

STANDARD PROCUREMENT DOCUMENT

Request for Bids Goods

(Two-Envelope Bidding Process)

RFB No.: IN-AHIDMS-515195-GO-RFB

Project Id: P179337

**FOR PROCUREMENT OF PROTON BEAM THERAPY
UNIT AT GUWAHATI INCLUDING INSTALLATION,
TESTING AND COMMISSIONING**

**Client: Assam Health Infrastructure Development and
Management Society (AHIDMS), Government of Assam**

Country: India

Project:

**Assam State Secondary Healthcare Initiative for Service
Delivery Transformation (ASSIST) Project**



March 2025

Standard Procurement Document

Summary

Specific Procurement Notice

Specific Procurement Notice - Request for Bids (RFB)

The template attached is the Specific Procurement Notice for Request for Bids method, two-envelope Bidding process. This is the template to be used by the Borrower.

Request for Bids – Goods (Two-Envelope Bidding Process)

PART 1 – BIDDING PROCEDURES

Section I - Instructions to Bidders (ITB)

This Section provides information to help Bidders prepare their Bids. It applies a two-envelope (2) Bidding process with application of Rated Criteria. Information is also provided on the submission, opening, and evaluation of Bids and on the award of Contracts. **Section I contains provisions that are to be used without modification.**

Section II - Bid Data Sheet (BDS)

This Section includes provisions that are specific to each procurement and that supplement Section I, Instructions to Bidders.

Section III - Evaluation and Qualification Criteria

This Section specifies the criteria to determine the Most Advantageous Bid.

Section IV - Bidding Forms

This Section includes the forms for the Bid submission, Price Schedules, Bid Security, and the Manufacturer's Authorization to be completed and submitted by the Bidder as part of its Bid.

Section V - Eligible Countries

This Section contains information regarding eligible countries.

Section VI - Fraud and Corruption

This section includes the Fraud and Corruption provisions which apply to this Bidding process.

Specific Procurement Notice Template

Request for Bids Goods

(Two-Envelope Bidding Process)

Country: India

Name of Project: Assam State Secondary Healthcare Initiative for Service Delivery Transformation (ASSIST) Project

Contract Title: Procurement of of Proton Beam Therapy Unit at Guwahati, Assam including Supply, Installation, Testing and Commissioning

Loan No./Credit No./ Grant No.: 95700-IN

RFB Reference No.: IN-AHIDMS-515195-GO-RFB

1. The Government of Assam on behalf of Govt. of India has received financing from the World Bank toward the cost of the Assam State Secondary Healthcare Initiative for Service Delivery Transformation (ASSIST) Project , and intends to apply part of the proceeds toward payments under the contract for Supply, Installation, Testing and Commissioning of Proton Beam Therapy Unit at Guwahati, Assam. 2. The Project Director, ASSIST now invites sealed Bids from eligible Bidders for Procurement of Proton Beam Therapy Unit at Guwahati, Assam including Supply, Installation, Testing and Commissioning .
3. Bidding will be conducted through international competitive procurement using a Request for Bids (RFB) as specified in the World Bank's "Procurement Regulations for IPF Borrowers" July 2016 Revised February'2025 ("Procurement Regulations"), and is open to all eligible Bidders as defined in the Procurement Regulations.
4. Bids will be evaluated in accordance with the evaluation process set out in the bidding documents. The following weightings shall apply for Rated Criteria (including technical and non-price factors): 10% and for Bid cost: 90% .
5. Interested eligible Bidders may obtain further information from Office of Project Director, ASSIST Project, AHIDMS and inspect the bidding document during office hours 1000 to 1700 hours IST (Indian Standard Time) at the address given below at para 13.
6. The bidding document in English is available online on www.assamtenders.gov.in from 06.12.2025 to 22.01.2026. Bid Security documents are to be submitted as per the

procedure described in paragraph 9 & 10 below. Bidders will be required to register on the website. The bidders would be responsible for ensuring that any addenda available on the website is also downloaded and incorporated.

7. For submission of the bid, the bidder is required to have Digital Signature Certificate (Class-3 digital signature) from one of the Certifying Authorities authorized by Government of India for issuing DSC. Aspiring bidders who have not obtained the user ID and password for participating in e-procurement in this Project, may obtain the same from the website: www.assamtenders.gov.in.
8. Bids comprise two Parts, namely the Technical Part and the Financial Part, and both parts must be submitted simultaneously online on www.assamtenders.gov.in on or before 1300 hours IST (Indian Standard Time) on 22.01.2025 and the 'Technical Part' of the bids will be publicly opened online at the address given at para 13 on the same day at 1400 hours IST (Indian Standard Time), in the presence of the bidders' designated representatives and anyone who chooses to attend. The "Financial Part" shall remain unopened in the e-procurement system until the second public Bid opening for the financial part. Any bid or modifications to bid (including discount) received outside e-procurement system will not be considered. If the office happens to be closed on the date of opening of the bids as specified, the bids will be opened on the next working day at the same time and venue. The electronic bidding system would not allow any late submission of bids.
9. All Bids must be accompanied by a "*Bid Security*" of **INR 8,00,00,000.00**. (USD 919,540.00) Bid security will have to be in any one of the forms as specified below and shall have to be valid for days beyond the validity of the bid. Procedure for submission of bid security is described in Para 9.
10. Bid Security may be submitted through any of following mode:
 - a) **Bank Guarantee** : Irrevocable Bank Guarantee issued by a Nationalized or Scheduled Bank located in India or by an international bank having a correspondent bank in India
 - b) **Fixed Deposit/Time Deposit certificate** issued by a Nationalized or Scheduled Bank located in India or by an international bank having a correspondent bank in India for equivalent or higher values are acceptable provided it is pledged in favour of **Assam Health Infrastructure Development and Management Society (AHIDMS)** (Implementing agency) and such pledging has been noted and suitably endorsed by the bank issuing the certificate.

In case bidder(s) opt to submit bid security in the form of Bank Guarantee/ Fixed Deposit/Time Deposit certificate, please comply the following instructions:

- a. Bidder has to submit the **ORIGINAL** Bank Guarantee/ Fixed Deposit/Time Deposit certificate before the bid submission end date & time, failing to which bid of the

bidder shall be rejected outrightly and bid shall not be opened. **ORIGINAL** Bank Guarantee/ Fixed Deposit/Time Deposit certificate shall be submitted in the address mentioned in ITB/BDS 21.3.

- b. Only to accommodate the submission of Bank Guarantee/ Fixed Deposit/Time Deposit certificate, Option of “BID SECURITY/EMD EXEMPTION” provision is enabled in the e-procurement portal. Bidder has to select/click the 100% exemption option to proceed further for submission of bid. The scanned copy of Bank Guarantee/ Fixed Deposit/Time Deposit certificate needs to be submitted under Technical Folder along with other qualification documents.
- c. Bidder to note that there is otherwise no BID SECURITY/EMD EXEMPTION for any bidder whosoever. This option is only enabled to submit Bank Guarantee/ Fixed Deposit/Time Deposit certificate as bid security..
- d. In case bidder(s) opt to submit bid security in the form of Bank Guarantee, the following bank details of AHIDM Society may be used while obtaining Bank Guarantee:

Account Name -Assam Health Infra Development &Mgt Society World Bank
ASSIST Project Account

Number- 245601002420 IFSC - ICIC0002456

Bank Name- ICICI Bank Ltd.

Branch Name- Downtown, Guwahati

(Bidder should note date this above mentioned account details only be used while obtaining Bank Guarantee.)

- 11. Attention is drawn to the Procurement Regulations requiring the Borrower to disclose information on the successful bidder’s beneficial ownership, as part of the Contract Award Notice, using the Beneficial Ownership Disclosure Form as included in the bidding document.
- 12. Other details can be seen in the bidding document. The Purchaser shall not be held liable for any delays due to system failure beyond its control. Even though the system will attempt to notify the bidders of any bid updates, the Purchaser shall not be liable for any information not received by the bidder. It is the bidders’ responsibility to verify the website for the latest information related to this bid.

A pre-bid meeting will be held on 16.12.2025 at 1730 hours to 1900 hours IST (Indian Standard Time) at the office of Project Director, Assam Health Infrastructure Development & Management Society, Dept. of Medical Education & Research, GOA, 4th floor, Nayantara Supermarket Complex, Six Mile, Khanapara, Guwahati, Assam to clarify the issues and to answer questions on any matter that may be raised at that stage. Bidders are advised to download the bidding document prior to the pre-bid meeting for bidders to have a good understanding of the scope of work under this contract for

discussion and clarification at the pre-bid meeting. Bidder may join the Pre-bid meeting through virtual mode by using the link provided below :

Video call link: <https://meet.google.com/yzv-nhwz-gtz>

13. The address(es) referred to above is (are):

Dr. Siddharth Singh, IAS

The Project Director
Assam Health Infrastructure Development & Management Society,
Dept. of Medical Education & Research, Govt. of Assam
4th floor, Nayantara Supermarket Complex, Six Mile, Khanapara,
Guwahati, Assam, India-781006
Phone:03613501033
Email:pmu.ahidms@gmail.com

Request for Bids Goods

(Two-Envelope Bidding Process)

Procurement of:

*Procurement of Proton Beam Therapy Unit at
Guwahati, Assam including Supply, Installation,
Testing and Commissioning .*

RFB No: IN-AHIDMS-515195-GO-RFB

**Project: Assam State Secondary Healthcare Initiative for Service Delivery
Transformation (ASSIST) Project**

**Purchaser: Assam Health Infrastructure Development& Management
Society**

Country: INDIA

Issued on: 06.12.2025

Standard Procurement Document

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PART 1 – Bidding Procedures

Section I - Instructions to Bidders

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Section I - Instructions to Bidders

A. General

1. Scope of Bid

- 1.1 In connection with the Specific Procurement Notice, Request for Bids (RFB), specified **in the Bid Data Sheet (BDS)**, the Purchaser, as specified **in the BDS**, issues this bidding document for the supply of Goods and, if applicable, any Related Services incidental thereto, as specified in Section VII, Schedule of Requirements. The name, identification and number of lots (contracts) of this RFB are specified **in the BDS**.
- 1.2 Throughout this bidding document:
 - (a) the term “in writing” means communicated in written form (e.g. by mail, e-mail, fax, including, if **specified in the BDS**, distributed or received through the electronic-procurement system used by the Purchaser), with proof of receipt;
 - (b) if the context so requires, “singular” means “plural” and vice versa; and
 - (c) “Day” means calendar day, unless otherwise specified as “Business Day”. A Business Day is any day that is an official working day of the Borrower. It excludes the Borrower’s official public holidays.

2. Source of Funds

- 2.1 The Borrower or Recipient (hereinafter called “Borrower”) specified **in the BDS** has applied for or received financing (hereinafter called “funds”) from the International Bank for Reconstruction and Development or the International Development Association (hereinafter called “the Bank”) in an amount specified **in the BDS**, toward the project named **in the BDS**. The Borrower intends to apply a portion of the funds to eligible payments under the contract for which this bidding document is issued.
- 2.2 Payment by the Bank will be made only at the request of the Borrower and upon approval by the

Bank in accordance with the terms and conditions of the Loan (or other financing) Agreement. The Loan (or other financing) Agreement prohibits a withdrawal from the loan account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall derive any rights from the Loan (or other financing) Agreement or have any claim to the proceeds of the Loan (or other financing).

3. Fraud and Corruption

- 3.1 The Bank requires compliance with the Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework, as set forth in Section VI, Fraud and Corruption.
- 3.2 In further pursuance of this policy, bidders shall permit and shall cause their agents (where declared or not), subcontractors, subconsultants, service providers, suppliers, and personnel, to permit the Bank to inspect all accounts, records and other documents relating to any initial selection process, prequalification process, bid submission, proposal submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.

4. Eligible Bidders

- 4.1 A Bidder may be a firm that is a private entity, a state-owned enterprise or institution (subject to ITB 4.6), or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the Bidding process and, in the event the JV is awarded the Contract, during contract execution. Unless specified **in the BDS**, there is no limit on the number of members in a JV.

- 4.2 A Bidder shall not have a conflict of interest. Any Bidder found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this Bidding process, if the Bidder:
- (a) directly or indirectly controls, is controlled by or is under common control with another Bidder; or
 - (b) receives or has received any direct or indirect subsidy from another Bidder; or
 - (c) has the same legal representative as another Bidder; or
 - (d) has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the Bid of another Bidder, or influence the decisions of the Purchaser regarding this Bidding process; or
 - (e) or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the Bid; or
 - (f) or any of its affiliates has been hired (or is proposed to be hired) by the Purchaser or Borrower for the Contract implementation; or
 - (g) would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the BDS reference ITB 2.1 (the name of the project), that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm; or
 - (h) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the bidding document or specifications of the Contract, and/or the

Bid evaluation process of such Contract; or
(ii) would be involved in the implementation or supervision of such Contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Bank throughout the Bidding process and execution of the Contract.

- 4.3 A firm that is a Bidder (either individually or as a JV member) shall not participate in more than one Bid, except for permitted alternative Bids. This includes participation as a subcontractor. Such participation shall result in the disqualification of all Bids in which the firm is involved. A firm that is not a Bidder or a JV member, may participate as a subcontractor in more than one Bid.
- 4.4 A Bidder may have the nationality of any country, subject to the restrictions pursuant to ITB 4.8. A Bidder shall be deemed to have the nationality of a country if the Bidder is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed subcontractors or subconsultants for any part of the Contract including related Services.
- 4.5 A Bidder that has been sanctioned by the Bank, pursuant to the Bank's Anti-Corruption Guidelines, and in accordance with its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework as described in Section VI paragraph 2.2 d. shall be ineligible to be prequalified for, initially selected for, bid for, propose for, or be awarded a Bank-financed contract or benefit from a Bank-financed contract, financially or otherwise, during such period of time as the Bank shall have determined. The list of debarred firms and individuals is available at the electronic address specified in the BDS.
- 4.6 Bidders that are state-owned enterprises or institutions in the Purchaser's Country may be eligible to compete and be awarded a Contract(s)

only if they can establish, in a manner acceptable to the Bank, that they (i) are legally and financially autonomous (ii) operate under commercial law, and (iii) are not under supervision of the Purchaser.

4.7 A Bidder shall not be under suspension from Bidding by the Purchaser as the result of the operation of a Bid-Securing Declaration or Proposal-Securing Declaration.

4.8 Firms and individuals may be ineligible if so indicated in Section V, Eligible Countries, and:

- (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of goods or the contracting of works or services required; or
- (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's country prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country.

4.9 A Bidder shall provide such documentary evidence of eligibility satisfactory to the Purchaser, as the Purchaser shall reasonably request.

4.10 A firm that is under a sanction of debarment by the Borrower from being awarded a contract is eligible to participate in this procurement, unless the Bank, at the Borrower's request, is satisfied that the debarment;

- (a) relates to fraud or corruption; and
- (b) followed a judicial or administrative proceeding that afforded the firm adequate due process.

5. Eligible Goods and Related Services

5.1 All the Goods and Related Services to be supplied under the Contract and financed by the Bank may have their origin in any country in accordance with Section V, Eligible Countries.

5.2 For purposes of this ITB, the term "goods" includes commodities, raw material, machinery,

equipment, and industrial plants; and “related services” includes services such as insurance, installation, training, and initial maintenance.

- 5.3 The term “origin” means the country where the goods have been mined, grown, cultivated, produced, manufactured or processed; or, through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.

B. Contents of Request for Bids Document

6. Sections of Bidding Document

- 6.1 The bidding document consist of Parts 1, 2, and 3, which include all the sections indicated below, and should be read in conjunction with any addenda issued in accordance with ITB 8.

PART 1 Bidding Procedures

- Section I - Instructions to Bidders (ITB)
- Section II - Bidding Data Sheet (BDS)
- Section III - Evaluation and Qualification Criteria
- Section IV - Bidding Forms
- Section V - Eligible Countries
- Section VI - Fraud and Corruption

PART 2 Supply Requirements

- Section VII - Schedule of Requirements

PART 3 Contract

- Section VIII - General Conditions of Contract
- Section IX - Special Conditions of Contract
- Section X - Contract Forms

- 6.2 The Specific Procurement Notice - Request for Bids (RFB) issued by the Purchaser is not part of this bidding document.
- 6.3 Unless obtained directly from the Purchaser, the Purchaser is not responsible for the completeness of the document, responses to requests for

clarification, the Minutes of the pre-Bid meeting (if any), or addenda to the bidding document in accordance with ITB 8. In case of any contradiction, documents obtained directly from the Purchaser shall prevail.

- 6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding document and to furnish with its Bid all information or documentation as is required by the bidding document.

7. Clarification of the Bidding Document

- 7.1 A Bidder requiring any clarification of the bidding document shall contact the Purchaser in writing at the Purchaser's address specified **in the BDS**. The Purchaser will respond in writing to any request for clarification, provided that such request is received prior to the deadline for submission of Bids within a period specified **in the BDS**. The Purchaser shall forward copies of its response to all Bidders who have acquired the bidding document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. If so specified **in the BDS**, the Purchaser shall also promptly publish its response at the web page identified **in the BDS**. Should the clarification result in changes to the essential elements of the bidding document, the Purchaser shall amend the bidding document following the procedure under ITB 8 and ITB 22.2.

8. Amendment of Bidding Document

- 8.1 At any time prior to the deadline for submission of Bids, the Purchaser may amend the bidding document by issuing addenda.
- 8.2 Any addendum issued shall be part of the bidding document and shall be communicated in writing to all who have obtained the bidding document from the Purchaser in accordance with ITB 6.3. The Purchaser shall also promptly publish the addendum on the Purchaser's web page in accordance with ITB 7.1.
- 8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Purchaser may, at its

discretion, extend the deadline for the submission of Bids, pursuant to ITB 22.2.

C. Preparation of Bids

9. Cost of Bidding

- 9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Purchaser shall not be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process.

10. Language of Bid

- 10.1 The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Purchaser, shall be written in the language specified **in the BDS**. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages into the language specified **in the BDS**, in which case, for purposes of interpretation of the Bid, such translation shall govern.

11. Documents comprising Bid

- 11.1 The Bid shall comprise two Parts, namely the Technical Part and the Financial Part. These two Parts shall be submitted simultaneously in two separate sealed envelopes (two-envelope Bidding process). One envelope shall contain only information relating to the Technical Part and the other, only information relating to the Financial Part. These two envelopes shall be enclosed in a separate sealed outer envelope marked “ORIGINAL BID”.
- 11.2 The **Technical Part** shall contain the following:
- (a) **Letter of Bid - Technical Part:** prepared in accordance with ITB 12;
 - (b) **Bid Security or Bid-Securing Declaration:** in accordance with ITB 19.1;
 - (c) **Alternative Bid - Technical Part:** if permissible in accordance with ITB 13, the Technical Part of any Alternative Bid;
 - (d) **Authorization:** written confirmation authorizing the signatory of the Bid to

commit the Bidder, in accordance with ITB 20.3;

- (e) **Bidder's Eligibility:** documentary evidence in accordance with ITB 17 establishing the Bidder's eligibility to Bid;
 - (f) **Qualifications:** documentary evidence in accordance with ITB 17 establishing the Bidder's qualifications to perform the Contract if its Bid is accepted;
 - (g) **Eligibility of Goods and Related Services:** documentary evidence in accordance with ITB 16, establishing the eligibility of the Goods and Related Services to be supplied by the Bidder;
 - (h) **Conformity:** documentary evidence in accordance with ITB 16, that the Goods and Related Services conform to the bidding document;
 - (i) any other document **required in the BDS.**
- 11.3 The **Financial Part** envelope shall contain the following:
- (a) **Letter of Bid – Financial Part:** prepared in accordance with ITB 12 and ITB 14;
 - (b) **Price Schedules:** completed prepared in accordance with ITB 12 and ITB 14;
 - (c) **Alternative Bid - Financial Part;** if permissible in accordance with ITB 13, the Financial Part of any Alternative Bid;
 - (d) any other document **required in the BDS.**
- 11.4 The Technical Part shall not include any financial information related to the Bid price. Where material financial information related to the Bid price is contained in the Technical Part the Bid shall be declared non-responsive.
- 11.5 In addition to the requirements under ITB 11.2, Bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful Bid shall be signed by all members and

submitted with the Bid, together with a copy of the proposed Agreement.

- 11.6 The Bidder shall furnish in the Letter of Bid information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.

12. Letters of Bid

- 12.1. The Bidder shall prepare the Letter of Bid – Technical Part, and Letter of Bid – Financial Part using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 20.3. All blank spaces shall be filled in with the information requested.

13. Alternative Bids

- 13.1. Unless otherwise **specified in the BDS**, Alternative Bids shall not be considered.

14. Bid prices and Discounts

- 14.1 The prices and discounts quoted by the Bidder in the Letter of Bid - Financial Part and in the Price Schedules shall conform to the requirements specified below.
- 14.2 All lots (contracts) and items must be listed and priced separately in the Price Schedules.
- 14.3 The price to be quoted in the Letter of Bid - Financial Part, in accordance with ITB 12.1 shall be the total price of the Bid, excluding any discounts offered.
- 14.4 The Bidder shall quote any discounts and indicate the methodology for their application in the Letter of Bid - Financial Part, in accordance with ITB 12.1.
- 14.5 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account, unless otherwise specified **in the BDS**. A Bid submitted with an adjustable price quotation shall be treated as nonresponsive and shall be rejected, pursuant to ITB 31. However, if in accordance with the BDS, prices quoted by the Bidder shall be subject to adjustment during the performance of the Contract, a Bid submitted with a fixed price

quotation shall not be rejected, but the price adjustment shall be treated as zero.

- 14.6 If so specified in ITB 1.1, Bids are being invited for individual lots (contracts) or for any combination of lots (packages). Unless otherwise specified **in the BDS**, prices quoted shall correspond to 100% of the items specified for each lot and to 100% of the quantities specified for each item of a lot. Bidders wishing to offer discounts for the award of more than one Contract shall specify in their Bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. **However, discounts that are conditional on the award of more than one lot will not be considered for bid evaluation purpose.**
- 14.7 The terms EXW, CIP, and other similar terms shall be governed by the rules prescribed in the current edition of Incoterms, published by the International Chamber of Commerce, as specified **in the BDS.**
- 14.8 Prices shall be quoted as specified in each Price Schedule included in Section IV, Bidding Forms. The disaggregation of price components is required solely for the purpose of facilitating the comparison of Bids by the Purchaser. This shall not in any way limit the Purchaser's right to contract on any of the terms offered. In quoting prices, the Bidder shall be free to use transportation through carriers registered in any eligible country, in accordance with Section V, Eligible Countries. Similarly, the Bidder may obtain insurance services from any eligible country in accordance with Section V, Eligible Countries. Prices shall be entered in the following manner:
- (a) For Goods manufactured in the Purchaser's Country:
 - (i) the price of the Goods quoted EXW (ex-works, ex-factory, ex warehouse, ex showroom, or off-the-shelf, as applicable), including all customs duties and sales and other taxes already paid or payable on the

components and raw material used in the manufacture or assembly of the Goods;

- (ii) any Purchaser's Country sales tax and other taxes which will be payable on the Goods if the Contract is awarded to the Bidder; and
 - (iii) the price for inland transportation, insurance, and other local services required to convey the Goods to their final destination (Project Site) specified **in the BDS.**
- (b) For Goods manufactured outside the Purchaser's Country, to be imported:
 - (i) the price of the Goods, quoted CIP named place of destination, in the Purchaser's Country, as specified **in the BDS;**
 - (ii) the price for inland transportation, insurance, and other local services required to convey the Goods from the named place of destination to their final destination (Project Site) specified **in the BDS;**
- (c) For Goods manufactured outside the Purchaser's Country, already imported:
 - (i) the price of the Goods, including the original import value of the Goods; plus any mark-up (or rebate); plus any other related local cost, and custom duties and other import taxes already paid or to be paid on the Goods already imported.
 - (ii) the custom duties and other import taxes already paid (need to be supported with documentary evidence) or to be paid on the Goods already imported;
 - (iii) the price of the Goods, obtained as the difference between (i) and (ii) above;
 - (iv) any Purchaser's Country sales and other taxes which will be payable on

the Goods if the Contract is awarded to the Bidder; and

- (v) the price for inland transportation, insurance, and other local services required to convey the Goods to their final destination (Project Site) specified **in the BDS**.
- (d) for Related Services, other than inland transportation and other services required to convey the Goods to their final destination, whenever such Related Services are specified in the Schedule of Requirements:
 - (i) the price of each item comprising the Related Services (inclusive of any applicable taxes).

