, and agrees to furnish any such information at the request of the Department of Health & Family Welfare, Government of **(Insert: Name of State)**,

Signed by an authorised representation of Bidder.

Title of Officer

Name and Address of the Bidder

Format 5 Anti-Collusion Certificate

(On the letter head of the single entity / each members of consortium)

Anti-Collusion Certificate

1. I/We hereby certify and confirm that in the preparation and submission of this Proposal, I/We have not acted in concert or in collusion with any other Bidder or other person(s) and also not done any act, deed, or thing which is or could be regarded as anti-competitive.
2. I/We further confirm that we have not offered nor will offer any illegal gratification in cash or kind to any person or agency in connection with the instant Proposal.

Date thisDay of201_.

Name of the Bidder.

Signature of the Authorised Representative

Name of the Authorised Representative

Note: To be executed by the each member, in case of a Consortium

Format 6 Project Undertaking

(On the Letter head of the single entity/ Lead Member) PROJECT UNDERTAKING

Date

To,

Phone: _____

Fax: _____

Email: _____

Date: _____

Subject: Proposal providing 24 x 7 Maintenance Services through Service Provider across all districts in (insert: name of state).

Dear Sir/Madam,

We have read and understood the Request for Proposal (RFP) in respect of the captioned Project provided to us by the Department of Health & Family Welfare, Government of **(Insert: Name of State)**

We hereby agree and undertake as under:

Notwithstanding any qualifications of conditions, whether implied or otherwise, contained in our Proposal, we hereby represent and confirm that our Proposal is unconditional in all respects and we agree to the contents, terms and conditions of the RFP and the Agreement, a draft of which also forms a part of the RFP provided to us.

Dated this.....Day of201_.

Name of the Bidder

Signature of the Authorised Representative

Name of the Authorised Representative

Note: To be signed by the Authorised Representative of the Lead Member, in case of a consortium, eligible to submit the bid.

Format 7 Memorandum of Understanding (MOU)

(To be executed on a non-judicial stamp paper of Rs. 100/- duly attested by notary public)

This Memorandum of Understanding (MoU) entered into this day of 201_ at _____

Among ____ (hereinafter referred as "____") and having office at **(Insert : Address)**, India Party of the First Part

And

_____ (hereinafter referred as "____") and having office at **(Insert : Address)**, India Party of the Second Part

And

_____ (hereinafter referred as "____") and having office at **(Insert : Address)**, India Party of the Third Part

And

_____ (hereinafter referred as "____"), and having office at **(Insert : Address)**, India party of the fourth part

The parties are individually referred to as Party and collectively as Parties.

Whereas the Department of Health & Family Welfare, Government of **(Insert : Name of State)**, has invited Qualification Proposal and Financial Proposal from entities interested in "Providing Biomedical Equipment Maintenance Services across **(insert: name of state)** called the "Project" for a specified time period.

And Whereas the Parties have had discussions for formation of a consortium for bidding for the said Project and have reached an understanding on the following points with respect to the Parties' rights and obligations towards each other and their working relationship.

IT IS HEREBY AS MUTUAL UNDERSTANDING OF THE PARTIES AGREED AND DECLARED AS FOLLOWS:

1. That the Parties shall carry out all responsibilities as Bidder in terms of the Agreement.
2. The Parties hereby undertake to perform the roles and responsibilities Party of the First Part shall be the Lead member of the consortium and shall have the power of attorney from all Parties for conducting all business for and on behalf of the consortium during the bidding process and until the Effective Date under the Agreement when all the obligations of the co shall become effective;
3. The Parties affirm that they shall implement the Project in good faith and shall take all necessary steps to carry out the Project expeditiously. They shall not negotiate with any other party for this Project except without the written permission of the Bidder if required.
4. The Parties do hereby undertake to be jointly and severally responsible for all obligations and liabilities relating to the Project and in accordance with the terms of the RFP and the Agreement, till the Agreement Period for the Project is achieved under and in accordance with the Agreement.
5. That this MoU shall be governed in accordance with the laws of India and courts in **(Insert Name of City)** shall have exclusive jurisdiction to adjudicate disputes arising from the terms herein.

In witness whereof the Parties affirm that the information provided is accurate and true and have caused this MoU to be duly executed on the date and year above mentioned.

(Party of the first part)

(Signature) (Name)
(Designation) (Address)

Witness:

(Party of the second part)

(Party of the third part)

Party of the fourth part)

Note:

1. The mode of execution of the MoU should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.
2. Also wherever required, the executant(s) should submit for verification the extract of the charter documents and documents such as resolution/ Power of attorney in favour of the person executing this Power of attorney for the designation of power hereunder on behalf of the Bidder.

Format 8 Board Resolutions For Bidding Entities

Format for Lead Member

"RESOLVED THAT approval of the Board be and is hereby granted to join the consortium with _____, _____ and ____ (name and address of the consortium members) for joint submission of bids to the Department of Health & Family Welfare, Government of **(Insert: Name of State)** for "Providing Biomedical Equipment Maintenance Services across **(insert: name of state)** called the "Project".