15. Currencies of Bid and Payment

- 15.1 The currency(ies) of the Bid and the currency(ies) of payments shall be the same. The Bidder shall quote in the currency of the Purchaser's Country the portion of the Bid price that corresponds to expenditures incurred in the currency of the Purchaser's country, unless otherwise specified **in the BDS**.
- 15.2 The Bidder may express the Bid price in any currency. If the Bidder wishes to be paid in a combination of amounts in different currencies, it may quote its price accordingly but shall use no more than three foreign currencies in addition to the currency of the Purchaser's Country.

16. Documents Establishing the Eligibility and Conformity of the Goods and Related Services

- 16.1 To establish the eligibility of the Goods and Related Services in accordance with ITB 5, Bidders shall complete the country of origin declarations in the Price Schedule Forms, included in Section IV, Bidding Forms.
- 16.2 To establish the conformity of the Goods and Related Services to the bidding document, the Bidder shall furnish as part of its Bid the documentary evidence that the Goods conform to the technical specifications and standards specified in Section VII, Schedule of Requirements.
- 16.3 The documentary evidence may be in the form of literature, drawings or data, and shall consist of a

detailed item by item description of the essential technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to the technical specification, and if applicable, a statement of deviations and exceptions to the provisions of the Section VII, Schedule of Requirements.

16.4 The Bidder shall also furnish a list giving full particulars, including available sources and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the Goods during the period specified **in the BDS** following commencement of the use of the goods by the Purchaser.

16.5 Standards for workmanship, process, material, and equipment, as well as references to brand names or catalogue numbers specified by the Purchaser in the Schedule of Requirements, are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, brand names, and/or catalogue numbers, provided that it demonstrates, to the Purchaser's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in the Section VII, Schedule of Requirements.

17. Documents Establishing the Eligibility and Qualifications of the Bidder

17.1 To establish Bidder's eligibility in accordance with ITB 4, Bidders shall complete the Letter of Bid – Technical Part, included in Section IV, Bidding Forms.

17.2 The documentary evidence of the Bidder's qualifications to perform the Contract, if its Bid is accepted, shall establish to the Purchaser's satisfaction:

- (a) that, if required **in the BDS**, a Bidder that does not manufacture or produce the Goods it offers to supply shall submit the Manufacturer's Authorization using the form included in Section IV, Bidding Forms to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods

to supply these Goods in the Purchaser's Country;

- (b) that, if required **in the BDS**, in case of a Bidder not doing business within the Purchaser's Country, the Bidder is or will be (if awarded the Contract) represented by an Agent in the country equipped and able to carry out the Supplier's maintenance, repair and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications; and
- (c) that the Bidder meets each of the qualification criterion specified in Section III, Evaluation and Qualification Criteria.

18. Period of Validity of Bids

- 18.1. Bids shall remain valid until the date **specified in the BDS** or any extended date if amended by the Purchaser in accordance with ITB 8. A Bid that is not valid until the date **specified in the BDS**, or any extended date if amended by the Purchaser in accordance with ITB 8, shall be rejected by the Purchaser as nonresponsive.
- 18.2. In exceptional circumstances, prior to the expiry of the Bid validity, the Purchaser may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested (in accordance with ITB 19), it shall also be extended for a corresponding period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid, except as provided in ITB 18.3.
- 18.3. If the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial Bid validity, the Contract price shall be determined as follows:
 - (a) In the case of fixed price contracts, the Contract price shall be the Bid price adjusted by the factor **specified in the BDS**.
 - (b) In the case of adjustable price contracts, no adjustment shall be made.
 - (c) In any case, Bid evaluation shall be based on the Bid price without taking into

consideration the applicable correction from those indicated above.

19. Bid Security

19.1. The Bidder shall furnish, as part of the Technical Part of its Bid, either a Bid-Securing Declaration or a Bid Security, as specified **in the BDS**, in original form and, in the case of a Bid security, in the amount and currency specified **in the BDS**.

19.2. A Bid Securing Declaration shall use the form included in Section IV, Bidding Forms.

19.3. If a Bid Security is specified pursuant to ITB 19.1, the Bid security shall be a demand guarantee in any of the following forms at the Bidder's option:

- (a) an unconditional guarantee issued by a bank or non-bank financial institution (such as an insurance, bonding or surety company);
- (b) an irrevocable letter of credit;
- (c) a cashier's or certified check; or
- (d) another security **specified in the BDS**,

from a reputable source from an eligible country. If an unconditional guarantee is issued by a non-bank financial institution located outside the Purchaser's Country the issuing non-bank financial institution shall have a correspondent financial institution located in the Purchaser's Country to make it enforceable unless the Purchaser has agreed in writing, prior to Bid submission, that a correspondent financial institution is not required. In the case of a bank guarantee, the Bid security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms, or in another substantially similar format approved by the Purchaser prior to Bid submission. The Bid security shall be valid for twenty-eight (28) days beyond the original date of expiry of the Bid validity, or beyond any extended date if requested under ITB 18.2.

19.4. If a Bid Security is specified pursuant to ITB 19.1, any Bid not accompanied by a substantially responsive Bid Security shall be rejected by the Purchaser as non-responsive.

- 19.5. If a Bid Security is specified pursuant to ITB 19.1, the Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing the contract and furnishing the Performance Security pursuant to ITB 49.
- 19.6. The Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required performance security.
- 19.7. The Bid Security may be forfeited:
- (a) if a Bidder withdraws its Bid prior to the expiry date of Bid validity specified by the Bidder on the Letter of Bid or any extended date provided by the Bidder ; or
 - (b) if the successful Bidder fails to:
 - (i) sign the Contract in accordance with ITB 48; or
 - (ii) furnish a performance security in accordance with ITB 49.
- 19.8. The Bid Security or Bid-Securing Declaration of a JV must be in the name of the JV that submits the Bid. If the JV has not been legally constituted into a legally enforceable JV at the time of Bidding, the Bid security or Bid-Securing Declaration shall be in the names of all future members as named in the letter of intent referred to in ITB 4.1 and ITB 11.5.
- 19.9. If a Bid security is **not required in the BDS**, pursuant to ITB 19.1, and
- (a) if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder on the Letter of Bid, or any extended date provided by the Bidder, or
 - (b) if the successful Bidder fails to: sign the Contract in accordance with ITB 48; or furnish a performance security in accordance with ITB 49;
- the Borrower may, **if provided for in the BDS**, declare the Bidder ineligible to be awarded a

contract by the Purchaser for a period of time **as stated in the BDS**.

20. Format and Signing of Bid

- 20.1 The Bidder shall prepare the Bid, in accordance with ITB 11 and ITB 21.
- 20.2 Bidders shall mark as “CONFIDENTIAL” information in their Bids which is confidential to their business. This may include proprietary information, trade secrets, or commercial or financially sensitive information.
- 20.3 The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation **as specified in the BDS** and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Bid where entries or amendments have been made shall be signed or initialed by the person signing the Bid.
- 20.4 In case the Bidder is a JV, the Bid shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.
- 20.5 Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

D. Submission of Bids

21. Sealing and Marking of Bids

- 21.1 The Bidder shall deliver the Bid in two separate, sealed **envelopes** (the Technical Part and the Financial Part). These two envelopes shall be enclosed in a sealed outer envelope marked “ORIGINAL BID”.
- 21.2 In addition, the Bidder shall submit copies of the Bid in the number specified **in the BDS**. Copies of the Technical Part shall be placed in a separate sealed envelope marked “COPIES: TECHNICAL PART”. Copies of the Financial Part shall be placed in a separate sealed envelope marked “COPIES: FINANCIAL PART”. The Bidder shall place both of these envelopes in a separate, sealed outer envelope

marked “BID COPIES”. In the event of any discrepancy between the original and the copies, the original shall prevail. If alternative Bids are permitted in accordance with ITB 13, the alternative Bids shall be submitted as follows: the original of the alternative Bid Technical Part shall be placed in a sealed envelope marked “ALTERNATIVE BID – TECHNICAL PART” and the Financial Part shall be placed in a sealed envelope marked “ALTERNATIVE BID – FINANCIAL PART” and these two separate sealed envelopes then enclosed within a sealed outer envelope marked “ALTERNATIVE BID – ORIGINAL”, the copies of the alternative Bid will be placed in separate sealed envelopes marked “ALTERNATIVE BID – COPIES OF TECHNICAL PART”, and “ALTERNATIVE BID – COPIES OF FINANCIAL PART” and enclosed in a separate sealed outer envelope marked “ALTERNATIVE BID - COPIES”.

- 21.3 The envelopes marked “ORIGINAL BID” and “BID COPIES” (and, if appropriate, a third envelope marked “ALTERNATIVE BID”) shall be enclosed in a separate sealed outer envelope for submission to the Purchaser.
- 21.4 All inner and outer envelopes, shall:
- (a) bear the name and address of the Bidder;
 - (b) be addressed to the Purchaser in accordance with ITB 22.1;
 - (c) bear the specific identification of this Bidding process indicated in ITB 1.1; and
 - (d) bear a warning not to open before the time and date for Bid opening.
- 21.5 If all envelopes are not sealed and marked as required, the Purchaser will assume no responsibility for the misplacement or premature opening of the Bid.

22. Deadline for Submission of Bids

- 22.1. Bids must be received by the Purchaser at the address and no later than the date and time specified **in the BDS**. When so specified **in the BDS**, Bidders shall have the option of submitting their Bids electronically. Bidders submitting Bids

electronically shall follow the electronic Bid submission procedures specified **in the BDS**.

- 22.2. The Purchaser may, at its discretion, extend the deadline for the submission of Bids by amending the bidding document in accordance with ITB 8, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

23. Late Bids

- 23.1. The Purchaser shall not consider any Bid that arrives after the deadline for submission of Bids, in accordance with ITB 22. Any Bid received by the Purchaser after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.

24. Withdrawal, Substitution, and Modification of Bids

- 24.1. A Bidder may withdraw, substitute, or modify its Bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization (the power of attorney) in accordance with ITB 20.3, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be:
- (a) prepared and submitted in accordance with ITB 20 and ITB 21 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked “WITHDRAWAL,” “SUBSTITUTION,” or “MODIFICATION;” and
 - (b) received by the Purchaser prior to the deadline prescribed for submission of Bids, in accordance with ITB 22.
- 24.2. Bids requested to be withdrawn in accordance with ITB 24.1 shall be returned unopened to the Bidders.
- 24.3. No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bids and the expiration of the period of Bid validity specified by the Bidder on the Letter of Bid -Technical Part and repeated in

the Letter of Bid - Financial Part, or any extension thereof.

E. Public Opening of Technical Parts of Bids

25. Public Opening of Technical Parts of Bids

- 25.1. Except as in the cases specified in ITB 23 and ITB 24.2, the Purchaser shall, at this Bid opening, publicly open and read out, in accordance with this ITB, all bids received by the deadline at the date, time and place specified **in the BDS** in the presence of Bidders' designated representatives and anyone who chooses to attend. Any specific electronic Bid opening procedures required if electronic Bidding is permitted in accordance with ITB 22.1, shall be as specified **in the BDS**.
- 25.2. First, the written notice of withdrawal in the envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding Bid shall not be opened, but returned to the Bidder. If the withdrawal envelope does not contain a copy of the "power of attorney" confirming the signature as a person duly authorized to sign on behalf of the Bidder, the corresponding Bid will be opened. No Bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at Bid opening.
- 25.3. Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding Bid being substituted, and the substituted Bid shall not be opened, but returned to the Bidder. No Bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at Bid opening.
- 25.4. Next, envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Bid. No Bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Bid opening. Only Bids that are opened and read out at Bid opening shall be considered further.

- 25.5. Next, all other envelopes marked “TECHNICAL PART” shall be opened one at a time. All envelopes marked “FINANCIAL PART” shall remain sealed, and kept by the Purchaser in safe custody until they are opened, at a later public opening, following the evaluation of the Technical Part of the Bids. On opening the envelopes marked “TECHNICAL PART” the Purchaser shall read out: the name of the Bidder and whether there is a modification; and Alternative Bid the presence or absence of a Bid Security, if required and any other details as the Purchaser may consider appropriate.
- 25.6. Only Technical Parts of Bids and Alternative Bid - Technical Parts that are read out at Bid opening shall be considered further in the evaluation. The Letter of Bid – Technical Part and the separate sealed envelope marked “FINANCIAL PART” are to be initialed by representatives of the Purchaser attending Bid opening in the manner specified **in the BDS.**
- 25.7. At the Bid opening the Purchaser shall neither discuss the merits of any Bid nor reject any Bid (except for late Bids, in accordance with ITB 23.1).
- 25.8. Following the opening of the Technical Parts of the Bid the Purchaser shall prepare a record that shall include, as a minimum:
- (a) the name of the Bidder and whether there is a withdrawal, substitution, or modification;
 - (b) the presence or absence of a duly sealed envelope marked “FINANCIAL PART”;
 - (c) the presence or absence of a Bid Security or Bid-Securing Declaration; and
 - (d) if applicable, any Alternative Bid - Technical Part;
- 25.9. The Bidders’ representatives who are present shall be requested to sign the record. The omission of a Bidder’s signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

F. Evaluation of Bids - General Provisions

26. Confidentiality

- 26.1 Information relating to the evaluation of the Technical Part shall not be disclosed to Bidders or any other persons not officially concerned with the Bidding process until the notification of evaluation of the Technical Part in accordance with ITB 33. Information relating to the evaluation of Financial Part, the evaluation of combined Technical Part and Financial Part, and recommendation of contract award shall not be disclosed to Bidders or any other persons not officially concerned with the RFB process until the Notification of Intention to Award the Contract is transmitted to Bidders in accordance with ITB 43.
- 26.2 Any effort by a Bidder to influence the Purchaser in the evaluation or contract award decisions may result in the rejection of its Bid.
- 26.3 Notwithstanding ITB 26.2, from the time of Bid opening to the time of Contract Award, if any Bidder wishes to contact the Purchaser on any matter related to the Bidding process, it should do so in writing.

27. Clarification of Bids

- 27.1 To assist in the examination, evaluation, comparison of the Bids, and qualification of the Bidders, the Purchaser may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder in respect to its Bid and that is not in response to a request by the Purchaser shall not be considered. The Purchaser's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease, in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Purchaser in the Evaluation of the Bids, in accordance with ITB 35.
- 27.2 If a Bidder does not provide clarifications of its Bid by the date and time set in the Purchaser's request for clarification, its Bid may be rejected.

28. Deviations, Reservations, and Omissions

- 28.1 During the evaluation of Bids, the following definitions apply:

- (a) “Deviation” is a departure from the requirements specified in the bidding document;
 - (b) “Reservation” is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the bidding document; and
- 28.2 “Omission” is the failure to submit part or all of the information or documentation required in the bidding document.
- 29. Nonconformities, Errors and Omissions**
 - 29.1 Provided that a Bid is substantially responsive, the Purchaser may waive any nonconformities in the Bid.
 - 29.2 Provided that a Bid is substantially responsive, the Purchaser may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.

G. Evaluation of Technical Parts of Bids

- 30. Evaluation of Technical Parts**
 - 30.1 In evaluating the Technical Parts of each Bid, the Purchaser shall use the criteria and methodologies listed in ITB 31, ITB 32, the BDS, if applicable, and Section III, Evaluation and Qualification Criteria. No other evaluation criteria or methodologies shall be permitted.
- 31. Determination of Responsiveness**
 - 31.1 The Purchaser’s determination of a Bid’s responsiveness is to be based on the contents of the Bid itself, as defined in ITB 11. A substantially responsive Bid is one that meets the requirements of the bidding document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:
 - (a) if accepted, would:

- (i) affect in any substantial way the scope, quality, or performance of the Goods and Related Services specified in the Contract; or
- (ii) limit in any substantial way, inconsistent with the bidding document, the Purchaser's rights or the Bidder's obligations under the Contract; or
- (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.

31.2 The Purchaser shall examine the technical aspects of the Bid submitted in accordance with ITB 16 and ITB 17, in particular, to confirm that all requirements of Section VII, Schedule of Requirements have been met without any material deviation or reservation, or omission.

31.3 If a Bid is not substantially responsive to the requirements of bidding document, it shall be rejected by the Purchaser and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

32. Qualification of the Bidders and Detailed Evaluation of the Technical Part

32.1 The Purchaser shall determine, to its satisfaction, whether all eligible Bidders, whose Bids have been determined to be substantially responsive to the bidding document, meet the Qualification Criteria specified in Section III, Evaluation and Qualification Criteria.

32.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 17. The determination shall not take into consideration the qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, subcontractors (other than specialized subcontractors if permitted in the bidding document), or any other firm different from the Bidder.

32.3 Prior to Contract award, the Purchaser will verify that the successful Bidder (including each member of a JV) is not disqualified by the Bank due to noncompliance with contractual SEA/SH

prevention and response obligations. The Purchaser will conduct the same verification for each subcontractor proposed by the successful Bidder. If any proposed subcontractor does not meet the requirement, the Purchaser will require the Bidder to propose a replacement subcontractor.

- 32.4 Only substantially responsive bids submitted by eligible and qualified bidders shall proceed to the detailed technical evaluation to assess adequacy of the Technical Part followed by evaluation applying technical factors/subfactors and corresponding scores and weightings as specified in the BDS.

H. Notification of Evaluation of Technical Parts and Public Opening of Financial Parts of Bids

33. Notification of Evaluation of Technical Parts and Public Opening of Financial Parts

- 33.1 Following the completion of the evaluation of the Technical Parts of the Bids, and the Bank has issued its no objection (if applicable), the Purchaser shall notify in writing those Bidders who have failed to meet the Qualification Criteria and/or whose Bids were considered non-responsive to the requirements in the bidding document, advising them of the following information:

- (a) the grounds on which their Technical Part of Bid failed to meet the requirements of the bidding document;
- (b) their envelope marked “FINANCIAL PART” will be returned to them unopened after the completion of the bid evaluation process and the signing of the Contract;
- (c) notify them of the date, time and location of the public opening of the envelopes marked “FINANCIAL PART”.

- 33.2 The Purchaser shall, simultaneously, notify in writing those Bidders whose Technical Parts have been evaluated as substantially responsive to the bidding document and met the Qualification Criteria, advising them of the following information:

- (a) their Bid has been evaluated as substantially responsive to the bidding

document and met the Qualification Criteria; and

- (b) their envelope marked “FINANCIAL PART” will be opened at the public opening of Financial Parts;
- (c) notify them of the date, time and location of the public opening of the envelopes marked “FINANCIAL PART”.

33.3 The opening date shall be not less than ten (10) Business Days from the date of notification of the results of the technical evaluation, specified in ITB 33.1 and 33.2. However, if the Purchaser receives a complaint on the results of the technical evaluation within the ten (10) Business Days, the opening date shall be subject to ITB 50.1. The Financial Part of the Bid shall be opened publicly in the presence of Bidders’ designated representatives and anyone who chooses to attend.

33.4 At this public opening the Financial Parts will be opened by the Purchaser in the presence of Bidders, or their designated representatives and anyone else who chooses to attend. Bidders who met the Qualification Criteria and whose Bids were evaluated as substantially responsive will have their envelopes marked “FINANCIAL PART” opened at the second public opening. Each of these envelopes marked “FINANCIAL PART” shall be inspected to confirm that they have remained sealed and unopened. These envelopes shall then be opened by the Purchaser. The Purchaser shall read out the names of each Bidder, the technical score and the total Bid prices, per lot (contract) if applicable, including any discounts and Alternative Bid - Financial Part, and any other details as the Purchaser may consider appropriate.

33.5 Only envelopes of Financial Part of Bids, Financial Parts of Alternative Bids and discounts that are opened and read out at Bid opening shall be considered further for evaluation. The Letter of Bid - Financial Part and the Price Schedules are to be initialed by a representative of the Purchaser attending the Bid opening in the manner specified **in the BDS**.

- 33.6 The Purchaser shall neither discuss the merits of any Bid nor reject any envelopes marked “FINANCIAL PART”.
- 33.7 The Purchaser shall prepare a record of the Financial Part of the Bid opening that shall include, as a minimum:
- (a) the name of the Bidder whose Financial Part was opened;
 - (b) the Bid price, per lot (contract) if applicable, including any discounts,
 - (c) if applicable, any Alternative Bid - Financial Part.
- 33.8 The Bidders whose envelopes marked ‘FINANCIAL PART’ have been opened or their representatives who are present shall be requested to sign the record. The omission of a Bidder’s signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

I. Evaluation of Financial Parts of Bids

34. Evaluation of Financial Parts

- 34.1 Provided that a Bid is substantially responsive, the Purchaser shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component, by adding the average price of the item or component quoted by substantially responsive Bidders. If the price of the item or component cannot be derived from the price of other substantially responsive Bids, the Purchaser shall use its best estimate.
- 34.2 To evaluate the Financial Part of each Bid, the Purchaser shall consider the following:
- (a) evaluation will be done for Items or Lots (contracts), as specified **in the BDS**; and the Bid Price as quoted in accordance with ITB 14;
 - (b) price adjustment for correction of arithmetic errors in accordance with ITB 35.1;

- (c) price adjustment due to discounts offered in accordance with ITB 14.4;
 - (d) converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITB 36;
 - (e) price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 34.1; and
 - (f) the additional evaluation factors specified in Section III, Evaluation and Qualification Criteria.
- 34.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.
- 34.4 If this bidding document allows Bidders to quote separate prices for different lots (contracts), each lot will be evaluated separately to determine the Most Advantageous Bid using the methodology specified in Section III, Evaluation and Qualification Criteria. **Discounts that are conditional on the award of more than one lot or slice shall not be considered for Bid evaluation.**
- 34.5 The Purchaser's evaluation of a Bid will exclude and not take into account:
- (a) in the case of Goods manufactured in the Purchaser's Country, sales and other similar taxes, which will be payable on the goods if a contract is awarded to the Bidder;
 - (b) in the case of Goods manufactured outside the Purchaser's Country, already imported or to be imported, customs duties and other import taxes levied on the imported Good, sales and other similar taxes, which will be payable on the Goods if the contract is awarded to the Bidder;
 - (c) any allowance for price adjustment during the period of execution of the contract, if provided in the Bid.
- 34.6 The Purchaser's evaluation of a Bid may require the consideration of other factors, in addition to the Bid price quoted in accordance with ITB 14.

These factors may be related to the characteristics, performance, and terms and conditions of purchase of the Goods and Related Services. The effect of the factors selected, if any, shall be expressed in monetary terms to facilitate comparison of Bids, unless otherwise specified **in the BDS** from amongst those set out in Section III, Evaluation and Qualification Criteria. The criteria and methodologies to be used shall be as specified in ITB 34.2 (f).

35. Correction of Arithmetic Errors

35.1 In evaluating the Financial Part of each Bid, the Purchaser shall correct arithmetic errors on the following basis:

- (a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;
- (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.

35.2 Bidders shall be requested to accept correction of arithmetic errors. Failure to accept the correction in accordance with ITB 35.1, shall result in the rejection of the Bid.

36. Conversion to Single Currency

36.1 For evaluation and comparison purposes, the currency(ies) of the Bids shall be converted in a single currency as specified **in the BDS**.

- 37. Margin of Preference** 37.1 Unless otherwise specified **in the BDS**, a margin of preference shall not apply.
- 38. Comparison of Financial Parts** 38.1 The Purchaser shall compare the evaluated costs of the Bids to determine the Bid that has the lowest evaluated cost. The comparison shall be on the basis of CIP (place of final destination) prices for imported goods and EXW prices, plus cost of inland transportation and insurance to place of destination, for goods manufactured within the Borrower's country, together with prices for any required installation, training, commissioning and other services. The evaluation of prices shall not take into account custom duties and other taxes levied on imported goods quoted CIP and sales and similar taxes levied in connection with the sale or delivery of goods.
- 39. Abnormally Low Bids** 39.1 An Abnormally Low Bid is one where the Bid price, in combination with other elements of the Bid, appears so low that it raises material concerns with the Purchaser as to the capability of the Bidder to perform the Contract for the offered Bid Price.
- 39.2 In the event of identification of a potentially Abnormally Low Bid, the Purchaser shall seek written clarification from the Bidder, including a detailed price analyses of its Bid price in relation to the subject matter of the contract, scope, delivery schedule, allocation of risks and responsibilities and any other requirements of the bidding document.
- 39.3 After evaluation of the price analyses, in the event that the Purchaser determines that the Bidder has failed to demonstrate its capability to perform the contract for the offered Bid price, the Purchaser shall reject the Bid.

J. Evaluation of Combined Technical and Financial Parts, Most Advantageous Bid and Notification of Intention to Award

- 40. Evaluation of combined Technical and Financial Parts** 40.1 The Purchaser's evaluation of responsive Bids will take into account technical factors, in addition to cost factors in accordance with Section III

Evaluation and Qualification Criteria. The weight to be assigned for the Technical factors and cost is specified **in the BDS**. The Purchaser will rank the Bids based on the evaluated Bid score (B).

- 40.2 The Purchaser will determine the Most Advantageous Bid. The Most Advantageous Bid is the Bid of the Bidder that meets the Qualification Criteria and whose Bid has been determined to be substantially responsive to the Bidding document and is the Bid with the highest combined technical and financial score.

41. Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids

- 41.1 The Purchaser reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to Contract Award, without thereby incurring any liability to Bidders. In case of annulment, all Bids submitted and specifically, Bid securities, shall be promptly returned to the Bidders.

42. Standstill Period

- 42.1 The Contract shall not be awarded earlier than the expiry of the Standstill Period. The Standstill Period shall be ten (10) Business Days unless extended in accordance with ITB 47. The Standstill Period commences the day after the date the Purchaser has transmitted to each Bidder the Notification of Intention to Award the Contract. Where only one Bid is submitted, or if this contract is in response to an emergency situation recognized by the Bank, the Standstill Period shall not apply.

43. Notification of Intention to Award

- 43.1 The Purchaser shall send to each Bidder (that has not already been notified that it has been unsuccessful) the Notification of Intention to Award the Contract to the successful Bidder. The Notification of Intention to Award shall contain, at a minimum, the following information:
- (a) the name and address of the Bidder submitting the successful Bid;
 - (b) the Contract price of the successful Bid;
 - (c) the total combined score of the successful Bidder;

- (d) the names of all Bidders who submitted Bids, and their Bid prices as readout, and as evaluated and technical scores;
- (e) a statement of the reason(s) the Bid (of the unsuccessful Bidder to whom the notification is addressed) was unsuccessful;
- (f) the expiry date of the Standstill Period;
- (g) instructions on how to request a debriefing and/or submit a complaint during the standstill period.

K. Award of Contract

44. Award Criteria

- 44.1 Subject to ITB 41, the Purchaser shall award the Contract to the successful Bidder. This is the Bidder whose Bid has been determined to be the Most Advantageous Bid as specified in ITB 40.

45. Purchaser's Right to Vary Quantities at Time of Award

- 45.1 At the time the Contract is awarded, the Purchaser reserves the right to increase or decrease the quantity of Goods and Related Services originally specified in Section VII, Schedule of Requirements, provided this does not exceed the percentages **specified in the BDS**, and without any change in the unit prices or other terms and conditions of the Bid and the bidding document.

46. Notification of Award

- 46.1 Prior to the date of expiry of the Bid validity and upon expiry of the Standstill Period, specified in ITB 42.1 or any extension thereof, and upon satisfactorily addressing any complaint that has been filed within the Standstill Period, the Purchaser shall notify the successful Bidder, in writing, that its Bid has been accepted. The notification of award (hereinafter and in the Contract Forms called the "Letter of Acceptance") shall specify the sum that the Purchaser will pay the Supplier in consideration of the execution of the Contract (hereinafter and in the Conditions of Contract and Contract Forms called "the Contract Price").
- 46.2 Within ten (10) Business Days after the date of transmission of the Letter of Acceptance, the Purchaser shall publish the Contract Award

Notice which shall contain, at a minimum, the following information:

- (a) name and address of the Purchaser;
- (b) name and reference number of the contract being awarded, and the selection method used;
- (c) names of all Bidders that submitted Bids, and their Bid prices as read out at Bid opening, and as evaluated;
- (d) names of all Bidders whose Bids were rejected either as nonresponsive or as not meeting qualification criteria, or were not evaluated, with the reasons therefor;
- (e) the name of the successful Bidder, the final total contract price, the contract duration and a summary of its scope; and
- (f) successful Bidder's Beneficial Ownership Disclosure Form.

46.3 The Contract Award Notice shall be published on the Purchaser's website with free access if available, or in at least one newspaper of national circulation in the Purchaser's Country, or in the official gazette.

46.4 Until a formal Contract is prepared and executed, the Letter of Acceptance shall constitute a binding Contract.

47. Debriefing by the Purchaser

47.1 On receipt of the Purchaser's Notification of Intention to Award referred to in ITB 43.1, an unsuccessful Bidder has three (3) Business Days to make a written request to the Purchaser for a debriefing. The Purchaser shall provide a debriefing to all unsuccessful Bidders whose request is received within this deadline.

47.2 Where a request for debriefing is received within the deadline, the Purchaser shall provide a debriefing within five (5) Business Days, unless the Purchaser decides, for justifiable reasons, to provide the debriefing outside this timeframe. In that case, the standstill period shall automatically be extended until five (5) Business Days after such debriefing is provided. If more than one debriefing is so delayed, the standstill period

shall not end earlier than five (5) Business Days after the last debriefing takes place. The Purchaser shall promptly inform, by the quickest means available, all Bidders of the extended standstill period

- 47.3 Where a request for debriefing is received by the Purchaser later than the three (3) Business Day deadline, the Purchaser should provide the debriefing as soon as practicable, and normally no later than fifteen (15) Business Days from the date of publication of Public Notice of Award of contract. Requests for debriefing received outside the three (3) day deadline shall not lead to extension of the standstill period.
- 47.4 Debriefings of unsuccessful Bidders may be done in writing or verbally. The Bidders shall bear their own costs of attending such a debriefing meeting.

48. Signing of Contract

- 48.1 The Purchaser shall send to the successful Bidder the Letter of Acceptance including the Contract Agreement, and a request to submit the Beneficial Ownership Disclosure Form providing additional information on its beneficial ownership. The Beneficial Ownership Disclosure Form shall be submitted within eight (8) Business Days of receiving this request.
- 48.2 The successful Bidder shall sign, date and return to the Purchaser, the Contract Agreement within twenty-eight (28) days of its receipt.
- 48.3 Notwithstanding ITB 48.2 above, in case signing of the Contract Agreement is prevented by any export restrictions attributable to the Purchaser, to the country of the Purchaser, or to the use of the products/goods, systems or services to be supplied, where such export restrictions arise from trade regulations from a country supplying those products/goods, systems or services, the Bidder shall not be bound by its Bid, always provided however, that the Bidder can demonstrate to the satisfaction of the Purchaser and of the Bank that signing of the Contract Agreement has not been prevented by any lack of diligence on the part of the Bidder in completing any formalities, including applying for permits, authorizations and licenses

necessary for the export of the products/goods, systems or services under the terms of the Contract.

49. Performance Security

- 49.1 Within twenty-eight (28) days of the receipt of the Letter of Acceptance from the Purchaser, the successful Bidder, if required, shall furnish the Performance Security in accordance with the GCC 18 using for that purpose the Performance Security Form included in Section X, Contract Forms, or another Form acceptable to the Purchaser. If the Performance Security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Purchaser. A foreign institution providing a bond shall have a correspondent financial institution located in the Purchaser's Country, unless the Purchaser has agreed in writing that a correspondent financial institution is not required.
- 49.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Purchaser may award the Contract to the Bidder offering the Most Advantageous Bid.

50. Procurement Related Complaint

- 50.1 The procedures for making a Procurement-related Complaint are as specified in the BDS.

Section II - Bid Data Sheet (BDS)

The following specific data for the Goods to be procured shall complement, supplement, and/or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

ITB Reference	A. General
ITB 1.1	<p>The reference number of the Request for Bids (RFB) is : <u>IN-AHIDMS-515195-GO-RFB</u></p> <p>The Purchaser is: Assam Health Infrastructure Development & Management Society .</p> <p>The name of the RFB is: Procurement of Proton Beam Therapy Unit at Guwahati, Assam including Supply, Installation, Testing and Commissioning</p> <p>The number and identification of lots (contracts) comprising this RFB is: RFB No. IN-AHIDMS-515195-GO-RFB, Single lot of one unit</p>
ITB 1.2(a)	<p>Electronic-Procurement System</p> <p>The Purchaser shall use the following electronic-procurement system to manage this Bidding process:</p> <p style="text-align: center;">www.assamtenders.gov.in</p> <p>The electronic-procurement system shall be used to manage the following aspects of the Bidding process:</p> <p>1) Issuing bidding document, 2) Issue of clarifications 3) Issue of Amendments, 4) Submission of Bids, 5) Opening of Bids 6) Disclosing technical and financial bids opening & outcomes 7) Disclosure on Awards</p>
ITB 2.1	<p>The Borrower is: Government of India. The sub-Borrower is Government of Assam</p> <p>Loan or Financing Agreement amount: \$251.03 million</p> <p>The name of the Project is: ASSAM STATE SECONDARY HEALTHCARE INITIATIVE FOR SERVICE DELIVERY TRANSFORMATION [ASSIST]</p>
ITB 4.1	<p>Maximum number of members in the Joint Venture (JV) shall be: 02, being OEM as the lead member.</p>

ITB 4.5	A list of debarred firms and individuals is available on the Bank's external website: http://www.worldbank.org/debarr .
	B. Contents of Bidding Document
ITB 7.1	<p>For <u>Clarification of Bid purposes</u> only, the Purchaser's address is:</p> <p>Attention: Project Director, AHIDM Society Address: Nayantara Super Market, Sixmile, Khanapara, Floor/Room number: 4th Floor City: Guwahati ZIP Code: 781022 Country: : India Telephone: +913613501033 Electronic mail address: pmu.ahidms@gmail.com</p> <p>Requests for clarification should be received by the Purchaser no later than: 15 days prior to bid submission end date</p> <p>Web page: www.assamtenders.gov.in & https://ahidms.assam.gov.in/</p>
	C. Preparation of Bids
ITB 10.1	<p>The language of the Bid is: <i>“English”</i>.</p> <p>All correspondence exchange shall be in English language.</p> <p>Language for translation of supporting documents and printed literature is <i>English</i>.</p>
ITB 11.2 (i) & 11.3 (d)	<p>The Bidder shall submit the following additional documents in its Bid:</p> <ol style="list-style-type: none"> 1. Incorporation certificate of the firm issued by Competent Authority, List of owners/ directors/ board members. 2. Manufacturing License from the country of origin. 3. The registration number for eLORA (Electronic Licensing of Radiation Applications) as applicable 4. A declaration form the Bidder mentioning that bidder is well versed with provision of Indian Environment Protection Act- 1985, CPCB norms and the State level guidelines and notifications in addition to various applicable rules and regulations under the Atomic Energy Regulatory Board.

ITB 13.1	Alternative Bids (Technical and Financial Parts) <i>“shall not be”</i> considered.
ITB 14.5	The prices quoted by the Bidder <i>“shall not”</i> be subject to adjustment during the performance of the Contract.
ITB 14.6	Prices quoted for one contract comprising of Procurement of Proton Beam Therapy Unit at Guwahati, Assam including Supply, Installation, Testing and Commissioning shall correspond at least to 100% percent of the items specified for the contract.
ITB 14.7	The Incoterms edition is: <i>Incoterms2020</i>
ITB 14.8 (a)(iii), (b)(ii) and (c)(v)	Final Destination (Project Site): <i>Guwahati Medical College Premises, Bhangagarh, Guwahati, Assam, India. PIN- 781005</i>
ITB 14.8 (b)(i)	Place of Destination: <i>CIP-Guwahati Medical College Premises, Bhangagarh, Guwahati, Assam, India. PIN- 781005</i>
ITB 15.1	The Bidder <i>is</i> required to quote in the currency of the Purchaser’s Country the portion of the Bid price that corresponds to expenditures incurred in that currency.
ITB 16.4	Period of time the Goods are expected to be functioning (for the purpose of spare parts): 30 years
ITB 17.2 (a)	<i>Bids from Original Equipment Manufacturer will only be accepted.</i>
ITB 17.2 (b)	After sales service is <i>required to be provided by the bidder.</i>
ITB 18.1	The Bid shall be valid until: <i>120 days</i>
ITB 18.3 (a)	The Bid price shall be adjusted by the following factor(s): The local currency portion of the Contract price shall be adjusted by a factor reflecting local inflation i.e. Consumer Price Index (CPI) during the period of extension beyond bid validity period plus 56 days, and the foreign currency portion of the Contract price shall be adjusted by a factor reflecting the international inflation (in the country of the foreign currency) during the period of extension beyond bid validity period plus 56 days

	Source of local inflation data (CPI) shall be of Government website (Reserve Bank of India).
ITB 19.1	<p>A <i>Bid Security</i> <i>shall be</i> required. .</p> <p>If a Bid Security shall be required, the amount and currency of the Bid Security shall be INR 8,00,00,000.00 (USD 919,540.00). Bid security must be issued by a Nationalized or Scheduled Bank located in India or by an international bank having a correspondent bank in India. .</p>
ITB 19.3 (d)	<p>Other types of acceptable securities:</p> <p>1. Fixed Deposit/Time Deposit certificate pledged in favour of Project Director, AHIDMS</p>
ITB 20.3	The written confirmation of authorization to sign on behalf of the Bidder shall consist of: Legally valid Power of Attorney is required to demonstrate the authority of the signatory to sign the Bid electronically.
	D. Submission of Bids
ITB 21	<p>ITB 21.1, 21.2, 21.3, 21.4 ,21.5 is replaced by the followings :</p> <p>21.1 Bids, both Technical and Financial Parts, shall be submitted online on the e-procurement system specified in BDS 7.1. Detailed guidelines for viewing bids and submission of online bids are given on the website. The Request for Bids under this Project is published on this website. Any citizen or prospective bidder can logon to this website and view the Request for Bids and can view the details of works for which bids are invited. A prospective bidder can submit its bid online; however, the bidder is required to have enrolment/registration in the website, and should have valid Digital Signature Certificate (Class-3 digital signature) in the form of smart card/e-token obtained from any certifying agency authorised by the Government of India . The bidder should register in the website using the relevant option available. Then the Digital Signature registration has to be done with the e-token, after logging into the website. The bidder can then login the website through the secured login by entering the password of the e-token & the user id/ password chosen during registration. After getting the bid schedules, the Bidder should go through them carefully and submit the specified documents, along with the bid, otherwise the bid will be rejected. The bidders shall fill up online, the forms that are available for online filling on the e-portal. The rest of the forms shall be download by the bidders and filled up. The filled up pages shall then be scanned and uploaded on the e-procurement portal along with the scanned copies of the supporting documents.</p>

	<p>21.2 The e-Procurement system will scan the uploaded documents for virus and if a document uploaded by bidder is found to have virus, the system will reject the uploaded file. Bidders shall take due care to ensure that the documents uploaded by them in e-Procurement system are virus free. The e-Procurement system restricts bidders from uploading file attachments larger than the file size of 20 MB. Hence, the bidders are informed to restrict the size of file attachments uploaded as part of their bid response to less than this size per file.</p> <p>21.3 In compliance to 19.3(d) , the original Bid Security in approved form shall be delivered by the Bidder to the office specified in the BDS /ITB 7.1 before the bid submission deadline. Hard copy of rest of the bid or any other document are not to be submitted.</p> <p>In case of non-receipt of these original documents, the bid will be declared non-responsive and will not be opened.</p> <p>21.4 The completed bid comprising of documents indicated in ITB 11, should be uploaded on the e-procurement portal along with scanned copies of requisite certificates as are mentioned in different sections in the bidding document and scanned copy of the bid security.</p> <p>21.5 All the documents are required to be signed digitally by the bidder. After electronic online bid submission, the system generates a unique bid identification number which is time stamped as per server time. This shall be treated as acknowledgement of bid submission.</p> <p>Physical, e-mail, Telex, Cable or Facsimile bids will be rejected as non-responsive.</p>
ITB 22.1	<p>For <u>submission of Original Documents as stipulated in BDS/ITB 21</u> only, the Purchaser's address is: <i>same as under provision BDS/ITB 7.1 for clarifications.</i></p> <p>The deadline for Bid submission is:</p> <p>Date: 22.01.2026</p> <p>Time: 1300 Hrs. IST (<i>Indian Standard Time</i>)</p> <p>Bidders <i>shall</i> have the option of submitting their Bids electronically ONLY.</p> <p>The electronic bidding submission procedures shall be: As mentioned in BDS/ITB 21</p>
	E. Public Opening of Technical Parts of Bids
ITB 25.1	<p>The Bid opening shall take place at:</p> <p>Address: Nayantara Super Market, Sixmile, Khanapara,</p>

	<p>Floor/Room number: 4th Floor</p> <p>City: Guwahati</p> <p>Country: : India</p> <p>Date: 16.12.2025</p> <p>Time: 1730 hrs IST (Indian Standard Time) to 1900 hrs. IST</p> <p>The electronic Bid opening procedures shall be: as per the procedure stipulated in www.assamtenders.gov.in</p>
ITB 25	<p>ITB 25.1, 25.2, 25.3, 25.4 ,25.5, 25.6,25.7,25.8 & 25.9 are replaced as the followings :</p> <p>25.1 The Employer shall publicly open Technical Parts of all Bids received by the deadline, at the date, time and place specified in the BDS/ITB 25.1 , in the presence of Bidders’ designated representatives and anyone who chooses to attend, and this could also be viewed by the bidders online. The Financial Parts of the bids shall remain unopened in the e-procurement system, until the subsequent public opening, following the evaluation of the Technical Parts of the Bids. In all cases, original documents submitted as specified in ITB 21 shall be first scrutinized, and Bids that do not comply with the provisions of ITB 21 will be declared non-responsive and will not be opened. Thereafter, bidders’ names, the presence or absence of a Bid Security, if one was required, alternative bids – technical parts, if any, and such other details as the Employer may consider appropriate will be notified, online by the Employer at the time of bid opening.</p> <p>25.2 In the event of the specified date of bid opening being declared a holiday for the Employer, the bids will be opened at the appointed time and location on the next working day.</p> <p>25.3 The electronic summary of the bid opening will be generated and uploaded online. The Employer will also prepare minutes of the Bid opening, including the information disclosed and upload the same for viewing online. Only Technical Parts of Bids, and technical parts of Alternative Bids if any, that are opened at technical Bid opening shall be considered further for evaluation.</p>
G. Evaluation of Technical Parts of Bids	
ITB 32.4	<p>The technical bid evaluation will be done in two parts – Part A & B. Part A is the mandatory criteria given in Section III, which must be fulfilled by each successful bidder to be considered for financial opening. Once the bidder qualifies in part A the bidder shall be eligible to participate in Part B evaluation, else bidder will be treated as non-responsive. (Part A & B may</p>

be referred at **Technical Evaluation in Section III - Evaluation and Qualification Criteria)**

Please note that even if a bidder scores zero marks in Part B the bid shall still be eligible for financial opening.

The weight to be given for Part B i.e. Rated Criteria (including technical and non-price factors) is 10%.

The technical factors, which for purposes of this document carry the same meaning as Rated Criteria, and the corresponding weight in % are mentioned below:

:

	Technical Requirement	Total Allotted Score	Weightage
1	Warranty Offered by the bidder beyond the minimum warranty stipulated in the RFB	100	50%
2	Working Hours Per Day for the proton beam therapy unit	100	10%
3	Preventive Maintenance Days for the proton beam therapy unit in a Year	100	10%
4	Onsite Availability of Spare Parts (Percentage of the total Spare Part)	100	5%
5	Uptime Committed in Percentage during CMC for the proton beam therapy unit (to be monitored on daily basis and assessed monthly to determine the actual uptime)	100	15%
6	Early commissioning of equipment (in comparison to timeline indicated in bid document)	100	5%
7	Response time to attend breakdown of maintenance (Time taken to attend the complaint from the time of reported breakdown)	100	5%
	Total	700	100%

Note: scoring shall be done as per the methodology described in Technical Evaluation in Section III - Evaluation and Qualification Criteria

H. Notification of Evaluation of Technical Parts and Public Opening of Financial Parts of Bids

ITB 33

ITB 33.1, 33.2, 33.3, 33.4 ,33.5, 33.6,33.7,33.8 are replaced as the following :

33.1 Following the completion of the evaluation of the Technical Parts of the Bids, and the Bank has issued its no objection (if applicable), the Employer shall notify in writing those Bidders whose Bids were considered non-responsive to the bidding document or failed to meet the Qualification Criteria, advising them of the following information:

- (a) the grounds on which their Technical Part of Bid failed to meet the requirements of the bidding document;
- (b) their Financial Part of Bid shall not be opened; and
- (c) notify them of the date, time, and location for public opening of Financial Parts of the Bids.

33.2 The Employer shall, simultaneously, notify in writing those Bidders whose Technical Part have been evaluated as substantially responsive to the bidding document and met all Qualifying Criteria, advising them of the following information:

- (a) their Bid has been evaluated as substantially responsive to the bidding document and met the Qualification Criteria;
- (b) their Financial Part of Bid will be opened at the public opening of the Financial Parts; and
- (c) notify them of the date, time and location for public opening of the Financial Parts of the Bids, **as specified in the BDS/ITB 7.1.**

33.3 The opening date should allow Bidders sufficient time to make arrangements for attending the opening. The Financial Part of the Bids shall be opened publicly in the presence of Bidders' designated representatives and anyone who chooses to attend, and this could also be viewed by the bidders online. The bidder's names, the Bid prices, per lot (contract) if applicable, including any discounts and Alternative Bid - Financial Part if any, and such other details as the Employer may consider appropriate, will be notified online by the Employer at the time of bid opening.