"RESOLVED FURTHER THAT the "draft" Memorandum of Understanding (MoU) to be entered into with the consortium partners (a copy whereof duly initialed by the Chairman is tabled in the meeting) be and is hereby approved."

"RESOLVED FURTHER THAT Mr. _____ (name), _____ (designation) be and is hereby authorised to enter into an MoU, on behalf of the company, with the consortium members and to sign the bidding documents on behalf of the consortium for submission of the bidding documents and execute a power of attorney in favour of the Company as Lead Member."

Format for Members

"RESOLVED THAT approval of the Board be and is hereby granted to join the consortium with _____, _____ and _____ (name and address of the Consortium members) for joint submission of bids to the Department of Health & Family Welfare, Government of **(Insert: Name of State)** for the Project".

"RESOLVED FURTHER THAT the "draft" Memorandum of Understanding ("MoU) to be entered into with the consortium partners (a copy whereof duly initialed by the Chairman is tabled in the meeting) be and is hereby approved."

"RESOLVED FURTHER THAT Mr. _____ (name), _____ (designation) be and is hereby authorised to enter into an MoU with the consortium members and execute a power of attorney in favour of _____ to act as the Lead Member.

Format 9 Undertaking for Individual Members

On the Letter head of the Legal Entity

Format for Lead Member

I/We hereby agree to join the consortium with , _____and (name and address of the consortium members) for joint submission of bids to the Department of Health & Family Welfare, Government of (**Insert Name of State**) for "Providing Biomedical Equipment Maintenance Services across (**insert: name of state**) called the "Project".

I /We also approve the Memorandum of Understanding ("MoU) to be entered into with the consortium partners.

I/We also authorise Mr. (name), (designation) to enter into an MoU with the consortium members and to sign the bidding documents on behalf of the consortium for submission of the bidding documents and execute a Power of Attorney in favour of the Company as "Lead Member ."

Format for Members

I/We _____ hereby agree to join the consortium with _____, _____and (name and address of the consortium members) for joint submission of bids to the Department of Health & Family Welfare, Government of (Insert: Name of State) for "Providing 24 x 7 Biomedical Equipment Maintenance Services through Service Provider across all districts in (insert: name of state) that would be accessible through a 24-hour toll free number (Centralised Call Center)", called the "Project".

I /We also approve the Memorandum of Understanding ("MoU) to be entered into with the consortium partners.

I/We also authorise Mr. _____(name), _____(designation) to enter into an MoU with the consortium members and execute a Power of Attorney in favour of _____ to act as the Lead Member"

Each member of the consortium will have to attach its Board Resolution/ Undertaking as the case may be, approving the participation in the consortium, bidding for the Project and authorising a company official to sign the bidding documents / Power of Attorney to the Lead Member.

Format 10 Information Regarding Bidder

Details of the Bidder

Note: Details to be provided for the Bidder / Lead Member / each member of consortium (in case of consortium)

Details of Organisation	
Name of Organisation	
Type Legal Entity	
Year of Incorporation/ registration	
Name of the Authority/Jurisdiction under which the Legal entity is incorporated or registered.	
Statute Legislation under which the Legal entity is incorporated/registered	
Registration Number	
Registered Address	
Correspondence Address & Head Office	
Does Memorandum of Association/Trust Deed/Articles of Association permit the organization to carry out the business of Medical Equipment Maintenance	
Number of years of operation in Medical Equipment Maintenance	
Relevant Qualification Details Years wise and State Wise/ Hospital wise.	
1. State wise/ Hospital wise	
Name of the State / Province/ Hospitals where Medical Equipment Maintenance services are operational	
Years of experience in Medical Equipment operations in the State/ Hospitals.	
Current areas of operation – specify (Names of the Districts/ Hospitals).	
Number of Service Centres	
Number of Hospital Contracts and total number of beds (copies of hospital contracts to be enclosed)	
Number and type of equipment repaired through Service Centres	
Number of Centralized Call centers (CCCs) / call centre operated.	
Location and address of the CCC/Call Centre.	
Average volume of daily calls received per CCC / call	
Certificate of Satisfactory Performance	

The Bidder should provide details of experience of only those Projects of “providing Biomedical Equipment Maintenance Services which is undertaken by it under its own name / under the names of the consortium members.

Format 11 Details of Eligible Experience

The Bidder should provide the experience details of services provided at each location / State / country / undertaken. The experience of the single entity's associate or consortium member's associates (who are not members of the consortium) will also be considered.

In case the Bidder is a consortium, the above information should be provided for each member.

In role of member specify whether single entity, or in case of consortium specify whether Lead Member.