33.4 In the event of the specified date of bid opening being declared a holiday for the Employer, the bids will be opened at the appointed time and location on the next working day.

	33.5 The electronic summary of the bid opening will be generated and uploaded online. The Employer will also prepare minutes of the Bid opening, including the information disclosed and upload the same for viewing online. Only Financial Parts of Bids, Financial Parts of Alternative Bids, and discounts that are opened at Bid opening shall be considered further for evaluation
	I. Evaluation of Financial Part of Bids
ITB 34.2(a)	<i>“Bids will be evaluated for one contract only comprising of Procurement of One Proton Beam Therapy Unit at Guwahati, Assam including Supply, and all related services (as reflected in “Price and Completion Schedule - Related Services”)to be awarded to the successful Bidder”.</i>
ITB 34.6	No non-price factor, other than those listed under ITB 32.4 will be used for evaluation of bids.
ITB 36.1	<p>The currency that shall be used for Bid evaluation and comparison purposes to convert at the selling exchange rate all Bid prices expressed in various currencies into a single currency is: INDIAN RUPEE</p> <p>The source of exchange rate shall be: At the selling exchange rate Reserve Bank India.</p> <p>The date for the exchange rate shall be: 1 days prior to the deadline for submission of the Bids.</p>
ITB 37.1	A margin of domestic preference <i>“shall not”</i> apply.
J. Evaluation of Combined Technical and Financial Parts and Most Advantageous Bid	
ITB 40.1	The weight to be given for cost is: 90%
	J. Award of Contract
ITB 45.1	<p>The maximum percentage by which quantities may be increased is: 0%</p> <p>The maximum percentage by which quantities may be decreased is: 0%</p>

ITB 50.1	<p>The procedures for making a Procurement-related Complaint are detailed in the “Procurement Regulations for IPF Borrowers (Annex III).” If a Bidder wishes to make a Procurement-related Complaint, the Bidder should submit its complaint following these procedures, in writing (by the quickest means available, that is either by email or fax), to:</p> <p>For the attention: <i>Dr. Siddharth Singh, IAS</i></p> <p>Title/position: <i>Project Director</i></p> <p>Purchaser: Assam Health Infrastructure Development & Management Society.</p> <p>Email address: <i>pmu.ahidms@gmail.com</i></p> <p>A copy of the complaint can be sent for the Bank’s information and monitoring to: pprocurementcomplaints@worldbank.org</p> <p>In summary, a Procurement-related Complaint may challenge any of the following:</p> <ol style="list-style-type: none">1. the terms of the Bidding Documents;2. the Purchaser’s decision to exclude a Bidder from the procurement process prior to the award of contract; and3. the Purchaser’s decision to award the contract.
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Section III - Evaluation and Qualification Criteria

This Section contains the criteria that the Purchaser shall use to evaluate Bids and qualify the Bidders. No other factors, methods or criteria shall be used other than specified in this bidding document.

TECHNICAL PART

1. Qualification (PART A)

Qualification Criteria (ITB 32.1)

The Purchaser shall assess each Bid against the following Qualification Criteria. Requirements not included in the text below shall not be used in the evaluation of the Bidder's (in case of Sole Bidder) or Lead Member of JV qualifications.

- (a) **Financial Capability:** The Bidder shall submit audited financial statements or, if not required by the law of the Bidder's country, other financial statements acceptable to the Purchaser, for the last five years prior to bid submission deadline, demonstrating the current soundness of the Bidder's financial position. Bidder must fulfill the following criteria:

1. The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the execution cash flow requirements estimated INR 300 crore or equivalent foreign currency for the subject contract(s) net of the Bidder's other commitments.

2. The Bidders shall also demonstrate, to the satisfaction of the Employer, that it has adequate sources of finance to meet the cash flow requirements to meet the requirement of this Contract by way of Solvency Certificate issued by banks or Chartered Accountant or any other relevant document like profit and loss account.

3. The minimum average annual financial turnover of the bidder during the last three years (calculated as total certified payments received for contracts in progress or completed within the last 3 financial years such certificates should be issued by the registered accountant in the Bidder's country), should be at least:

Currency	Amount
INR	400 crore ¹
USD	45 million
EURO	39 million
GBP	34 million
Any other foreign currency	Equivalent of INR amount shown above, converted to INR as per the provision mentioned in ITB/BDS 36.1

For a joint venture, the above mentioned requirement shall be met by Lead member and other member must fulfilled 25% of the above requirements.

¹ 1 Crore = 10 million

- (b) **Specific Experience:** The Bidder must be an Original Equipment manufacturer of Proton Therapy Unit and shall demonstrate that it has successfully completed at least *one (01)* contracts ***comprising of Supply, Installation, Testing and Commissioning of One unit Proton Beam Therapy Unit*** within the last five years prior to bid submission deadline. In support of this experience, the bidder shall furnish Satisfactory Performance Certificate in respect of above, duly translated in English and duly notarized in the country of origin, along with the Bid.
- (c) **Documentary Evidence:** The Bidder shall furnish documentary evidence to demonstrate that the Goods it offers meet the following usage requirement:
1. **FDA Approval**
 2. **AERB (India) Approval**
 3. **Regulatory approval for all sub components from respective country of origin (Translated in English)**
 4. **Purchaser satisfaction certificate for previous supply- installation**
- (d) **Manufacturing experience and Technical Capacity:** The Bidder shall furnish documentary evidence to demonstrate that:
- (i) it has manufactured goods of similar nature and complexity for at least five years , prior to the bid submission deadline; and
 - (ii) its annual production capacity of goods of similar nature and complexity for each of the last five years prior to the bid submission deadline, is at least two times the quantities specified under the contract.
- (e) At the time of Contract Award, the Bidder (including each subcontractor proposed by the Bidder) shall not be subject to disqualification by the Bank for non-compliance with SEA/ SH obligations.
- (f) **Complete Technical Conformity of the Technical Specification mentioned in “3. Technical Specification” in Section VII - Schedule of Requirements.**

2. Technical Evaluation (ITB 32.4) (PART B)

Technical Part B Scoring Methodology

S l. N o	Technica l Factor	Score	Total mark s Allott ed	Weight age
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1	Maximum Warranty Offered by the bidder beyond the minimum warranty stipulated in the RFB	20 points for 24 months	40 points for 36 months	60 points for 48 months	100 points for 60 months and above	100	50%
2	Maximum Working Hours Per Day for the proton beam therapy unit	25 points for 8 Hours	50 points for 10 Hours	75 points for 12 Hours	100 points for 14 Hours and more	100	10%
3	Reduction in downtime / Preventive Maintenance Days for the proton beam therapy unit in a Year	25 points for 20 days	50 points for 15 days	75 points for 10 days	100 points for 5 days or less	100	10%
4	Maximum Onsite Availability of Spare Parts (Percentage of the total Spare Part)	25 points for 30% availability	50 points for 40% availability	75 points for 50% availability	100 points for 60% or more availability	100	5%

5	Maximum Uptime Committed in Percentage during CMC for the proton beam therapy unit (to be monitored on daily basis and assessed monthly to determine the actual uptime)	25 points for 90% uptime	50 points for 92% uptime	75 points for 93% uptime	100 points for 95% uptime	100	15%
6	Early commissioning of Equipment (in comparison to timeline indicated in bid document)	25 point for commissioning of Equipment within 100 days	50 points for commissioning of Equipment within 90 days	75 points for commissioning of Equipment within 60 days	100 points for commissioning of Equipment within 45 days	100	5%
7	Response time to attend breakdown of maintenance (Time taken to attend the complaint from the time of reported breakdown)	25 points for attending within 20 hours	50 points for attending within 15 hours	75 points for attending within 10 hours	100 points for attending within 4 hours	100	5%
	Total					700	100%

The Factor Technical Scores will be combined in a weighted sum to form the total Technical Bid Score using the following formula:

$$T \equiv \sum_{j=1}^n S_j * W_j$$

where:

S_j = the Factor Technical Score of factor “j”,

W_j = the weight of factor “j” as specified **in the BDS**,

n = the number of Factors, and

$$\sum_{j=1}^n W_j = 1$$

FINANCIAL PART

1. Margin of Preference (ITB 37) : Not applicable

2. Evaluation Criteria (ITB 34.6)- Not Applicable

Combined Evaluation : APPLICABLE

The Purchaser will evaluate and compare the Bids that have been determined to be substantially responsive.

The Purchaser's evaluation of responsive Bids will take into account technical factors, in addition to cost factors.

An Evaluated Bid Score (B) will be calculated for each responsive Bid using the following formula (for comparison in percentages), which permits a comprehensive assessment of the Bid price and the technical merits of each Bid:

$$B \equiv \frac{C_{low}}{C} * X * 100 + \frac{T}{T_{high}} * (1 - X) * 100$$

where

C = Evaluated Bid Price

C_{low} = the lowest of all Evaluated Bid Prices among responsive Bids

T = the total Technical Score awarded to the Bid

T_{high} = the Technical Score achieved by the Bid that was scored best among all responsive Bids

X = weight for the Cost as specified in the BDS

The Bid with the best evaluated Bid Score (B) among responsive Bids shall be the Most Advantageous Bid provided the Bidder is qualified to perform the Contract.

Determination of Rated Criteria Price (RCP) :

In case the evaluated price of Most Advantageous Bid provided the Bidder is not the lowest of all Evaluated Bid Prices among responsive Bids, then the difference between evaluated price of Most Advantageous Bid and the lowest of all Evaluated Bid Prices among responsive Bids shall be considered as Rated Criteria Price.

$$\text{RCP} = \text{Evaluated bid price of Most Advantageous Bid} - (\text{Minus}) C_{low} \quad (\text{the lowest of all Evaluated Bid Prices among responsive Bids})$$

The Rated Criteria Price (RCP) shall have implication in the Provision Related to Functional Guarantee in the Contract provided the evaluated price of Most Advantageous Bid provided the Bidder is not the lowest of all Evaluated Bid Prices among responsive Bids. In case, the evaluated price of Most Advantageous Bid provided the Bidder is the lowest of all Evaluated Bid Prices among responsive Bids, The Rated Criteria Price (RCP) shall not be calculated.

Multiple Contracts (ITB 34.4)- Not Applicable

Alternative Bids (ITB 13.1)- Not Applicable

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Letter of Bid – Technical Part

INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE DOCUMENT

Place this Letter of Bid in the first envelope “TECHNICAL PART”.

The Bidder must prepare the Letter of Bid on stationery with its letterhead clearly showing the Bidder’s complete name and business address.

Note: All italicized text in black font is to help Bidders in preparing this form and Bidders shall delete it from the final document.

Date of this Bid submission: *[insert date (as day, month and year) of Bid submission]*

RFB No.: *[insert number of Bidding process]*

Request for Bid No.: *[insert identification]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

To: *[insert complete name of Purchaser]*

We, the undersigned Bidder, hereby submit our Bid, in two parts, namely:

- (a) the Technical Part, and
- (b) the Financial Part.

In submitting our Bid we make the following declarations:

- (a) **No reservations:** We have examined and have no reservations to the bidding document, including addenda issued in accordance with Instructions to Bidders (ITB 8);
- (b) **Eligibility:** We meet the eligibility requirements and have no conflict of interest in accordance with ITB 4;
- (c) **Bid/Proposal-Securing Declaration:** We have not been suspended nor declared ineligible by the Purchaser based on execution of a Bid Securing Declaration or Proposal Securing Declaration in the Purchaser’s country in accordance with ITB 4.7;
- (d) **Sexual Exploitation and Abuse (SEA) and/or Sexual Harassment (SH):** *[select the appropriate option from (i) to (iii) below and delete the others. In case of JV members and/or subcontractors, indicate the status of disqualification by the Bank of each JV member and/or subcontractor].*

We, including any of our subcontractors:

- (i) *[have not been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations.]*
- (ii) *[are subject to disqualification by the Bank for non-compliance with SEA/ SH obligations.]*

- (iii) [had been subject to disqualification by the Bank for non-compliance with SEA/SH obligations, and were removed from the disqualification list. An arbitral award on the disqualification case has been made in our favor.]
- (e) **Conformity:** We offer to supply in conformity with the bidding document and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods: *[insert a brief description of the Goods and Related Services]*;
- (f) **Bid Validity:** Our Bid shall be valid until *[insert day, month and year in accordance with ITB 18.1]*, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (g) **Performance Security:** If our Bid is accepted, we commit to obtain a performance security in accordance with the bidding document;
- (h) **One Bid per Bidder:** We are not submitting any other Bid(s) as an individual Bidder, and we are not participating in any other bid(s) as a Joint Venture member or as a subcontractor, and meet the requirements of ITB 4.3, other than Alternative Bids submitted in accordance with ITB 13;
- (i) **Suspension and Debarment:** We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the World Bank Group or a debarment imposed by the World Bank Group in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the World Bank and other development banks. Further, we are not ineligible under the Purchaser's country laws or official regulations or pursuant to a decision of the United Nations Security Council;
- (j) **State-owned enterprise or institution:** *[select the appropriate option and delete the other] [We are not a state-owned enterprise or institution] / [We are a state-owned enterprise or institution but meet the requirements of ITB 4.6];*
- (k) **Binding Contract:** We understand that this Bid, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (l) **Not Bound to Accept:** We understand that you are not bound to accept the lowest evaluated cost Bid, the Most Advantageous Bid or any other Bid that you may receive; and
- (m) **Fraud and Corruption:** We hereby certify that we have taken steps to ensure that no person acting for us, or on our behalf, engages in any type of Fraud and Corruption.

Name of the Bidder: **[insert complete name of Bidder]*

Name of the person duly authorized to sign the Bid on behalf of the Bidder: *** [insert complete name of person duly authorized to sign the Bid]*

Title of the person signing the Bid: *[insert complete title of the person signing the Bid]*

Signature of the person named above: *[insert signature of person whose name and capacity are shown above]*

Date signed *[insert date of signing]* **day of** *[insert month]*, *[insert year]*

*: In the case of the Bid submitted by a Joint Venture specify the name of the Joint Venture as Bidder.

**: Person signing the Bid shall have the power of attorney given by the Bidder. The power of attorney shall be attached with the Bid Schedules.

Technical Part

The technical bid shall include all relevant information required to evaluate the technical Part in accordance with the requirements.

To establish the conformity of the Goods and Related Services to the RFB document, the Bidder shall furnish the documentary evidence that the Goods conform to the technical specifications and standards, including any essential technical and performance characteristics specified in Section VII, Schedule of Requirements.. The attached forms/format may support the Bidder to organize information required to present its technical bid.

The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item by item description of the essential technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to the technical specification, and if applicable, a statement of deviations and exceptions to the provisions of the Section VII, Schedule of Requirements.

In the interest of timely bid evaluation and contract award, Bidders are encouraged not to overload the supporting materials with documents that do not directly address the Purchaser's requirements.

The Bidder shall also furnish a list giving full particulars, including available sources and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the Goods during the period specified in the BDS following commencement of the use of the goods by the Purchaser.

Standards for workmanship, process, material, and equipment, as well as references to brand names or catalogue numbers specified by the Purchaser in the Schedule of Requirements, are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, brand names, and/or catalogue numbers, provided that it demonstrates, to the Purchaser's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in the Section VII, Schedule of Requirements.

If the contract has been assessed to present potential or actual cyber security risks, the technical bid must include proposed cyber security risks management plan.

If there are assessed supply chain risks, the technical bid must include proposed supply chain risk management plan.

The Manufacture's Authorizations shall be included in accordance with ITB BDS 17.2 (a) and the attached Manufacturer's Authorization form, if applicable.

Technical Bid Checklist

Technical. Requirement No. _	Technical Requirement: <i>[insert: description of requirement]</i>
Bidder's technical bid/ compliance:	
Bidder's cross references to supporting information in the Technical Bid:	

Bidder Information Form

[The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: *[insert date (as day, month and year) of Bid submission]*

RFB No.: *[insert number of Bidding process]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

Page _____ of _____ pages

1. Bidder's Name <i>[insert Bidder's legal name]</i>
2. In case of JV, legal name of each member : <i>[insert legal name of each member in JV]</i>
3. Bidder's actual or intended country of registration: <i>[insert actual or intended country of registration]</i>
4. Bidder's year of registration: <i>[insert Bidder's year of registration]</i>
5. Bidder's Address in country of registration: <i>[insert Bidder's legal address in country of registration]</i>
6. Bidder's Authorized Representative Information Name: <i>[insert Authorized Representative's name]</i> Address: <i>[insert Authorized Representative's Address]</i> Telephone/Fax numbers: <i>[insert Authorized Representative's telephone/fax numbers]</i> Email Address: <i>[insert Authorized Representative's email address]</i>
7. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITB 4.4. <input type="checkbox"/> In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1. <input type="checkbox"/> In case of state-owned enterprise or institution, in accordance with ITB 4.6 documents establishing: <ul style="list-style-type: none"> • Legal and financial autonomy • Operation under commercial law • Establishing that the Bidder is not under the supervision of the Purchaser

8. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership. The successful Bidder shall provide additional information on beneficial ownership, using the Beneficial Ownership Disclosure Form.

Bidder's JV Members Information Form

[The Bidder shall fill in this Form in accordance with the instructions indicated below. The following table shall be filled in for the Bidder and for each member of a Joint Venture]].

Date: *[insert date (as day, month and year) of Bid submission]*

RFB No.: *[insert number of RFB process]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

Page _____ of _____ pages

1. Bidder's Name: <i>[insert Bidder's legal name]</i>
2. Bidder's JV Member's name: <i>[insert JV's Member legal name]</i>
3. Bidder's JV Member's country of registration: <i>[insert JV's Member country of registration]</i>
4. Bidder's JV Member's year of registration: <i>[insert JV's Member year of registration]</i>
5. Bidder's JV Member's legal address in country of registration: <i>[insert JV's Member legal address in country of registration]</i>
6. Bidder's JV Member's authorized representative information Name: <i>[insert name of JV's Member authorized representative]</i> Address: <i>[insert address of JV's Member authorized representative]</i> Telephone/Fax numbers: <i>[insert telephone/fax numbers of JV's Member authorized representative]</i> Email Address: <i>[insert email address of JV's Member authorized representative]</i>
7. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITB 4.4. <input type="checkbox"/> In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and that they are not under the supervision of the Purchaser, in accordance with ITB 4.6.
8. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership. The successful Bidder shall provide additional information on beneficial ownership for each JV member using the Beneficial Ownership Disclosure Form.

Sexual Exploitation and Abuse (SEA) and/or Sexual Harassment Performance Declaration

[The following table shall be filled in by the Bidder, each member of a Joint Venture and each subcontractor proposed by the Bidder]

Bidder's Name: *[insert full name]*

Date: *[insert day, month, year]*

Joint Venture Member's or Subcontractor's Name: *[insert full name]*

RFB No. and title: *[insert RFB number and title]*

Page *[insert page number]* of *[insert total number]* pages

SEA and/or SH Declaration in accordance with Section III, Qualification Criteria, and Requirements
<p>We:</p> <p><input type="checkbox"/> (a) have not been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations</p> <p><input type="checkbox"/> (b) are subject to disqualification by the Bank for non-compliance with SEA/ SH obligations</p> <p><input type="checkbox"/> (c) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations, and were removed from the disqualification list. An arbitral award on the disqualification case has been made in our favor.</p>
<p><i>[If (c) above is applicable, attach evidence of an arbitral award reversing the findings on the issues underlying the disqualification.]</i></p>

Form of Bid Security

(Bank Guarantee)

[The bank shall fill in this Bank Guarantee Form in accordance with the instructions indicated.]

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: *[Purchaser to insert its name and address]*

RFB No.: *[Purchaser to insert reference number for the Request for Bids]*

Alternative No.: *[Insert identification No if this is a Bid for an alternative]*

Date: *[Insert date of issue]*

BID GUARANTEE No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that _____ *[insert name of the Bidder, which in the case of a joint venture shall be the name of the joint venture (whether legally constituted or prospective) or the names of all members thereof]* (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its Bid (hereinafter called "the Bid") for the execution of _____ under Request for Bids No. _____ ("the RFB").

Furthermore, we understand that, according to the Beneficiary's conditions, Bids must be supported by a Bid guarantee.

At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (_____) upon receipt by us of the Beneficiary's complying demand, supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating that either the Applicant:

- (a) has withdrawn its Bid prior to the Bid validity expiry date set forth in the Applicant's Letter of Bid, or any extended date provided by the Applicant; or
- (b) having been notified of the acceptance of its Bid by the Beneficiary prior to the expiry date of the Bid validity or any extension thereof provided by the Applicant has failed to:
 - (i) sign the contract agreement, or
 - (ii) furnish the performance security, in accordance with the Instructions to Bidders ("ITB") of the Beneficiary's bidding document.

This guarantee will expire: (a) if the Applicant is the successful Bidder, upon our receipt of copies of the Contract agreement signed by the Applicant and the performance security issued to the Beneficiary in relation to such Contract agreement; or (b) if the Applicant is not the successful Bidder, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Bidding process; or (ii) twenty-eight days after the expiry date of the Bid validity.

Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758.

[Signature(s)]

Note: All italicized text is for use in preparing this form and shall be deleted from the final product.

Letter of Bid - Financial Part

INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE DOCUMENT

Place this Letter of Bid - Financial Part in the second envelope marked “FINANCIAL PART”.

The Bidder must prepare the Letter of Bid - Financial Part on stationery with its letterhead clearly showing the Bidder’s complete name and business address.

Note: All italicized text is to help Bidders in preparing this form.

Date of this Bid submission: *[insert date (as day, month and year) of Bid submission]*

RFB No.: *[insert number of bidding process]*

Request for Bid No.: *[insert identification]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

To: *[insert complete name of Purchaser]*

We, the undersigned Bidder, hereby submit the second part of our Bid, the Financial Part

In submitting our Financial Part we make the following additional declarations:

(a) **Bid Validity:** Our Bid shall be valid until *[insert day, month and year in accordance with ITB 18.1]*, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

(b) **Total Price:** The total price of our Bid, excluding any discounts offered in item (c) below is:

In case of only one lot, the total price of the Bid is [insert the total price of the bid in words and figures, indicating the various amounts and the respective currencies];

In case of multiple lots, the total price of each lot is [insert the total price of each lot in words and figures, indicating the various amounts and the respective currencies];

In case of multiple lots, total price of all lots (sum of all lots) [insert the total price of all lots in words and figures, indicating the various amounts and the respective currencies];

(c) **Discounts:** The discounts offered and the methodology for their application are:

(i) The discounts offered are: *[Specify in detail each discount offered]*

- (ii) The exact method of calculations to determine the net price after application of discounts is shown below: *[Specify in detail the method that shall be used to apply the discounts]*;

- (d) **Commissions, gratuities and fees:** We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]*.

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate “none.”)

- (e) **Binding Contract:** We understand that this Bid, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed.

Name of the Bidder: **[insert complete name of the Bidder]*

Name of the person duly authorized to sign the Bid on behalf of the Bidder: *** [insert complete name of person duly authorized to sign the Bid]*

Title of the person signing the Bid: *[insert complete title of the person signing the Bid]*

Signature of the person named above: *[insert signature of person whose name and capacity are shown above]*

Date signed *[insert date of signing]* **day of** *[insert month]*, *[insert year]*

*: In the case of the Bid submitted by a Joint Venture specify the name of the Joint Venture as Bidder.

**: Person signing the Bid shall have the power of attorney given by the Bidder. The power of attorney shall be attached with the Bid Schedules.

Price Schedule Forms

Special Instruction to Bidder:

- 1. All the Price Schedule Forms (BOQ) shall be available in Excel format under Financial Folders of the bid in the www.assamtenders.gov.in . Bidder has to download the forms and fill all the required information including the price. The excel file will be otherwise Write Protected, however, cell where bidder to fill the required information will be opened. After filling up the required information bidder has to save the file and then required to upload in the Financial Folder. Further bidder must upload the “Letter of Financial Bid” in pdf. Format in the Financial Folder only.**
- 2. The Bidder shall fill in rates and prices for all items of the Price Schedules. Items against which no rate or price is entered by the Bidder will not be paid for by the Employer when executed and shall be deemed covered by the rates for other items and prices in the Price Schedules.**
- 3. Price quoted for “Comprehensive Management Contract (CMC) for preventive and breakdown maintenance including all required spare parts, Service Engineers, Consumables, Special tools etc. (for 5 Years)” shall not be less than 15% of overall contract value for Goods and Related Service. In case, the quoted price of the same is less than 15% percentage, payment shall be adjusted through retention to the extend CMC value becomes 15% of overall contract value of Goods and Related Service.**

Price Schedule: Goods Manufactured Outside the Purchaser's Country, to be Imported *(This Price Schedule forms will be available in the www.assamtenders.gov.in under the financial folder)*

(Group C Bids, goods to be imported)							Date: _____	
Currencies in accordance with ITB 15							RFB No: _____	
							Alternative No: _____	
							Page N° _____ of _____	
1	2	3	4	5	6	7	8	9
Line Item N°	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price CIP, <i>Guwahati, Assam</i> in accordance with ITB 14.8(b)(i)	CIP Price per line item (Col. 5x6)	Price per line item for inland transportation and other services required in the Purchaser's Country to convey the Goods to their final destination specified in BDS	Total Price per Line item (Col. 7+8)
01	Supply of PROTON Therapy System along with all accessories, fittings as stipulated in the technical specification (including mandatory spare parts)		Within 3 months from the date of intimation to supply.	01 set				
							Total Price	

Name of Bidder [insert complete name of Bidder] Signature of Bidder [signature of person signing the Bid] Date [Insert Date]

Price Schedule: Goods Manufactured in the Purchaser's Country

(This Price Schedule forms will be available in the www.assamtenders.gov.in under the financial folder)

Purchaser's Country _____					(Group A and B Bids) Currencies in accordance with ITB 15			Date: _____ RFB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7	8	9	10
Line Item N°	Description of Goods	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price EXW	Total EXW price per line item (Col. 4x5)	Price per line item for inland transportation and other services required in the Purchaser's Country to convey the Goods to their final destination at Guwahati, Assam	Cost of local labor, raw materials and components from with origin in the Purchaser's Country % of Col. 5	Sales and other taxes payable per line item if Contract is awarded (in accordance with ITB 14.8(a)(ii))	Total Price per line item (Col. 6+7)
01	Supply of PROTON Therapy System along with all accessories , fittings as stipulated in the technical specification (including mandatory spare parts)	Within 3 months from the date of intimation to supply.	1 set						
								Total Price	

Name of Bidder *[insert complete name of Bidder]* Signature of Bidder *[signature of person signing the Bid]* Date *[insert date]*

Price and Completion Schedule - Related Services

(This Price Schedule forms will be available in the www.assamtenders.gov.in under the financial folder)

Currencies in accordance with ITB 15					Date: _____ RFB No: _____ Alternative No: _____ Page N° _____ of _____	
1	2	3	4	5	6	7
Service N°	Description of Services (excludes inland transportation and other services required in the Purchaser's Country to convey the goods to their final destination)	Country of Origin	Delivery Date at place of Final destination	Quantity and physical unit	Unit price	Total Price per Service (Col. 5*6 or estimate)
01	Integrated building design for civil construction including Good For Construction (GFC) drawing, Electrical, Mechanical, Plumbing drawing, Interior drawing, Bill of Quantity etc. ²		Within 15 days from the date of signing the contract. Guwahati, Assam.	01 set		
02	Installation, Testing & commissioning of above Proton Therapy system		4 months of the readiness of the civil infrastructure. 4 months of the readiness of the civil infrastructure	01 , Lumpsum		
03	Comprehensive Management Contract (CMC) for preventive and breakdown maintenance including all required spare parts, Service Engineers, Consumables, Special tools etc. (for 5 Years)		After end of 2 years comprehensive warranty	5 years		
Total Bid Price						

Name of Bidder [insert complete name of Bidder] Signature of Bidder [signature of person signing the Bid] Date [insert date]

² Construction of the building will be taken up separately and is outside the scope of this Contract

Section V - Eligible Countries

Eligibility for the Provision of Goods, Works and Non Consulting Services in Bank-Financed Procurement

In reference to ITB 4.8 and ITB 5.1, for the information of the Bidders, at the present time firms, goods and services from the following countries are excluded from this Bidding process:

Under ITB 4.8 (a) and ITB 5.1: “*none*”.

Under ITB 4.8(b) and ITB 5.1: “*none*”.

Section VI - Fraud and Corruption

(Section VI shall not be modified)

1. Purpose

1.1 The Bank’s Anti-Corruption Guidelines and this annex apply with respect to procurement under Bank Investment Project Financing operations.

2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (applicants/proposers), consultants, contractors and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption.

2.2 To this end, the Bank:

a. Defines, for the purposes of this provision, the terms set forth below as follows:

- i. “corrupt practice” is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
- ii. “fraudulent practice” is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
- iii. “collusive practice” is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
- iv. “coercive practice” is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- v. “obstructive practice” is:
 - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
 - (b) acts intended to materially impede the exercise of the Bank’s inspection and audit rights provided for under paragraph 2.2 e. below.

- b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Anti-Corruption Guidelines, and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;¹ (ii) to be a nominated² sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding/request for proposals documents and in contracts financed by a Bank loan, requiring (i) bidders (applicants/proposers), consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents, personnel, permit the Bank to inspect³ all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

¹ For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

² A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

³ Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

PART 2 – Supply Requirements

Section VII - Schedule of Requirements

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1. List of Goods and Delivery Schedule

Line Item N°	Description of Goods	Quantity	Physical unit	Final (Project Site) Destination as specified in BDS	Delivery (as per Incoterms) Date		
					Earliest Delivery Date	Latest Delivery Date	Bidder's offered Delivery date [<i>to be provided by the Bidder</i>]
01	Supply of PROTON Therapy System along with all accessories, fittings as stipulated in the technical specification (including mandatory spare parts)	1	set	Guwahati, Assam, India	Within 1 months from the date of intimation to supply whole or part of the goods	Within 3 months from the date of intimation to supply whole of the goods	

2. List of Related Services and Completion Schedule

Service	Description of Service	Quantity ¹	Physical Unit	Place where Services shall be performed	Final Completion Date(s) of Services
01	Integrated building design for civil construction including Good For Construction (GFC) drawing, Electrical, Mechanical, Plumbing drawing, Interior drawing, Bill of Quantity etc. [Note : All drawing and design should be site specific as per the drawing PT-01 in autocad format and other format as specified by the employer)	01	Set	Guwahati, Assam India	Within 15 days from the date of signing the contract. Guwahati, Assam.
02	Installation, Testing & commissioning of above Proton Therapy system	01	Lumpsum	Guwahati, Assam India	Within 4 months after completion of entire civil construction to Install the Proton Therapy system
03	Comprehensive Management Contract (CMC) for preventive and breakdown maintenance including all required spare parts, Service Engineers, Consumables, Special tools etc. (for 5 Years)	05	Years	Guwahati, Assam India	5 years after end of 2 years comprehensive warranty

1. If applicable

3. Technical Specifications

Technical specifications for Proton Therapy System:	
The offered equipment should have the following technical features.	
System Overview:	
Bids are invited for the supply of state-of the-art (at the time of supply) pencil beam scanning technology based Compact Gantry suitable to treat patients with lying down position Proton Therapy System (scalable to two gantries with beam match feasibility) capable of Image-Guided, Intensity Modulated Proton Therapy (IG-IMPT). The Proton therapy system must have the latest technology and should be fully computer controlled. The proton therapy system includes particle accelerator, proton treatment gantry rooms, in-room imaging system, treatment planning system, oncology information system, dosimetry and quality assurance equipment, patient positioning and immobilization devices. The proton therapy system should be capable of integrating with standard computer networking and PACS systems available in the market and Institute.	
1. Clinical Proton Beam Specification:	
The clinical proton beam should have following technical specification:	
1.1	Beam Energy: The energy range necessary to treat from body surface up to 32g/cm2 over the clinical range of field sizes. The beam energy should be in the range of 70-250 MeV at nozzle exit (please specify).
1.2	Energy Range without range shifter: 4 g/cm2 to 30 g/cm2 or more in water. For ranges below 4 g/cm2 the range shifters should be provided
1.3	Range accuracy: +0.1 g/cm2
1.4	Range adjustment: continuous or specify any other method.
1.5	Range stability: 0.03 g/cm2
1.6	Maximum treatment field size: 20 x 24 cm2 or more (please specify).
1.7	Minimum treatment field size: 1 spot
1.8	Beam spot size: should be in the range of 3 to 8 mm for the maximum to minimum proton energy respectively. If not, vender to specify their system value.
1.9	Relative spot position accuracy in a layer: $\pm 10\%$ sigma or <1mm
1.10 Beam Spot Uniformities and profiles:	
1.10.1.	Lateral penumbra 80-20% for a single spot: should be of 1.13xspot size (sigma).
1.10.2.	Lateral penumbra 80-20% for a map of even spots equally spaced by one sigma should be of 1.6x spot size (sigma).
1.10.3.	Lateral penumbra 80-20% for a map of spots optimized by the TPS for lateral penumbra enhancement it should be of 1.3 to 1.6x spot size (sigma).
1.10.4.	Distal dose fall-off above the physical limit of single bragg peak (80%-20%) should be less than 0.2g/cm2. If not, the vendor should specify as per their system.

1.11. Beam Monitoring System and Beam Monitor Units:
The vendor should specify about the detectors which use to measure the spot fluence, spot position, shape and size. Specify number of beam fluence monitors and beam position monitors/detectors used and its sensitive area, charge resolution and readout frequency. The monitor unit accuracy should be as follows;
1.11.1. Minimum no. of monitor units per spot: 0.01MU. If not, specify
1.11.2. Maximum no. of monitor units per spot: 12 MU. If not specify.
1.11.3. Monitor Unit reproducibility: <1%
1.11.4. Monitor unit proportionality factor: +1.5% or 1.5 MU
1.12. Beam intensity: average dose rate: should be sufficient to produce > 2Gy/min per litre over full range of field sizes.
1.13. Dose reproducibility: should be of +/- 1cGy or +/- 2%
1.14. Dose uniformity: +/-2% over treatment volume.
1.15. Average Effective (source-to axis distance) SAD: > 2 m. If not, specify.
1.16. Specify treatment time to deliver 2Gy to a 1 litre cube centered at a depth of 10cm.
1.17. Layer switching time: <1sec. If not, specify.
1.18. Agreement between planned and delivered dose for IMPT: >95% of evaluated points in the central 80% of the field should fulfill the gamma criteria of 3%/2mm.
2. Particle Accelerator Specification:
2.1. The type of particle accelerator should be of advanced cyclotron or Synchrocyclotron or synchrotron or linear accelerator based.
2.2. The particle accelerator should be of compact footprint size to minimize structural and maintenance cost for maximum efficiency.
2.3. The life expectancy of the primary hardware components of the accelerator(s) should be of 30 years or greater.
3. Gantry and Nozzle Specifications:
3.1. The gantry should be equipped with dedicated pencil beam scanning (PBS) nozzle.
3.2. Field shaping should be either by pencil beam scanning technique of continuously, layer by layer spot scanning.
3.3. The nozzle should have ability to use various sizes of snouts, range shifter and ridge filter and multiple accessories (multiple slots).
3.4. The vendor should provide various sizes of snouts, range shifter and ridge filter compatible with nozzle with appropriate holders. (Please specify)
3.5. The gantry should have rotation angle in the range of 220-360 degree. (Please Specify)
3.6 Maximum deviation of gantry rotation angle should be: < 1 degree.
3.7. Gantry rotational speed range should be : from 1degree/sec to 6degree/sec. Please specify maximum gantry speed.
3.8. Mechanical isocentricity: <1 mm radius at isocenter over full rotation
4. Patient Positioning System specification:
All coordinates, movements and scales should be as per the IEC61217 nomenclature.

4.1.	The patient positioning system must be compatible with standard radiotherapy immobilization devices and the ancillary imaging equipment. (Please specify)
4.2.	Specify maximum and minimum of the treatment table x, y, z movements. (Minimum X=50cm. Y= 100cm & Z=40cm)
4.3.	Specify the lowest table top position above floor.
4.4.	Isocentric rotation accuracy should be: ≤ 1.0 mm.
4.5.	Maximum speed of translation motion should be: ≤ 10 cm/sec Maximum speed of rotation should be: ≤ 60 per sec. The robotic patient positioning systems should have 6 degree of freedom (3 rotational and 3 translational movements). Robotic patient positioning accuracy should be: $\pm 5^\circ$
4.6.	The attenuation of the treatment beam through the positioning assembly at any angle shall be $< 5\%$.
4.7.	The positioning system should be capable of handling patients upto 150 Kg and above (Please specify) .
4.8.	Software control or hardware interlocks should prevent patient positioning system, nozzle and floor collision.
4.9.	The patient positioning system shall be capable and compatible in accommodating anesthesia equipment and should have mechanisms for attaching IV poles, cardiac monitors, CO2 monitors, etc. The system should permit placement of a patient on a treatment table and induction of anesthesia in a separate induction room; movement from the induction room to the treatment room; docking with the treatment unit; imaging for alignment; and treatment, all without moving the patient from the table.
	The patient positioning system should be compatible with latest motion management system available in the market.
4.10.	The minimum three laser patient alignment system should be provided.
4.11.	Room ports: Five or more adequate number of ports should be installed in treatment room to allow future addition of cables and other equipment into the treatment room. The ports will be distributed in size from 2 inch to 4 inches and will run from the treatment control area to a minimum of two locations inside the treatment room (the cable conduits as per AERB safety provisions).
4.12	Rail free and flat carbon fiber couch top for non-perturbation of proton range should be provided
4.13	6D correction vector derived from the image registration should be seamlessly/automatically transferred to patient positioning system and correct automatically.
5.	Image Guidance system specifications: Image guidance system: The image guidance system for patient setup and alignment should consist of either 2D planar stereotactic orthogonal x-ray system and 3D cone beam computed tomography (CBCT) imaging or in-room CT imaging. The system should have capability of high quality imaging in a less time with lower radiation dose.
5.1.	Stereoscopic orthogonal 2D-x-ray KV image guidance system: vendor should provide a orthogonal KV-based planar x-ray imaging for offline verification and stereoscopic image guidance system for real-time verification with following technical specification.

5.2.	Specify the offered system's KVp, mA ranges and its reproducibility accuracy, high contrast and low contrast resolution and maximum imaging dose and image registration algorithm available and image registration accuracy.
5.3.	CBCT image guidance system: The vendor should provide either gantry-mounted CBCT or nozzle-mounted CBCT having a flat-panel imager for patient setup 3D localization and verification of target at the time of treatment.
5.4.	Vendor should provide the advanced acquisition and reconstruction methods and specify the geometry area and FOV of the flat panel, image reconstruction time, HU accuracy, HU uniformity, high contrast spatial resolution, low contrast resolution/detectability, frame rate, slice thickness, CTDI value for head, pelvis, Focal spot and thorax protocol and image registration algorithms available and image registration accuracy with the offered system.
5.5.	The vendor should provide the required 2D and 3D phantoms and detectors including dedicated laptop for commissioning, QA of imaging modality and validation of the system for clinical implementation.
7.	Radiation Safety Requirements: The safety of the entire system is of paramount importance. While safety is difficult to specify, a safe system will include redundant guards against any conceivable failure mode. Specific attention must be given to beam delivered outside the chosen target area, incorrect dose rate, incorrect total dose, collisions of patient with nozzle components, avoidable exposure to facility workers, and accidents involving fire, electrical or vacuum systems. Control system hardware and software must pass strict safety and quality assurance tests. The entire facility will be required to meet relevant national and international safety standards for patient treatment devices. Control systems and all patient-related hardware must be designed to be "fail-safe", that is, the consequences of a failure cannot compromise the safety of the patient or the facility. The principle of Mechanical, Electrical, Fire, Radiation, and any other safety for the proton therapy facility shall be based on a "fail-safe" philosophy, i.e., any malfunction in the chain of interlock mechanism is such that the patient safety must be considered first.
7.1.	Patient Monitoring and communication system: Each treatment room must have patient viewing and communication equipment (audio- visual). This will consist of a minimum of 4 night vision cameras mounted (preferable one zoom, pan and wide angle) so that at least one camera is capable of meaningful observation of the patient at any gantry or table position. Two-way audio communication should be provided.
7.2.	Emergency Buttons: There will be a three level of power off emergency buttons. They must be clearly marked and must be distinguishable from each other both in shapes and colors.
7.2.1.	Cut off the power to the entire facility (level one emergency)
7.2.2.	Cut off the power to the room and equipment a person is working (level two emergency). The beam must not leave the accelerator or be diverted to the beam dump within 10 psec after this button is pushed. The room light must not go out in this mode.
7.2.3.	Divert or turn off the beam within 10 psec to the beam dump after the button is pushed (level three emergencies).

7.3.	Door Interlocks: There shall be at least two electronics switches located on the door or door jamb. These switches shall function as the level three emergency button and thus stops the radiation exposure within 10 psec when the door was opened by more than 3 inches. Closing of door shall not cause the radiation to be resumed. The radiation shall resume only when door is closed and the operator initiates the exposure, assuming that all the other interlocks are properly set.
7.4.	Radiation Monitoring & Warning As per AERB : All appropriate and regulatory required proton, photon and neutron (Highest energy producing) monitoring equipment, warning signs and access control should be provided for appropriate areas of the facility. A red and white light shall be located above the treatment room door. The white light shall be turned on whenever the accelerator power is turned on without the beam in the accelerator and beam lines. The red light at the entrance of each treatment room shall be flashing during the delivery of the beam to that treatment room. The control console shall be equipped with an indicator indicating that the accelerator's main power is on. It shall also be equipped with an indicator indicating that the beam is being delivered to that room and that high radiation exposure exists during the beam-on mode. Minimum 3 nos. each (for photon & neutron) should be provided and as per the existing AERB rules
7.5.	Neutron production: The system shall be designed with minimal materials intersecting the beam line to minimize the production of neutrons in the proton delivery system. The vendor should provide an estimate of neutron activity (both dose and half-life) upon beam stop after full operation.
7.6.	Residual radioactivity: The vendor shall provide an estimate of residual radioactivity of all system and building components assuming a 30 year operational lifetime of the facility. (Disposal Policy to be furnished)
7.7.	National Regulation compliance: All safety features shall meet the Indian national regulatory requirement in addition to the international regulatory requirements. The vendor should provide last-man-out switch safety mechanism and should fulfill all other necessary national safety compliance.
8. General Requirements	
8.1.	Timeline: The construction work for the bunker should be started only after getting all regulatory approval. The Bunker should not take more than 12 months. The equipment will be shipped at site only after completion of the bunker. The time for installation should not be more than 14 months.
8.2.	Facility availability: >95% of the time during warranty period and >90% during CMC period, with clinical beam available for treatment or quality assurance between 6:00 AM and 10:00 PM, Monday through Saturday. Specific time required for preventive maintenance that should be mentioned. The preventive maintenance if any should be scheduled in the holidays after prior written approval from the department. In case the facility downtime exceeds 5% during warranty period and 10% during CMC period , there will be a penalty of 0.05 % of contract value per hour with maximum penalty of 15% of overall contract value . It has to be ensured that vendor must stock all the required spare parts to maintain the uptime. A dedicated space for the storing must be created by the vendor and should be reflected in the turnkey. Bidding Vendor to mention Downtime policy to the extend downtime is permissible under this provision.
9.	Staff Training Requirements

9.1.	Training: Training for the staff should happen in an abroad advanced institute of excellence which is attached to teaching center for at least 5 years and treating more than 20 patients per day. The institute should provide opportunity to the trainee hands on experience and comprehensive involvement in all relevant areas of work. The Offsite training should be completed at least three months prior to commissioning. Off Site (Abroad) (Six Months) On-site training (Own site): Continued till commissioning Offsite and onsite training are essential to get the AERB approval and clinical commissioning the proton therapy system. (Four Physicists, Two Radiation Oncologists and four radiation Technologists) Training should happen at a facility which is undergoing commissioning similar model anywhere in the world outside India. The cost of training (all inclusive) should be born by the OEM.
9.2.	The vendor should provide three personal duly familiar with the quoted model for carrying out the commissioning of the Proton machine.
10.	Equipment Warranty and Comprehensive Annual Maintenance Contract (CMC)
10.1.	Warranty: Minimum 2 year starts from the date the facility is patient ready and first patient given Radiation.
10.2.	CMC: 5 Years, extendable for another 5 years. CMC period shall start After end of 2 years comprehensive warranty
10.3.	All necessary cabling like LAN, DICOM & PACS for data interface between TPS and proton therapy system; CT-SIMULATOR & proton therapy system should be provided with adequate number of terminals. & Rodent protection.
10.4.	All the internal wiring including that of telephone, LAN, DICOM & PACS etc.) will be concealed variety. Earthing: Double earthing with copper plate shall be provided for the treatment system and all accessories like UPS with remote sensing and monitoring will be the responsibility of vendor. The earthing for the AC should also be done by the suppliers. The earthing cable/wire shall be routed end-to-end through an insulated conduit. Switches light and power points should be of modular type and of standard make as listed below. All wires used must be FRLS (Fire Retardant with low smoke) type only.
10.5.	The PROTON facility should be DICOM connected with all existing radiation facility and multimodality Imaging facility including CT, PET and MRI etc.
11.	MISCELLANEOUS:
12.	Equipment Compliance with Standards and Safety
12.1	Should be ISO, IEC, USA-FDA and/or European CE certified product.
12.2	Should comply with the national regulatory AERB guidelines
12.3	The offered Proton Therapy System model should have AERB type approval/ NOC.
12.4	Dosimetry, QA and Safety protocols should adhere to ICRP/ICRU/IAEA/AAPM and national regulatory AERB guidelines/reports
12.6	High voltage protection and warning lights/symbols to be provided.