Name of the Entity Providing Support			
Location (Country/ State/ districts)	Number of Staff by Category		
	Biomedical Equipment Maintenance Operation	Call Centre Operation	Others (specify)
Duration of Medical Equipment Maintenance Operation	Profile of staff: Summary of key staff (degree /diploma/ certificates with specific reference to the project, training, number of years in employment, total relevant experience as a paramedic/ call centre employee.)		
Start Date	Completion date	Of all contracts	
Name of Senior staff (Project Director, Project Manager) involved and functions performed:			
Narrative description of project and the outcome: (Including number of equipment repaired per annum on an average)			
Brief description of the actual services provided:			
Service Centre Details; Repair workshop details; Spare part store details (if any).			

Checklist for the Bidders

SECTION 07

Name of the Bidder (Sole Individual/Consortium): _____

Sl. No.	Activity	Yes/No/NA	Page No. in the Tender Document	Remarks
1.	Enclosed EMD of required amount for the Project.			
2.	Format 1: Covering letter for Proposal submission.			
3.	Format 2: Power of Attorney for Signing of proposal.			
4.	Format 3: Power of Attorney for Lead Member of Consortium.			
5.	Format 4: affidavit (Non-Conviction).			
6.	Format 5: Anti-Collusion Certificate.			
7.	Format 6: Project Undertaking.			
8.	Format 7: Memorandum of Understanding (MoU).			
9.	Format 8: Board Resolutions for Bidding entities.			
10.	Format 9: Undertaking for Individual Members.			
11.	Format 10: Information Regarding Bidder.			
12.	Format 11: Details of Eligible Experience.			

Biomedical Equipment Inventory Mapping for National Health Mission, (insert: name of state)

TERMS OF REFERENCE (TOR)

1. Introduction

To address the gap in technology management and maintenance in district and sub-district hospitals in the country, a model has been conceived on the lines of public-private partnership for maintenance of all biomedical equipment across PHCs, CHCs and DHs in *(insert: name of state)*

To map the inventory of all medical equipment in following *(insert: number of districts)* Districts of *(insert: name of state)* across all District Hospitals, CHCs, BPHCs and PHCs:

S. No.	Name of the District	No. of District Hospital	No. of Primary health Center	No. of Community Health Centers	Total Health Facilities
1					
2					
3					
.					
.					
.					
N					
Total					

2. The following work is being issued to the agency for:

1. Line Listing of biomedical equipment in all District Hospitals, CHCs, BPHCs, FRUs and PHCs in the districts above
2. Assessment of functional status of all biomedical equipment
3. Assessment of any existing warranty/AMC/CMC status for all biomedical equipment
4. Listing of any other information in medical equipment inventory software for the state of (*insert: name of state*). The software shall be provided FREE of cost by NHSRC to State Government as well as to agency performing the equipment mapping. Any training required for this purpose shall also be provided FREE by NHSRC to state government and the agency.

Data Sources

The Biomedical Equipment inventory mapping will use the following data sources:

- ❖ Data 1: Line listing of Medical Devices or Mapping Technologies in district & sub- district centers
- ❖ Data 2: Functional Status, AMC/CMC/Warranty status of each Medical Equipment
- ❖ Data 3: Information on number of biomedical engineers available with facilities
- ❖ Data 4: Any other information required for the purposes of equipment inventory mapping

3. Budget

A budget for Rs. each district i.e. Rs. (*insert: total amount*) (INR) for all (*insert: number of districts*) districts is allocated for this task in the following manner:

- a. 30% upon acceptance of work order and signing of the contract
- b. 30% upon completion of work in 50% of districts and submission of data sheets.
- c. 40% upon completion of work in all the districts and submitting data sheets for the entire project

4. Roles and Responsibilities

a. Biomedical Agency: as given in point (2) above

- i. Line Listing of biomedical equipment in all District Hospitals, CHCs, BPHCs, FRUs and PHCs in the districts above
- ii. Assessment of functional status of all biomedical equipment
- iii. Assessment of any existing warranty/AMC/CMC status for all biomedical equipment
- iv. Listing of all information in medical equipment inventory software for the state of (*insert: name of state*). The software shall be provided FREE of cost by NHSRC to State

b. National Health Mission, (*insert: name of state*)

- i. Will finance the work
- ii. Provide access to all facilities where study has to be conducted
- iii. Send official communication to respective state government officials detailing the study objective and introducing the biomedical agency

c. NHSRC, New Delhi

- i. Provide technical support
- ii. Provide template, software and training for data collection
- iii. Make visits to selected sites to ensure capturing of correct and sufficient data sets and provide independent feedback to Mission Director, NHM, (insert: name of state) for satisfactory completion of the work by the agency.
- iv. Cost for all technical support provided including that of travel of NSHRC team to selected sites for work audit shall be borne by NSHRC

5. Time frame for completion of work:

The total time-frame for this consultancy contract will be 45 days from the date of release of work order. The work shall be done in several districts in parallel, and a maximum time of 15 days after 60 days shall be given in case of any issue beyond agencies' control which could cause a delay. The agency accepting the work order shall deploy sufficient Human resources to ensure accuracy in the work and its timely completion.



NATIONAL HEALTH MISSION
Ministry of Health & Family Welfare
Government of India
Nirman Bhawan, New Delhi