13.	National Regulatory Body and Radiation Safety and Protection Requirement:
	The vendors should visit the site and user department to get the Plan Layout and should facilitate and coordinate with user department in communicating with AERB in providing all required information pertaining to radiation safety compliance of the concerned equipment till the clinical commissioning process of first patient treatment commencement.
14.	Utility Requirements
	The vendor should specify about the utility requirements for the offered system such as power supply, water cooling system, Air-Conditioning, Electrical load and water leakage issue.
II.	Technical Specification of Proton Treatment Planning System
1.	General requirements
1.1.	The proton treatment planning system (PTPS) is required for treatment planning purpose for delivering proton beam treatment with pencil beam scanning (PBS) technology based multi room proton therapy delivery system with dedicated nozzle for PBS delivery and capable for planning of delivering intensity modulated proton therapy (IMPT) and ARC therapy , SRS/SBRT, 4D Radiotherapy and adaptive radiotherapy.
1.2.	The Proton Treatment Planning System (PTPS) must be designed in accordance with good principles, and the system should be robust and reliable.
1.3.	The PTPS should accept domestic characters and support domestic keyboards.
1.4.	The tender document should comprise a complete TPS with all necessary components including, but not limited to, import of DICOM compatibility images including image fusion of different image modalities, deformable image registration, dose tracking, adapt planning, proton uncertainty management and evaluation, target delineation, field application, optimization, biological optimization and evaluation, dose calculation, plan evaluation and export of plan data. Photon & Proton Dose calculation algorithm (Monte Carlo).
1.5.	The equipment should be USA-FDA and/or European CE marked and comply with radiation protection, health and safety and other relevant legal requirements in India.
1.6.	Remote access: For efficient and flexible deployment and user access the system should be remotely accessible e.g. via Citrix and in situations where needed the applications.
1.7.	Safety/Reliability: The proposed system must be safe for patients, staff and the general public and shall be highly reliable.
1.8.	Mechanism of system recovery after a server failure should be available on no cost basis.
1.9.	The PTPS should be a redundant system with duplicated hardware installed in two separated server rooms. If hardware in one server room is not working because of fatal failure, the duplicated hardware should be in operation within a pre-defined number of hours.
1.10.	The applications must be able to run on computers with active antivirus software

1.11.	Hardware: The tenderer should include a complete hardware package for the PTPS in the tender. The offer should also include hardware for storage. The computing and storage resources should be sufficient for the expected workload at the proton centre.
1.12.	Server software and client should be possible to host in a virtual environment (e.g. Citrix or VM-Ware)
1.13.	The offer should include a total of at least 8 workstations for treatment planning and 8 countouring workstations.
1.14.	Licenses: The offer shall include enough licenses for all its components to ensure effective use of the PTPS in the described environment.
1.15.	Integration: The PTPS must be able to seamlessly integrate with and connect to Oncology Management Systems, as described, which will include Record and Verify capabilities.
1.16.	DELETED
1.17.	It should be state of the art, latest and futuristic at the time of supply. It should also have the capability of handling proton or multi ion with artificial intelligence & machine learning system which we may acquire in future.
1.18.	All upgrades and updates should be free of cost for initial 7 years from date of first patient treated
2.	Image handling
2.1.	General requirements:
2.1.1.	The PTPS should as a minimum requirement provide tools for import and segmentation of CT, CBCT, MRI, and PET.
2.1.2.	In addition to this, tools for import and segmentation of 4D CT, DWI MRI, DCE MRI, 4D MRI, and 4D PET should be provided.
2.1.3.	The PTPS should support import of FDG-PET standardized uptake value (SUV) data of the major vendors of PET-CT systems; specify the details.
2.1.4.	The PTPS manufacturer should guarantee support for novel image datasets (e.g. functional imaging as well as functional maps).
2.1.5.	There should be no intrinsic limit on the number of image sets which can be imported.
2.1.6.	Import for dual-energy CT retrieved elemental composition of patient tissues should be supported.
2.1.7.	The TPS should provide tools for DRR generation with flexible and configurable imaging geometries (e.g. to support a gantry-mounted 2 BEV x-ray system).
2.1.8.	The TPS should support the export of DRR and other images in DICOM format to the PACS and OIS systems
2.1.9.	The system should meet DICOM compliance for RT Dose object (import and export)
2.2.	Visualisation
2.2.1.	The PTPS should provide 4D image display, processing and fusion tools.
2.2.2.	The PTPS should provide 3D surface-rendered visualization of structures.
2.2.3.	The PTPS should provide 3D volume-rendered visualisation of an image series.
2.3.	Rigid registration

The PTPS should be able to quickly and efficiently register and merge image data from different imaging modalities.
2.3.1. The PTPS should provide tools for rigid registration (translations and rotations) of CT images to CT, CBCT, PET and MR images. It should be possible to restrict the registration to a user-defined volume (mask)
2.3.2. The PTPS should supply automated structure/contour-based rigid registration
2.3.3. The PTPS should supply automated point-based rigid registration based on user-defined fiducial points
2.3.4. Specify the algorithms for rigid registration (e.g. grayscale, volume based, point based etc.). Describe the possibility to select multiple user defined regions of interest (ROIs) for a registration.
2.3.5. Describe the tools and features for rigid registration of images. E.g. is the naming of the registration unique and descriptive? Is it possible to select/deselect rotation, roll and pitch separately? Is it possible to perform automatic registration between one image and multiple selected images (e.g. planning CT and daily CBCTs)?
2.3.6. In the interest of retrospective data handling, as many details as possible should be available from the rigid registration matrix.
2.4. Deformable registration
2.4.1. The PTPS should support multi-modality deformable registration of CT, CBCT, PET and MR datasets.
2.4.2. The PTPS should support structure/contour-based deformable registration
2.4.3. The underlying algorithms of the deformable registration should be described. The accuracy of the algorithms should be stated. If possible, provide white papers and peer-reviewed literature.
2.4.4. The PTPS should provide tools for the qualitative and quantitative evaluation of the outcome of the registration, including intuitive graphical tools.
2.4.5. The PTPS should supply data available for the user from the registration (e.g. transformation matrix, coordinates for structures, volume changes, Dice coefficient, etc.) and allow for visualization of the deformation vector.
2.4.6. The user-friendliness of the tools and the speed of the deformable registration will be evaluated.
2.5. Structure propagation
2.5.1. The PTPS should allow for “structure-propagation”: the registration of a floating dataset will result in the definition of a new deformed dataset; structures (i.e. points and delineations) defined on the original floating dataset will be propagated to the deformed dataset.
2.5.2. In case of multiple online/offline rigid registrations, the user should be able to select the registration which should be used for dose propagation. If available, describe the functionality.
2.5.3. Describe contour propagation from one image to deformedly registered images (e.g. copy of a structure, deformable propagation). Also describe how the history of the contour is tracked to e.g. show from which image the contour originates. Describe the possibility to automatically propagate contours from one image to multiple registered images.

2.5.4.	The TPS must provide rigid and non-rigid propagation of structures across multiple volumetric data sets
2.6.	HU-conversion
2.6.1.	The PTPS should provide flexible handling of HU-SP calibration curves and should in addition provide HU or stopping power (SP) override capability with user defined values within defined structures and/or regions.
2.6.2.	The PTPS should have the ability to assign one or several Hounsfield Unit look-up tables to an imaging device e.g. a HU to proton stopping power conversion.
2.6.3.	The PTPS should be able to handle CT scanner specific calibrations and editable translation lookup tables of HU to tissue and algorithm specific interaction quantities.
2.7.	Dose accumulation
	In order to perform dose accumulation, the PTPS should support flexibility in the selection of the rigid registration used for dose propagation.
3.	Segmentation tools
3.1.	Advanced treatment planning and image guided adaptive proton therapy demands handling of multi-modality imaging and 4D imaging. The PTPS should make available flexible tools for structure contouring on CT, PET, MRI and CBCT including delineation on one image using information from other images registered to the image.
3.2.	A high patient throughput requires a high efficiency in the target and normal tissue delineation effectuated by e.g. scripting or atlas-based and semi-automatic target or structure segmentation. In order to avoid improper treatment, structures generated e.g. by Boolean functions should preferably be automatically updated if the underlying structure is changed.
3.3.	Automatic contouring using SUV on PET images should be supplied.
3.4.	The naming of the registrations should be unique and descriptive as well as automatic registration between one image and a series of images is preferred. The PTPS should allow for the application of user-defined templates with delineation-related settings (e.g. defined structures, names, colours) to facilitate quick setup of new treatment plans.
3.5.	The contouring tools included in the TPS should ease the “delineation-burden” on physicians and physicists. This is especially important in the context of adaptive radiotherapy: without efficient automatic segmentation tools, repeated CT, MRI and PET imaging will result in a prohibitively high image segmentation workload.
3.6.	The PTPS should therefore provide state-of-the-art automated segmentation tools that allow for accurate and fast delineation of large numbers of images. These tools may include the use of anatomical atlases, biomechanical models or a combination of these techniques.
3.7.	Manual tools
3.7.1.	The PTPS shall offer tools for manual contouring and structure delineation. The manual contouring tools should be able to ease the “delineation-burden” on physicians and physicists, and to facilitate efficient and accurate segmentation of patient anatomy
3.7.2.	The 2D contouring should be available in all cardinal image planes (axial, sagittal, coronal). When contouring, switching between image planes should be a seamless transition.

3.7.3.	The PTPS should offer an undo/redo-functionality when performing manual contouring. There should be an undo buffer where a number of delineation actions that can be stored.
3.7.4.	The PTPS should provide tools for structure editing, e.g. cut, combine, exclude, avoid functions and morphological operations.
3.7.5.	The PTPS should allow 2D contours to be interpolated between contiguous image slices.
3.7.6.	The PTPS should provide tools for post processing of structures (remove holes, remove small contours, reduce number of points etc.), delineation in all three orthogonal planes, etc.
3.8.	Automatic tools
3.8.1.	The PTPS should offer tools for automatic contouring and semi-automatic contouring and structure delineation.
3.8.2.	The PTPS should offer an undo/redo-functionality when performing semi-automated contouring.
3.8.3.	The PTPS should offer tools for HU/grey scale based contour delineation.
3.8.4.	The PTPS should allow for automatic generation of auxiliary structures by applying 3D margins to existing structures and support growing and shrinking of structures. It should be possible to define anisotropic margins along the positive and negative directions of the cardinal axes (axial, coronal and sagittal).
3.8.5.	The PTPS should allow for automatic generation of auxiliary structures by applying Boolean logic (or equivalent) to existing structures. In particular, it should be possible to add and subtract structures.
3.8.6.	The PTPS should be able to save the “rules” by which derivative structures are created (3D margins, Boolean logic) as an attribute of the derivative structure. The PTPS should provide tools for the support of automatic generation of ITVs based on 4D data sets (e.g. MIP, average position etc.). The PTPS should provide beam specific PTVs taking inhomogeneities into account.
3.8.7.	If a structure is changed, contours based on this structure, e.g. contours created by Boolean algorithms involving the structure, should be automatically updated. It should be possible to manually ‘guide’ the automatic segmentation process for individual cases.
3.8.8.	The PTPS should allow for subsequent manual editing of automatically generated auxiliary structures.
3.9.	Scripting
3.9.1.	The PTPS should provide possibility of scripting of structure generation, describe the functionality.
3.9.2.	The PTPS should provide a well-documented API to allow its structure delineation tools to be triggered by external applications or imported scripts.
3.10.	Atlas
3.10.1.	The PTPS should provide automated anatomical atlas- and/or model-based segmentation of MRImages.
3.10.2.	The PTPS should allow users to define anatomical atlases and/or models based on their own patient data. It should be stated how the construction of user-defined atlases and/or models is implemented and the database organized.

3.10.3.	A description of the underlying algorithms for anatomical atlas- and/or model-based segmentation should be provided.
3.10.4.	The speed and accuracy of the algorithms for anatomical atlas- and/or model-based segmentation should be given.
3.10.5.	It should be possible to manually ‘guide’ the automatic segmentation process for individual cases; describe how this is implemented.
3.10.6.	It should be stated which anatomical structures are included in the atlases and/or models provided by the bidder.
3.11.	PET
3.11.1.	The PTPS should supply specific tools for contouring PET images.
3.11.2.	The PTPS should support auto contouring using e.g. SUV values. A description which SUV values are supported, e.g. SUV max, should be supplied.
3.11.3.	The PTPS should offer algorithms for automatic segmentation of FDG-PET datasets based on SUV-values that go beyond simple thresholding, in order to facilitate “dose painting by contours”
4.	Planning tools
4.1.	General requirements
4.1.1.	The PTPS must support the treatment delivery of Pencil Beam Scanning (PBS) Proton Therapy System. Treatment planning using state of the art proton pencil beam scanning techniques should be provided. To ensure high level of patient treatment quality and flexibility, effective tools to perform optimization should be available.
4.1.2.	The PTPS should provide tools for beam set-up and field geometries, including 3D rendering and BEV displays.
4.1.3.	The PTPS should provide tools for the definition and application of ‘planning recipes’ (standard planning procedures and field geometries).
4.1.4.	Dose calculation of treatment records and/or of incomplete fractions (assess dose in case of treatment abortion).
4.1.5.	The PTPS should provide the possibility of plan dose summation.
4.2.	Optimization
4.2.1.	Optimization should as a minimum be based on constraints (max/min dose, dose-volume constraints etc.) and should allow for multiple constraints for each target or OAR, constraints placed on more than one target/OAR and LET optimization.
4.2.2.	Describe the optimization process and features (e.g. direct access to DVH parameters during optimization, visualization of fulfillment of clinical goals, calculation of intermediate dose if necessary, possibility to edit fluence etc.). Also describe criteria apart from dose distribution that can be included in the optimization (e.g. smoothness, speed of treatment delivery etc.).
4.2.3.	It should be possible to optimize a new proton dose distribution as an additional dose on top of a primary/former dose distribution. If this is possible, describe the functionality.
4.2.4.	Specify the PBS techniques supported, e.g. SFUD, distal edge tracking, MFO, etc.

4.2.5.	Specify which types of constraints are supported in the optimization mentioned above (e.g. min, max, mean, EUD, min/max to a specified volume, dose fall off, multiple constraints/line dose, etc.).
4.2.6.	A large variety and flexibility of optimization methods and spot delivery techniques should be supported.
4.2.7.	The optimization should be capable of taking into account simultaneous integrated boosting specific targets.
4.2.8.	It should be possible to base a proton plan optimization on an already given dose distribution, regardless if it is given with protons or photons.
4.2.9.	The PTPS should have and allow for Multi-criteria optimization capability.
4.3.	Photons
4.3.1.	The PTPS should provide tools for treatment planning using photons including dynamic wedges, IMRT and VMAT, electrons and multi ion. Facility of plan conversion for different modalities should be available for e.g. proton to photon and vice versa. Import of user specific beam data from the [specified machines] should be supported.
4.3.2.	The referral of patients will for large part be based on comparative dose planning (photon vs. proton). Photon dose planning must therefore also be supported.
4.4.	Dose Painting by Numbers (DPBN) Dose painting by numbers (functionality): The PTPS should support dose painting by numbers using functional and molecular imaging to determine a voxel by voxel dose. If so, describe the functionality.
4.5.	Spot pattern and positions
4.5.1.	The PTPS should support minimization of scan path e.g. by spot sorting. If so, describe the functionality.
4.5.2.	The PTPS should be able to optimize with non-uniform distribution of spot positions and non-uniform energy increments. Describe default spot patterns (e.g. hexagonal, square, etc.). Is it possible to have user defined spot positions?
4.5.3.	Describe how energy layer spacing is set (e.g. automatic according to an algorithm, can it be customized as a parameter for IMPT etc.).
4.5.4.	The PTPS should provide methods to automatically reduce the number of spots during optimization. The PTPS should provide methods to automatically reduce the number of range layers during optimization
4.6.	Spot weights
4.6.1.	The PTPS should provide an intuitive GUI for displaying and manual editing of spot weights.
4.6.2.	The PTPS should provide tools to constrain spot weights to zero on a per field basis. For e.g. multi-target treatment plans, it should be possible to assign a field to only contribute to a specific target volume. For critical tissues adjacent to target volume, it should be possible to (partially) block the target beam directions where pencil beam pass through the critical structure.
4.6.3.	The TPS should provide tools for the flexible definition of machine specific scanning parameters such as maximum scanning extents.

4.6.4.	The TPS should provide tools to support varying scanning source to isocentre distances, including infinite, or very large, distances.
4.6.5.	Describe how the PTPS handles spots with low weight e.g. if the MU is lower than the Proton systems' minimum MU. The minimum MU per spot should be included during the optimization process.
4.7.	Robustness
4.7.1.	The PTPS should have built-in functionality to evaluate the robustness of a treatment plan for at least a user-defined setup error and range uncertainty combined.
4.7.2.	The PTPS should have robust optimization for IMPT as an integrated feature. Specify the algorithms used for robust optimization (e.g.minimax, mean, hybrid, user defined).
4.7.3.	Specify all the options available for robust optimization (e.g. isocenter shift, density change, a full 4DCT scan, additional CT/CBCT scans, specified positional changes in contours, isocenter position, etc.).
4.7.4.	The robust optimization should be possible to apply for the dose to the target, as well as for the dose to organs at risk.
4.7.5.	The PTPS should allow evaluation of a treatment plan under relative beam-by- beam isocenter variations.
4.7.6.	The PTPS should be flexible in choosing a set of error scenarios (range and/or setup) both in robustness evaluation and robust optimization.
4.7.7.	The PTPS should provide tools to summarize and display the results of robustness evaluation and make the evaluation of a (robust) treatment plan easy for the physicist and physician.
4.8.	Accessories
4.8.1.	The PTPS should be able to handle accessories like range shifter, blocks and ridge filters for different snouts and snout-skin distances. Which materials are supported? Describe the degrees of freedom and limitations, e.g. if accessories are plan specific or may be changed between fields.
4.8.2.	Multiple beam tunes (spot sizes): Describe how the PTPS supports planning with multiple beam tunes. Is it possible to have several different beam tunes per plan, per field, per energy layer?
4.9.	Patching
4.9.1.	The PTPS should provide tools for patching of fields to cover extended field sizes. The location of the patch lines should be definable by the user.
4.9.2.	The PTPS should provide tools for matching of dose gradients for field junctions. Describe what tools are available for this, both with and without gradient smoothing to improve plan robustness.
5.	Plan Evaluation and Documentation
5.1.	Evaluate and compare plans
5.1.1.	The PTPS should have informative, efficient, and user friendly tools for evaluating plans, and for comparing plans.
5.1.2.	The PTPS should allow comparison of treatment plans with dose distributions (DICOM RTDose) originating from third parties (e.g.photon therapy treatment plans)

5.1.3.	The PTPS should support dose calculation based on log files from the beam delivery system. It will serve as the dose status in case of partially delivered beams, and as a method to validate the quality of the beam delivery.
5.1.4.	The PTPS should provide dose volume histograms and dose distribution analysis tools.
5.1.5.	The PTPS should have tools to compare two or more plans.
5.1.6.	The PTPS should have tools for evaluation based on modelling of biological response. Response parameters like normal tissue complication rate, tumour response probability, etc., should be accessible and editable.
5.1.7.	The PTPS may be used to estimate the risk for radiation induced secondary cancer.
5.1.8.	The PTPS should have tools to perform an automatic ranking of two or more plans based on user defined decision protocols.
5.1.9.	The PTPS should have tools to evaluate the RBE/LET distribution of a plan, and to compare RBE/LET distributions between two or more plans.
5.1.10.	The PTPS should be capable of adding dose distributions of two or more treatment plans and visualizing the results (including DVHs).
5.1.11.	The PTPS should be capable of subtracting the dose distributions of two treatment plans and visualizing the results
5.1.12.	The PTPS should accurately calculate DVHs for in steep dose gradients and/or small structures (e.g. optic nerves, chiasm, pituitary gland) by adapting the sampling frequency (or an equivalent solution)
5.1.13.	The PTPS should allow for generation of Beam's Eye View (BEV) images and visualization of spot weight distribution in BEV of organs at risk and targets
5.1.14.	The PTPS should provide tools for displaying dose profiles and for dose-at-a-point querying.
5.1.15.	The PTPS should provide multi-slice (e.g. trans axial, frontal, sagittal and user defined) display of competing dose distributions using colour wash and/or iso-dose contours.
5.1.16.	The PTPS should provide dose difference and 2D/3D gamma analysis for comparing different dose distributions
5.1.17.	The PTPS should be able to calculate differential and cumulative dose- volume and dose- surface histograms for defined structures and for combinations of structures.
5.1.18.	The PTPS should provide a comprehensive (and configurable) display of dose volume statistics for any selected structure or structures.
5.1.19.	The PTPS should provide tools for recalculating dose on alternative data sets (e.g. repeat CTs) and for comparing these to the nominal treatment plan for the patient
5.1.20.	The PTPS should have tools for comparing plans from different modalities. These tools should include adding and subtracting plans with different dose weights.
5.2.	Robustness
5.2.1.	Appropriate tools to address robustness should be available.
5.2.2.	The PTPS should have tools to evaluate the robustness of a proton plan to uncertainties related to SPR calibration, isocenter position, intra fractional motions, and inter fractional organ changes.

5.3.	Plan Check
5.3.1.	The PTPS should support checks for collisions.
5.3.2.	Tools for patient specific QA should be provided e.g. generation of patient specific QA plans for specific test devices
5.4.	Documentation
5.4.1.	The PTPS should allow for automated production of plan documentation in Portable Document Format (PDF)
5.4.2.	The PTPS should allow the PDF documentation to be customized by the user.
5.4.3.	The PTPS should support to configure standardized reports, for instance by means of templates or scripting
5.4.4.	Following treatment plan data should be included in the documentation (e.g. beam data, couch position, DVHs, graphical representation of dose distribution in orthogonal planes)
5.4.5.	A summary of plan objectives and DVH indices (following ICRU 83) with indication whether objectives are satisfied (“traffic light” functionality) should be included.
5.4.6.	PDF-documentation of a comparison between two different treatment scenarios (e.g. to provide documentation of superiority of proton over photon therapy for reimbursement purposes) should be provided.
5.4.7.	The PTPS should support the printing of dose distributions in a user configurable format and their export in a common image data format (e.g. TIFF, JPG etc.)
5.4.8.	The PTPS should support the printing of DRRs and their export in a common image data format (e.g. TIFF, JPFG etc.)
5.4.9.	The PTPS should support user-configurable plan reports including prescription information, dose distributions and dose to structure statistics (e.g. min/max, mean, D5, V5 etc.). These should be available as PDF documents (or equivalent) and also in XML format.
5.5.	Others
5.5.1.	The PTPS should allow the user to quickly copy and modify a proton therapy treatment scenario
5.5.2.	The PTPS should be capable of converting isodose volumes to structures that can be exported as DICOM RT Structure objects.
6.	Motion management
6.1.	4D data sets
6.1.1.	The PTPS should provide tools to account for respiratory motion by use of images obtained at multiple points during the respiration cycle, e.g. a 4D CT scan.
6.1.2.	A smooth workflow for planning on 4D CT is preferred, including automation of as many steps in the planning process as possible.
6.1.3.	In order to evaluate the effect of organ motion, the PTPS should provide tools for dose propagation to all phases of e.g. a 4D CT scan.
6.1.4.	Automatic generation of MIP (maximum intensity projection), automatic selection of mid-ventilation phase, and automatic propagation of contours from one phase to all phases should be possible

6.1.5.	The PTPS should support dose calculation at all phases (e.g. by dose/structure propagation individual weighted summation)
6.1.6.	The PTPS should allow any of the phases of the 4D dataset to be used as the “reference” image set for treatment planning.
6.1.7.	The PTPS should be capable of generating MIP and AveIP (average intensity projection) images from 4D CT datasets and allow these to be used as the reference image set for treatment planning
6.1.8.	The PTPS should be capable of automatically propagating structures that are delineated on a single phase to other phases in the 4D dataset, taking into account changes in anatomy
6.1.9.	The PTPS should be capable of automatically generation of an “internal target volume” (ITV) from a structure that is defined on all phases of the 4D dataset. An ITV can be assigned to any phase of the 4D dataset and to the MIP and AveIP
6.1.10.	The PTPS should have built-in functionality for recalculating on all phases of a 4D dataset the dose distribution of a treatment plan that was defined on the reference image set
6.1.11.	The PTPS should be capable of computing a cumulative dose distribution by summing the dose distributions of the individual phases of the 4D dataset (or a subset, thereby simulating a gating-window) by means of deformable registration
6.1.12.	The PTPS should provide cine visualization of the 4D dataset and dose distribution.
6.1.13.	The PTPS should be capable of determining the mid-ventilation phase.
6.1.14.	The PTPS should be capable of generating by means of deformable image registration position “a mid-scan”. The mid-position can be used as the reference data set for treatment planning.
6.2.	4D robust optimization
6.2.1.	It is preferable if the organ motion can be included in robust optimization.
6.2.2.	Robust 4D CT optimization to minimize the interplay effects should be provided. It should be possible to include only selected 4D CT phases used for gating in the optimization.
6.2.3.	The PTPS support robust optimization that minimizes effects of interplay on the dose distribution.
6.3.	Motion Mitigation
6.3.1.	The PTPS should support motion mitigation features of various delivery systems.
6.3.2.	The PTPS should support as many motion mitigation methods as possible to ensure optimal treatment of the large variety of moving targets. E.g. breath hold gating, respiratory gating, re-scanning, tracking, re-tracking, spot size variations, phase controlled spot delivery, motion-robust scan patterns, and ripple filters.
6.3.3.	To maintain high efficiency, repainting as a parameter for plan optimization is preferred.
6.3.4.	The PTPS must support layer and volume repainting.
6.3.5.	The PTPS should support inclusion of repainting as a parameter for plan optimization (e.g. to optimize delivery time).

6.3.6.	The PTPS should handle rescanning (e.g. isolayer, scaled rescanning, phase controlled, volumetric, combination of the techniques, user defined etc.). Describe the available repainting methods in some detail.
6.3.7.	The PTPS should quantify and report the effects of interplay on the dose distribution.
7.	Physics of Beam Modeling
7.1.	The beam models should preferably have been experimentally validated, and include special issues like handling of accessories, edge scattering on cut blocks, Bragg peak degradation due to inhomogeneities, non-organic implants, and the use of Dual Energy CT – data for optimized determination of Stopping Power Ratio.
7.2.	For evaluation of patient safety the PTPS should be capable of modelling neutron doses.
7.3.	Various calculation engines for proton therapy should be available (e.g. pencil beam convolution, Monte Carlo simulation)
7.4.	The PTPS calculation engines should handle nonorganic implants like metal, Kevlar, silicone implants etc. If possible - provide documentation for experimental validation.
7.5.	Provide documented experimental validation for range shifters, blocks and ridge filters for different snouts, snout-skin distances, materials and geometries
7.6.	The PTPS should handle data from a dual energy CT scanner and convert it into SPR information for the dose calculation algorithms.
7.7.	It should be possible for the user alone to generate the beam models for the PTPS with appropriate support provided.
7.8.	The PTPS should be able to calculate dose distributions for actively scanned proton beams.
7.9.	The PTPS should model the nuclear halo at the level of the individual pencil beams
7.10.	For dose calculation using a non-Monte Carlo algorithm, the physical pencil beams should be decomposed into finer mathematical beams (usually referred to as bixels or beamlets) in order to take into account the effects of patient tissue inhomogeneities.
7.11.	The PTPS should model the variation of the spot size in air at isocenter as a function of proton energy
7.12.	Range shifters of various thicknesses should be modelled
7.13.	Apertures for pencil beam scanning should be supported.
7.14.	The PTPS should be able to model the variation in pencil beam size as a function of the air gap between range shifter and patient.
7.15.	The PTPS should provide scan path optimization (e.g. beam delivery dynamics, robustness, rescanning)
7.16.	Specify the different optimization algorithms for IMPT (distal edge tracking, single field uniform dose, etc.)
8.	Radiobiological Response Modeling
8.1.	The PTPS should have informative, efficient, and user friendly tools for evaluating plans, and for comparing plans, also based on biological response modelling.

8.2.	Biological response models should preferably include normal tissue complication rate, tumour control rate, variable proton linear energy transfer distribution (LET) dependent relative biological effectiveness (RBE) and risk for radiation induced secondary cancer risk.
8.3.	The PTPS should be capable of calculating the 3D LET
8.4.	Evaluation of the LET distribution for the entire plan or beam wise provides information of the biological robustness of treatment plans and ideally the LET distribution will be considered in the optimization of the dose distribution.
8.5.	The PTPS should allow optimization of LET distribution.
8.6.	The PTPS should be capable of correcting the physical dose distribution for RBE with a uniform scaling factor
8.7.	The PTPS should be capable of taking into account the 3D LET-distribution and (optionally) tissue composition in a voxel based RBE-correction
8.8.	The PTPS should be able to report radiobiological equivalent dose (EQD) for tumour and healthy tissues, modelling the effects of fractionation and variations in overall treatment time according to the standard linear- quadratic model of radiobiology (the parameters can be set by the user)
8.9.	The PTPS should be able to calculate tumour control probability (TCP) and normal tissue complication probability (NTCP) according to established radiobiological models (the parameters can be set by the user)
8.10.	The PTPS should be able to use TCP and NTCP as inverse planning optimization goals
8.11.	The PTPS should provide the capability of comparing plans using biological metrics (TCP, NTCP, EUD etc.)
8.12.	Additional quantities (besides RBE weighted dose), e.g. LET or LET weighted dose (more physical quantities) should be provided.
9.	Adaptive Radiotherapy (ART)
9.1.	Adaptive Radiotherapy (ART) involves adaptation of the treatment plan to anatomical changes during the treatment course. ART is based on images (e.g. CT, CBCT, MRI, PET) acquired during the treatment course, and the PTPS should support the use of the additional information in these images for smooth plan adaptation.
9.2.	The core feature to be provided by the PTPS in relation to ART is Deformable Image Registration (DIR). High quality DIR is mandatory. Nevertheless, knowing the uncertainties in DIR it also becomes important to be able to monitor, evaluate and control the DIR used for adaptation. This can be done if the PTPS provides tools for visualization, evaluation and user interaction of and with the registration. This should include:
9.2.1	Deformable image registration (DIR): The PTPS should provide tools to perform DIR between two CT images and between CBCT and CT images.
9.2.2	Contour propagation: The PTPS should provide tools to propagate contours between deformedly registered images.

9.3	Further, the vendor should specify the deformable image registration algorithms available. It should also describe if the algorithms are based on grayscale, anatomical structures, preservation of mass, etc. Evaluation tools for the DIR (e.g. point evaluation for manually selected points and self-consistency checks by back-and-forth mapping or circular mapping through e.g. 4DCT phases) and user interaction should be also described
9.4	The PTPS should support an efficient, effective and safe workflow including aspects of ART such as treatment evaluation using CBCT, dose recalculation from the same plan on additional CT images deformedly registered to the planning CT, dose mapping, dose accumulation, and treatment re-planning with inclusion of the dose delivered so far.
9.5	The PTPS should support plan selection libraries, where daily pre-treatment imaging is used for online selection of the most suitable plan from a plan library.
9.6	An efficient and safe implementation of adaptive workflows not only requires specific capabilities of the TPS, but also of the record-and-verify system. The vendor should provide a description of the available interfaces with commercial R&V systems to facilitate adaptive workflows. The vendor should describe what efforts are being made to develop and maintain such interfaces in the future.
10.	Automation, workflow and data integrity
10.1.	The TPS is expected to have the following basic functionalities:
10.1.1.	The possibility to import/export administrative patient information through a well- defined service interface not only internally but also from/to external centres.
10.1.2.	The possibility to duplicate a patient through a copy action
10.1.3.	The possibility to delete a patient
10.1.4.	The possibility to anonymise a patient
10.1.5.	Archiving functions enabling archived treatment plans to be completely reconstructed in the TPS. The archiving should be operable from all clients in the distributed environment.
10.2.	To ensure efficient, consistent, user independency and safe workflows, the PTPS must maintain data integrity and provide tools for automation.
10.2.1.	Data integrity is important for maintaining both efficiency and patient safety. The vendor should describe the database or databases used in the PTPS to store and organize data. In general terms specify which database stores which data. Giving special attention to safety for the patient and to prevent unintended events, how does the vendor organize data to ensure minimum redundancy, maintaining unique relations between patient ID, images, dose plans, registrations, etc. across database. OIS and PTPS server backup should be provided and automated (database size should be > 50 TB).
10.2.2.	Automation includes among others the use of templates, automated segmentation, automated dose planning, and scripting.
10.3.	To this end the following tools are expected:
10.3.1.	Templates: The PTPS should be able to use various predefined templates/protocols to automate the treatment planning process (this could e.g. include, but is not limited to: names and types of structures, fractionation, location of isocenter, field geometry, optimization criteria, plan objectives, etc.)

10.3.2.	Segmentation: The PTPS should provide tools for automation of segmentation based on CT or MRI images, with specification of the models used for automatic segmentation (e.g. atlas based). Describe the workflow and the possibility of user interaction and customization (e.g. addition of patients/structures to the atlas).
10.3.3.	Multi Criteria Optimization functionality
10.3.4.	Automatic treatment planning. Is the PTPS able to base a treatment plan on a library of best-case plans from similar cases (by diagnose and/or anatomical site) in order to optimize the planning process and quality?
10.4.	A particular attention should be made to scripting. The software should feature the possibility to create and execute user-defined scripts allowing for customizable automation of various procedures. A full description of the scripting language should be made available. Scripts delivered by the vendor as part of this tender need to be specified. Macro recording of scripts should be available.
10.5.	A further interest is the possibility to use the TPS in “batch mode” and/or “service mode”. By this we mean that the TPS can be configured to automatically execute pre-defined scripts when triggered by external events. This could for example be implemented by allowing the TPS to be started from an external program or by running the TPS as a network service. An example use case would be to have the TPS automatically recalculate a treatment plan on a new CT dataset in an adaptive workflow.
10.6.	Other scripting options are:
10.6.1.	The scripting language is a high-level imperative programming language with support for procedural and object-oriented programming, advanced container data types (e.g. arrays, dictionaries) and automatic memory management
10.6.2.	The scripting language allows script developers to define their own libraries and to use external third party libraries
10.6.3.	The scripting language allows script developers to call external programs (e.g. shell commands)
10.6.4.	The scripting language allows script developers to create GUI-elements to facilitate interaction with the user
10.6.5.	How are scripts and script libraries managed? How is script development and testing separated from clinical use? Is there an authorization scheme in place? Can scripts be managed on a per-user basis?
10.7.	The vendor should describe which functionality of the TPS is available for automation.
11.	Research, Education and Training
11.1.	The vendor should support the implementation of the PTPS by making available application training and preferably provide resources for continuous educational training, knowledge exchange, and access to resources at reference centres. This includes:
11.1.1.	The vendor should make a beam modelling application specialist available at the site to discuss the provisional beam modelling.
11.1.2.	The vendor should make a beam modelling application specialist available at the site to discuss and/or perform the definitive beam modelling, for at least 1 week continuously during commissioning of the system.

11.1.3.	Application training: The vendor should provide on-site application training of all relevant staff (physicists and physicians) for a minimum 2 weeks . Application training includes training in tools, procedures and operations required for segmentation, treatment planning, plan evaluation, data transfer, treatment evaluation, and adaptation.
11.1.4.	Technical training: The vendor should provide training of relevant staff (IT-engineers). Training should include system installation, setup, administration, and optimization. Training for third party virtualization software should also be included.
11.1.5.	The vendor should provide PTPS system hardware and software licenses for non-clinical educational use and training
11.1.6.	The vendor in addition to application training should offer continuous educational programs (on-site training, e-learning, webinars, teaching courses, etc.).
11.2.	A comprehensive scientific and research collaboration for the development of advanced PTPS tools and systems for pencil beam scanned proton therapy should be agreed. The goals set can only be achieved in a strategic alliance with the supplier of the treatment planning system in which the supplier provides significant financial support to the program. This may include:
11.2.1.	To improve and apply multi-criteria intensity modulated proton
11.2.2.	To develop and implement image-guided and biology-guided adaptive workflows including online (near real-time) or offline (ready for the next day) adaptation of the treatment plan to anatomical changes (detected by in-room CTs) and/or to biological changes (measured by offline MRI or PETCT);
11.2.3.	To automatically generate IMPT treatment plans of consistent high quality;
11.2.4.	To improve the accuracy of the proton dose calculation by using dual- energy CT scanning;
11.2.5.	To develop methods (prompt-gamma and time-of-flight PET imaging) for in-vivo proton range and verification and integrate those in the adaptive treatment cycle.
11.3.	The vendor should support future features of other existing system, and the vendor is asked to disclose their strategy and collaboration about the synchronization of development of new features.
12.	Service, Support and Documentation
12.1.	The customer will require a service and maintenance contract as part of the supply. This should cover hardware and software and mandatory updates. A comprehensive support service will be required.
12.2.	The PTPS manufacturer should provide
12.2.1.	Comprehensive physics manuals including algorithms, references, file formats, file structures and limitations, including detailed descriptions of the dose algorithms used.
12.2.2.	Comprehensive documentation of their deformable image registration capabilities including algorithms, references, file formats, file structures and limitations.
12.2.3.	All installation/setup and documentation manuals should be electronically available, as well as tech tips and other technical documentation.
12.2.4.	Scripting interface for in-house customizations / development of PTPS extensions
12.2.5.	Full Support Contract on two different levels, including all upgrade, updates, licenses, service visits and support, including remote on-line support.

12.2.6.	Maintenance and service of the servers and clients must be easy and flexible supported by server and client virtualization, fast and secure backup and archive routines.
12.2.7.	Remote support – as a minimum telephone support (English speaking) with appropriate first-hand technical knowledge of the Equipment and systems, should be available within specified time frames.
12.2.8.	Vendor must comply with e waste policy of Govt. of India.
13.	Miscellaneous
13.1.	Speed: The analytical calculation must be fast enough that, together with the optimization step. SFUD and IMPT plans should be calculated within clinically acceptable time scales, which for a 1 litre volume and 4 fields should not take longer than [number] minutes, vendor to specify.
13.2.	Dose validation: The TPS should have dedicated tools for fast and easy transfer of treatment plans to phantoms or detector systems for treatment plan verification purposes.
13.3.	Configuration:
13.3.1.	The PTPS must support the administration and versioning of all parameters characterizing proton pencil beams
13.3.2.	The PTPS must support multiple, energy dependent depth dose curves with non– regular, and user definable, energy/range separations
13.3.3.	The PTPS must support energy dependent, initial angular spatial distributions (IASDs) that can represent both focused and divergent pencil beams
13.4.	Acceptance testing:
13.4.1.	The entire system should be subject to a set of acceptance tests. These tests, taken together, will verify that the entire completed system meets all specifications.
13.4.2.	The vendor should supply a complete list of acceptance testing procedures.
13.4.3.	If the acceptance tests proposed by the tenderer do not cover all essential and relevant issues to verify that the delivered system meets the stated specifications, the Customer reserves the right to add relevant test procedures to the final acceptance testing.
13.4.4.	The periodic calibration, maintenance of all dosimetry equipments including third party equipment should be responsibility of the bidder till the life of the equipment.
III.	Technical Specification for Oncology Information System (OIS) The Oncology Information System should have following specifications:
1.	OIS has to deliver and precisely record the latest treatment techniques such as Intensity Modulated Proton therapy, and other technique available in the machine.
2.	Oncology Driven Clinical Workflows should be inbuilt or customized in OIS and could facilitate in structural clinical data collection.
3.	OIS should be able to review the CBCT and stereoscopic portal images offline. Five licenses have to be provided with 5 dedicated workstations. Minimum graphics card of 2 GB require. All workstations should have a 24 inch LED monitor as well.
4.	OIS should be able to connect and receive treatment plans from different Treatment Planning systems available in the hospital for treatment. Necessary licenses has to be provided.

5.	Five Treatment plan review licenses in OIS should be available. It should be having capabilities of sum up different modality plans as well for plan review.
6.	Patients identification and setup photos should be able to import in OIS. Latest digital HD camera has to be provided.
7.	OIS should have option to import documents and attach to Prescription.
8.	OIS should be able to connect through HL7 with HIS to receive the patient Demographics information. Necessary license has to be provided. The configuration with HIS is to be done by the vendor. OIS should be include all the licences which will be required for paperless work flow.
9.	Five dedicated workstations with 24 inch LED monitors for routine import and scheduling purposes has to be provided.
10.	IN- ROOM Monitor of 24 inch in each treatment room has to be provided with necessary positioning accessories for mounting.
11.	Barcode printer compatible with OIS for accessory label printing has to be provided with its ribbon and label consumables for 5 years.
12.	OIS should be able to verify the accessories automatically or through Barcode scanner (compatible with OIS) for its verification at time of treatment.
13.	OIS should be able to export the CBCT and portal images to treatment planning systems if required. License for the same has to be there.
14.	OIS should have server capability of storing data of 50 TB in live database with 3KV online UPS to switch during the treatment automatically with in case of power failure to facilitate the un-interrupted treatment.
15.	OIS should have seamless archive and retrieve facilities for the data management. Storage server space of 100 TB required and should have Provision of arrays or accessories extending up to 100 TB . Software should be available archive and restore.
16.	OIS should be able to take the routine back of the live database (including patient treatment record, planning CT images, RT structure Set, RT plan, RT dose, CBCT, portal images and MR images etc.) for the same 50 TB storage server is required. Backup software should be available.
17.	License for any new feature or treatment technique which will be in future has to be provided without any additional cost.
18.	OIS software has to update time to time with new releases and necessary hardware upgrade also to be provided.
19.	Preventive maintenance for the OIS has to be carried out quarterly.
20.	OIS should be able to provide the customized reports based on the user interest.
21.	OIS should be IHE-RO (Integrated Healthcare Enterprise- Radiation oncology) Complaint
22.	It should be state of the art, latest and futuristic at the time of supply. It should also have the capability of handling the multi ion system with artificial intelligence & machine learning which we may acquire in future.

<p>IV. Dosimetry and Quality Assurance equipment and systems:</p> <p>The vendor should provide the latest technology of proton-specific dosimetry equipment required for acceptance testing, commissioning, periodic machine quality assurance of proton therapy machine/system and acceptance testing and commissioning of Treatment Planning System, and patient-specific QA including kV imaging. The technical specification in detail is as below:</p>
<p>8.1. Reference Class secondary standard absolute dosimetry system. Vendor must supply all the required dosimetry items as per the requirement of AERB for commissioning and smooth running of the system.</p>
<p>8.1.1 Two numbers of reliable (modifiable as per gantries), high quality Reference Class secondary standard electrometer suitable for proton beam measurements shall be provided. The electrometer shall have wide measurement range and a large multifunction display. It shall be capable of measuring both current and charge with excellent resolution. It shall have negligible leakage current. There shall be provision for at least two different bias voltages. The electrometer shall have extremely good accuracy, repeatability, and stability. Along with electrometers, Two numbers of calibrated Farmer type thimble 0.6 cc or 0.65 cc ion chamber (NDw) calibration factors with calibration certificate) for absolute dose measurement with proton-specific suitable Parallel plate ionization chambers with suitable interface and holders for absorbed dose determination as per the IAEA-TRS 398 protocol shall be provided. Tri axial cables of 20 mtr length (Qty – 4nos) should be supplied for connection from control to Iso center.</p>
<p>8.1.2. 1D motorized water phantom: vendor should provide stand-alone 1D motorized water phantom with suitable detector holder for Absolute Dosimetry according the specifications of TRS-398. The position accuracy of the phantom should be ± 0.1mm</p>
<p>8.2. 3D water scanning phantom system</p>
<p>8.2.1 The vendor should provide the proton therapy-specific dedicated 3D water scanning phantom along with required dosimetry software system for measuring integrated depth doses and profiles of proton beam. The water phantom must have a thin PMMA or water equivalent material entrance window.</p>
<p>8.2.2 Vendor should provide the advanced model with latest technology based 3D water scanning phantom with water reservoir and electrometer system which is specifically meant for proton beam commissioning dosimetry with necessary systems including beam data acquisition and analysis software. Vendor must provide base plate for keeping the 3 D water Phantom for measurement.</p>
<p>8.2.3. The 3D water scanning system should be able to measure integral depth-dose profiles and transverse beam profiles in water with a resolution of 0.1 mm having scanning dimensions of 514 x 450 x 450 mm³ or its equivalent to cover maximum proton beam ranges and to allow measuring low-dose levels at larger lateral distances from the beam axis. The system should be capable of both step by step and continuous scanning mode</p>
<p>8.2.4 The phantom must support Large-area ionization (>12 cm diameter) chamber in the and also Markus or ROOS type parallel plate ionization chamber for integrated depth dose measurements.</p>
<p>8.2.5 The water phantom must be compatible with all types of proton therapy machines available in the market and must be resistant to magnetic fields produced by the PT machine.</p>
<p>8.2.6. The depth dose measurement range must be 32cm or more.</p>

8.2.7.	The water phantom should be capable for use of both relative and absolute dosimetry.
8.2.8	All components comply with national and international regulations and safety rules. All components of the system; all available options are controlled by the same software that runs under Microsoft Windows of latest version of Windows or equivalent.
8.2.9.	The positioning tool should be there to allow easy and exact positioning of the chamber's geometric center in the central beam and at the water surface. Apart from this the exact position of the chamber the radiation beam should be possible via software.
8.2.10.	The scanning mode must have the option of both step by step with variable scan resolution and continuous scan mode with variable speed from 0-20 mm/sec or more.
8.2.11.	The zero point, reference point and limit of the different detector units should be stored separately and permanently in the control unit.
8.2.12.	The latest high end laptop computer with beam data acquisition software should be provided.
8.3.	Solid, water equivalent phantom: One set of solid, water equivalent phantom made up of slabs of different thicknesses shall be provided by the vendor for Proton Therapy dosimetry. The phantom shall be free of contaminants and air bubbles. The slab shall be of 30x30 cm or more size totaling a thickness of 30 cm. The material used should be water equivalent. The slabs must accompany their carry case. Solid phantoms should have adaptors for the supplied detectors.
8.4.	Detectors for PBS proton beam measurements:
	Vendor should provide the latest model with advanced technology based required to measure absorbed dose, output factor, beam energy range, pristine bragg-peak, spread out bragg-peak SOBP width, integrated depth dose curves, beam profiles, in- air profile measurements.
8.4.1	One Large integral ionization bragg-peak chamber (≥ 12 cm diameter) and one thin window parallel plate chambers (PPC05 SSDL calibrated) for accurate Bragg peak and absolute dose measurements in PBS along with 3D water scanning phantom.
8.4.2	Should provide two numbers of thimble small volume ionization chambers and one number of pinpoint type chamber for output measurements.
8.4.3	Should provide micro-diamond detector (One number) for small field measurements.
8.4.4	Multilayer ionization chamber (MLIC): The vendor must supply one Multi-layer ion chamber device complete with its software to allow fast and high resolution measurement of Spread Out Bragg Peaks (SOBP) and Pristine Bragg Peaks (IDD/ range) measurements in the range 2–335 mm in water equivalent thickness (WET). MLIC should have air- vented ionization chambers with a water equivalent intrinsic resolution of about 2 mm.
8.5.	Scintillation screen detector: A high-resolution scintillator based detector with an Ethernet CCD camera required to acquire 2D fluence maps or spot maps. Detector should have maximum field size of 300 mm x 300 mm with an inherent resolution of 0.5 mm with a certificate specifying tolerances on the uniformity and geometric distortion usually lower than 2% and 1 mm, respectively. The software should allow acquiring time integrated images (over up to 90 s) or videos (sequence of images) with a maximum

frequency of 7.5 frames per second. With suitable detector for gantry/nozzle attachment needs to be provided.
8.6. Film dosimetry: Film dosimetry is required using radiochromic films: EBT3 Gafchromic films in combination with suitable flat scanner with transparency unit, providing 0.17 mm resolution (150 DPI). The film dosimetry should be provided with compatible software , which is used for scanning, calibrating, and analyzing the films (film dosimetry is often considered as the reference detector for 2D dosimetry or at least as an independent device to cross-check 2D fluence measurements obtained with other devices such as scintillating screens).
8.7 2D-Array Patient-specific dosimetry QA system: Vendor should provide ONE 2D Array detectors with suitable phantom for patient-specific dose verification of proton beam. Two-dimensional arrays of ionization chambers are required to verify scanned proton beam delivery in two dimensions and can also serve for patient specific QA measurements. The panel of detectors based 1405 or more vented ionization chambers arranged in a 27x27 cm matrix with resolution of < 5mm with calibration certificate. The bias voltage applied to all ionization chambers is 1000 V to minimize ion recombination. This detector should be possible to accommodate with suitable phantom during the commissioning as well as patient QA. The suitable dosimetry software system for patient dose verification also should be provided.
8.8 Log based file analysis complete software and hardware set may be provided for PSQA.
9.0 Anthropomorphic Phantom for End-to End Testing: The vendor should provide one anthropomorphic head phantom and one anthropomorphic pelvic phantom for commissioning and treatment planning system (TPS) verification of Proton Therapy system.
9.1 The phantoms should be constructed of tissue-equivalent materials, which mimic reference tissues within 1.5% for protons.
9.2 Above both phantoms should have provision to accommodate different detectors such as thimble chambers and radiochromic films and other dosimetry systems used in proton therapy.
10. CTDI dosimetry system: The vendor should provide the complete set of CTDI dosimetry phantom (Head and Body phantom) with appropriate detectors for the purpose of CBCT imaging commissioning QA.
11. Periodic QA/Safety Devices/detectors and Software Systems/Tools
11.1. Proton machine QA activities dedicated software system: vendor should provide the dedicated software systems for proton machine QA activities in order to carry out QA measurements as per the AAPM TG-142 and AAPM TG-224 protocol. measurements such as like radiation field flatness, symmetry, output consistency, etc shall be provided Vendor should provide appropriate/suitable necessary dosimeter and software system/modules that can store analyze all the data and report the data in a user friendly format. Provide comprehensive details on the systems offered. The periodic machine QA system should be able to measure spot size, spot position, proton energy/range, uniformity etc which need to be measure routinely.

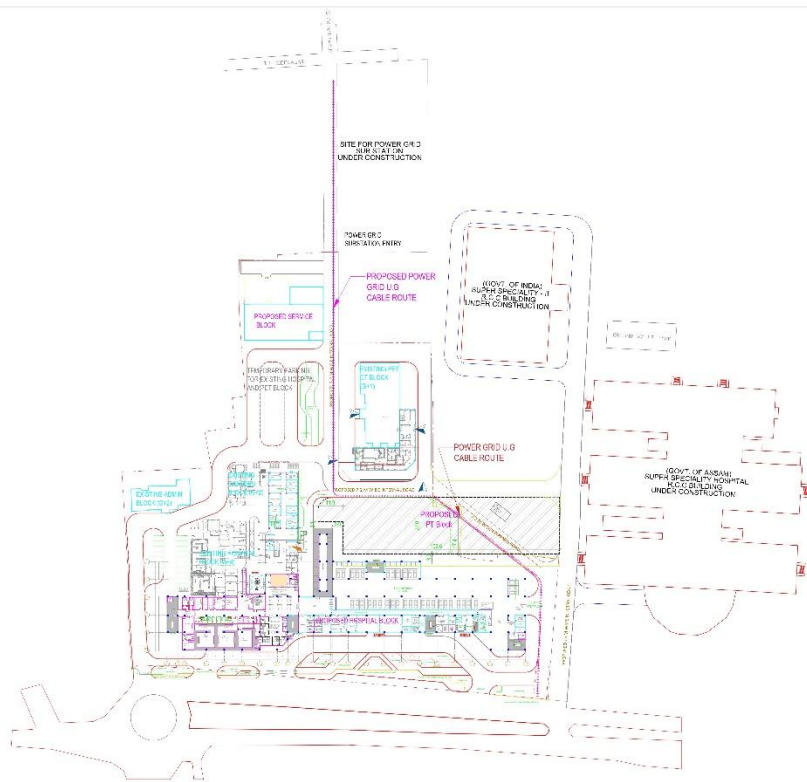
11.2.	Dosimetric QA management software system It should also have the full flexibility to create custom protocols according to the local requirements. Full coverage of tests related to dosimetry, safety, medical imaging, MLC QA, etc. Generic tests with customizable pass / fail criteria can be used for definition, scheduling, tracking and reporting of any QA tasks. Flexible scheduling tool to manage the tasks, resources and time with 5 licenses.
11.3.	A simple isocenter alignment device (two numbers) that can measure accuracy of the gantry angle, collimator angle, couch angle, isocenter accuracy, optical-radiation field congruence, optical field readouts, etc shall be supplied.
11.4.	An electronic (digital) spirit level should be provided for measuring or marking incline or leveling surfaces and water phantom tank and checking collimator and gantry angles of Linear accelerators (2 nos.) .
11.5.	Electron-Density phantom (one number): The electron-density phantom commissioning CT scanners for in homogeneity correction based dose calculation in treatment planning system shall be supplied that has different electron density inserts for calibrating CT numbers (Hounsfield units) against electron density and mass. Furnish complete description about the offer phantoms.
11.6.	The calibrated Digital Thermometers (two numbers) : The Portable digital thermometer to use in radiation dosimetry for measuring temperature inside a medium including water should be supplied. It should use the latest in temperature sensor technology.
11.7.	The calibrated Digital Barometers (two numbers) : The Portable digital barometer to use in radiation dosimetry for measuring pressure inside the room should be supplied.
11.8.	Latest technology one Photon and one Neutron Survey Meters (detection energy range upto 250MeV) and one contamination monitor (each one number): one Photon and one neutron survey meter is used for surveying and monitoring of proton, photon and neutron and other contamination measurements around the proton therapy facility. Neutron Survey meter should be able to measure entire spectrum (thermal to maximum) of neutron dose around the proton therapy facility.
V.	Technical specification of Patient positioning and immobilizations devices. The mould room and patient fixation and immobilization devices/accessories/ tools are required in developing and implementing of a comprehensive, advanced PBS based image-guided intensity modulated proton therapy program in the department of Radiation Oncology. The vendor should provide the all items with product information brochures.
1.	Patient alignment laser system with patient support table The vendor should provide an indexed table flat top couch/table of good make along with fixed sagittal laser (two green laser) in-tune and aligned with the sagittal laser of the CT simulator and treatment room. The laser system may be mounted on the ceiling of the mould room for patient alignment and pre-treatment isocenter localization procedures.
2.	Vendor should provide the universal couch top (two numbers) for CT machine with Indexer compatible with proton therapy machine treatment table.
3.	Patient positioning and Immobilization Accessories

3.1.	The vendor should provide high precision radiotherapy immobilization devices of base plates (inserts for various clinical sites compatible with the supplied couch top) for CNS, Head, Head & Neck, Breast, Thorax, Abdomen Pelvis and pediatrics patients with appropriate accessories having light weight, remarkable reproducibility, stability and durability.
3.2.	The vendor should provide all appropriate locking mechanism for all offered base plates to couch. Density and also percent of attenuation of carbon fiber or other suitable material for proton therapy should be mentioned.
3.3.	The vendor should provide 200 (numbers as and when required) thermoplastic sheets of each kind other suitable material for proton therapy should be mentioned for each site- specific offered base plates as mentioned above tables.
3.4	Various fixation devices like inserts for various clinical sites and property of these inserts should be such that it does not alter the range of the proton. (Qty. – 2 sets) Vacuum immobilization devices of various sizes
4.	Digital Water Bath System (one number) Vendor should provide digital water bath system which should have minimum inner dimensions of 700 mm x 700 mm x 110 mm with adjustable position of water drainage, black safety opening bracket, digital temperature display.
5.	Miscellaneous items: Vendor should provide any patient immobilization items/features left/missed inadvertently which are required to complete the workflow and new features clinically important for machine-specific and patient-specific advanced QA and also for ensuring accurate treatment
Specific Requirements: 1) Equipment tender should be separate from the tender for civil construction	
2) Vendor to clearly specify regarding 3rd party equipment necessary for optimal operations of the entire facility	
Vi) Technical & Supervision support during Civil Construction phase. Vendor has to deploy technically competent supervisor(s) during the entire civil construction phase so as to ensure technical compatibility and quality to install the entire Proton Beam Therapy Unit and related ancillaries.	

4. Drawings

This bidding document includes *the following* drawings.

List of Drawings		
Drawing Nr.	Drawing Name	Purpose
PT-01	Site Plan	<p>1) To evaluate the feasibility to accommodate the proposed Proton Therapy Unit along with required civil infrastructure. In case, considering the site plan, bidder conclude that the offered goods & required civil infrastructure cannot be accommodate in the available site. Bidder must not quote infeasible goods.</p> <p>2. To provide Integrated building design for civil construction including Good For Construction (GFC) drawing, Electrical, Mechanical, Plumbing drawing, Interior drawing, Bill of Quantity etc. based on drawing PT-01 in autocad format and other format as specified by the employer.</p>



Drawing Title : PROPOSED LOCATION FOR PROTON THERAPY PROJECT

Drawing No.: PT-01

Scale : Dimensions are in metre

5. Inspections and Tests

The following inspections and tests shall be performed:

The inspection and testing shall be followed as per regulatory norms as specified by the Atomic Energy Regulatory Board and other agencies pertaining to electrical safety etc; and as mentioned in the Technical Specification section.

PART 3 – Contract

Section VIII - General Conditions of Contract

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Section VIII. General Conditions of Contract

1. Definitions

1.1 The following words and expressions shall have the meanings hereby assigned to them:

- (a) “Bank” means the World Bank and refers to the International Bank for Reconstruction and Development (IBRD) or the International Development Association (IDA).
- (b) “Contract” means the Contract Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.
- (c) “Contract Documents” means the documents listed in the Contract Agreement, including any amendments thereto.
- (d) “Contract Price” means the price payable to the Supplier as specified in the Contract Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.
- (e) “Day” means calendar day.
- (f) “Completion” means the fulfillment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.
- (g) “GCC” means the General Conditions of Contract.
- (h) “Goods” means all of the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Purchaser under the Contract.
- (i) “Purchaser’s Country” is the country specified **in the Special Conditions of Contract (SCC)**.
- (j) “Purchaser” means the entity purchasing the Goods and Related Services, as **specified in the SCC**.
- (k) “Related Services” means the services incidental to the supply of the goods, such as insurance, installation, training and initial maintenance and other such obligations of the Supplier under the Contract.
- (l) “SCC” means the Special Conditions of Contract.
- (m) “Subcontractor” means any person, private or government entity, or a combination of the above, to whom any part of

the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.

- (n) “Supplier” means the person, private or government entity, or a combination of the above, whose Bid to perform the Contract has been accepted by the Purchaser and is named as such in the Contract Agreement.
- (o) “The Project Site,” where applicable, means the place **named in the SCC.**

2. Contract Documents

- 2.1 Subject to the order of precedence set forth in the Contract Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory. The Contract Agreement shall be read as a whole.

3. Fraud and Corruption

- 3.1 The Bank requires compliance with the Bank’s Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG’s Sanctions Framework, as set forth in Appendix 1 to the GCC.
- 3.2 The Purchaser requires the Supplier to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the Bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.

4. Interpretation

- 4.1 If the context so requires it, singular means plural and vice versa.
- 4.2 Incoterms
 - (a) Unless inconsistent with any provision of the Contract, the meaning of any trade term and the rights and obligations of parties thereunder shall be as prescribed by Incoterms **specified in the SCC.**
 - (b) The terms EXW, CIP, FCA, CFR and other similar terms, when used, shall be governed by the rules prescribed in the current edition of Incoterms **specified in the SCC** and published by the International Chamber of Commerce in Paris, France.
- 4.3 Entire Agreement

The Contract constitutes the entire agreement between the Purchaser and the Supplier and supersedes all communications, negotiations and agreements (whether written or oral) of the parties with respect thereto made prior to the date of Contract.
- 4.4 Amendment

No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto.

4.5 Nonwaiver

- (a) Subject to GCC Sub-Clause 4.5(b) below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.
- (b) Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, dated, and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

4.6 Severability

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

5. Language

- 5.1 The Contract as well as all correspondence and documents relating to the Contract exchanged by the Supplier and the Purchaser, shall be written in the language specified in the **SCC**. Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified, in which case, for purposes of interpretation of the Contract, this translation shall govern.
- 5.2 The Supplier shall bear all costs of translation to the governing language and all risks of the accuracy of such translation, for documents provided by the Supplier.

6. Joint Venture, Consortium or Association

- 6.1 If the Supplier is a joint venture, consortium, or association, all of the parties shall be jointly and severally liable to the Purchaser for the fulfillment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium, or association. The composition or the constitution of the joint venture, consortium, or association shall not be altered without the prior consent of the Purchaser.

- 7. Eligibility**
- 7.1 The Supplier and its Subcontractors shall have the nationality of an eligible country. A Supplier or Subcontractor shall be deemed to have the nationality of a country if it is a citizen or constituted, incorporated, or registered, and operates in conformity with the provisions of the laws of that country.
- 7.2 All Goods and Related Services to be supplied under the Contract and financed by the Bank shall have their origin in Eligible Countries. For the purpose of this Clause, origin means the country where the goods have been grown, mined, cultivated, produced, manufactured, or processed; or through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.
- 8. Notices**
- 8.1 Any notice given by one party to the other pursuant to the Contract shall be in writing to the address **specified in the SCC**. The term “in writing” means communicated in written form with proof of receipt.
- 8.2 A notice shall be effective when delivered or on the notice’s effective date, whichever is later.
- 9. Governing Law**
- 9.1 The Contract shall be governed by and interpreted in accordance with the laws of the Purchaser’s Country, unless otherwise **specified in the SCC**.
- 9.2 Throughout the execution of the Contract, the Supplier shall comply with the import of goods and services prohibitions in the Purchaser’s Country when:
- (a) as a matter of law or official regulations, the Borrower’s country prohibits commercial relations with that country; or
 - (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower’s Country prohibits any import of goods from that country or any payments to any country, person, or entity in that country.
- 10. Settlement of Disputes**
- 10.1 The Purchaser and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.
- 10.2 If, after twenty-eight (28) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter

provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract. Arbitration proceedings shall be conducted in accordance with the rules of procedure **specified in the SCC**.

10.3 Notwithstanding any reference to arbitration herein,

- (a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and
- (b) the Purchaser shall pay the Supplier any monies due the Supplier.

11. Inspections and Audit by the Bank

11.1 The Supplier shall keep, and shall make all reasonable efforts to cause its Subcontractors and subconsultants to keep, accurate and systematic accounts and records in respect of the Goods in such form and details as will clearly identify relevant time changes and costs.

11.2 Pursuant to paragraph 2.2 e. of Appendix 1 to the General Conditions the Supplier shall permit and shall cause its agents (where declared or not), subcontractors, subconsultants, service providers, suppliers, and personnel, to permit, the Bank and/or persons appointed by the Bank to inspect the site and/or the accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have such accounts, records and other documents audited by auditors appointed by the Bank. The Supplier's and its Subcontractors' and subconsultants' attention is drawn to Sub-Clause 3.1 (Fraud and Corruption) which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).

12. Scope of Supply

12.1 The Goods and Related Services to be supplied shall be as specified in the Schedule of Requirements.

13. Delivery and Documents

13.1 Subject to GCC Sub-Clause 33.1, the Delivery of the Goods and Completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in the Schedule of

Requirements. The details of shipping and other documents to be furnished by the Supplier are **specified in the SCC**.

**14. Supplier's
Responsibilities**

- 14.1 The Supplier shall supply all the Goods and Related Services included in the Scope of Supply in accordance with GCC Clause 12, and the Delivery and Completion Schedule, as per GCC Clause 13.
- 14.2 The Supplier, including its Subcontractors, shall not employ or engage forced labor or persons subject to trafficking, as described in GCC Sub-Clauses 14.3 and 14.4.
- 14.3 Forced labor consists of any work or service, not voluntarily performed, that is exacted from an individual under threat of force or penalty, and includes any kind of involuntary or compulsory labor, such as indentured labor, bonded labor or similar labor-contracting arrangements.
- 14.4 Trafficking in persons is defined as the recruitment, transportation, transfer, harbouring or receipt of persons by means of the threat or use of force or other forms of coercion, abduction, fraud, deception, abuse of power, or of a position of vulnerability, or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purposes of exploitation.
- 14.5 The Supplier, including its Subcontractors, shall not employ or engage a child under the age of 14 unless the national law specifies a higher age (the minimum age).
- 14.6 The Supplier, including its Subcontractors, shall not employ or engage a child between the minimum age and the age of 18 in a manner that is likely to be hazardous, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.
- 14.7 Work considered hazardous for children is work that, by its nature or the circumstances in which it is carried out, is likely to jeopardize the health, safety, or morals of children. Such work activities prohibited for children include work:
 - (a) with exposure to physical, psychological or sexual abuse;
 - (b) underground, underwater, working at heights or in confined spaces;
 - (c) with dangerous machinery, equipment or tools, or involving handling or transport of heavy loads;
 - (d) in unhealthy environments exposing children to hazardous substances, agents, or processes, or to temperatures, noise or vibration damaging to health; or

- (e) under difficult conditions such as work for long hours, during the night or in confinement on the premises of the employer.

- 14.8 The Supplier shall comply, and shall require its Subcontractors if any to comply, with all applicable health and safety regulations, laws, guidelines, and any other requirement stated in the Technical Specifications.
- 14.9 **Pursuant to the SCC**, the Supplier, including its Subcontractors/ suppliers/ manufacturers shall take all technical and organizational measures necessary to protect the information technology systems and data used in connection with the Contract. Without limiting the foregoing, the Supplier, including its Subcontractors/ suppliers/ manufacturers, shall use all reasonable efforts to establish, maintain, implement and comply with, reasonable information technology, information security, cyber security and data protection controls, policies and procedures, including oversight, access controls, encryption, technological and physical safeguards and business continuity/disaster recovery and security plans that are designed to protect against and prevent breach, destruction, loss, unauthorized distribution, use, access, disablement, misappropriation or modification, or other compromise or misuse of or relating to any information technology system or data used in connection with the Contract.
- 14.10 The Supplier shall comply with additional obligations as **specified in the SCC**.

15. Contract Price

- 15.1 Prices charged by the Supplier for the Goods supplied and the Related Services performed under the Contract shall not vary from the prices quoted by the Supplier in its Bid, with the exception of any price adjustments **authorized in the SCC**.

16. Terms of Payment

- 16.1 The Contract Price, including any Advance Payments, if applicable, shall be paid as **specified in the SCC**.
- 16.2 The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by invoices describing, as appropriate, the Goods delivered and Related Services performed, and by the documents submitted pursuant to GCC Clause 13 and upon fulfillment of all other obligations stipulated in the Contract.
- 16.3 Payments shall be made promptly by the Purchaser, but in no case later than sixty (60) days after submission of an invoice or request for payment by the Supplier, and after the Purchaser has accepted it.

16.4 The currencies in which payments shall be made to the Supplier under this Contract shall be those in which the Bid price is expressed.

16.5 In the event that the Purchaser fails to pay the Supplier any payment by its due date or within the period **set forth in the SCC**, the Purchaser shall pay to the Supplier interest on the amount of such delayed payment at the rate **shown in the SCC**, for the period of delay until payment has been made in full, whether before or after judgment or arbitration award.

17. Taxes and Duties

17.1 For goods manufactured outside the Purchaser's Country, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the Purchaser's Country.

17.2 For goods Manufactured within the Purchaser's Country, the Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser.

17.3 If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in the Purchaser's Country, the Purchaser shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.

18. Performance Security

18.1 If required as specified in the SCC, the Supplier shall, within twenty-eight (28) days of the notification of contract award, provide a performance security for the performance of the Contract in the amount **specified in the SCC**.

18.2 The proceeds of the Performance Security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

18.3 As specified in the SCC, the Performance Security, if required, shall be denominated in the currency (ies) of the Contract, or in a freely convertible currency acceptable to the Purchaser; and shall be in one of the format stipulated by the **Purchaser in the SCC**, or in another format acceptable to the Purchaser.

18.4 The Performance Security shall be discharged by the Purchaser and returned to the Supplier not later than twenty-eight (28) days following the date of Completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless **specified otherwise in the SCC**.

19. Copyright

19.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if

they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.

20. Confidential Information

- 20.1 The Purchaser and the Supplier shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above, the Supplier may furnish to its Subcontractor such documents, data, and other information it receives from the Purchaser to the extent required for the Subcontractor to perform its work under the Contract, in which event the Supplier shall obtain from such Subcontractor an undertaking of confidentiality similar to that imposed on the Supplier under GCC Clause 20.
- 20.2 The Purchaser shall not use such documents, data, and other information received from the Supplier for any purposes unrelated to the contract. Similarly, the Supplier shall not use such documents, data, and other information received from the Purchaser for any purpose other than the performance of the Contract.
- 20.3 The obligation of a party under GCC Sub-Clauses 20.1 and 20.2 above, however, shall not apply to information that:
- (a) the Purchaser or Supplier need to share with the Bank or other institutions participating in the financing of the Contract;
 - (b) now or hereafter enters the public domain through no fault of that party;
 - (c) can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party; or
 - (d) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.
- 20.4 The above provisions of GCC Clause 20 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Supply or any part thereof.

- 20.5 The provisions of GCC Clause 20 shall survive completion or termination, for whatever reason, of the Contract.

21. Subcontracting

- 21.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under the Contract if not already specified in the Bid. Notification by the Supplier, for addition of any Subcontractor not named in the Contract, shall also include the Subcontractor's declaration in accordance with Appendix 2 to the GCC- Sexual exploitation and Abuse (SEA) and/or Sexual Harassment (SH) Performance Declaration. Such notification, in the original Bid or later shall not relieve the Supplier from any of its obligations, duties, responsibilities, or liability under the Contract.
- 21.2 Subcontracts shall comply with the provisions of GCC Clauses 3 and 7.

22. Specifications and Standards

- 22.1 Technical Specifications and Drawings
- (a) The Goods and Related Services supplied under this Contract shall conform to the technical specifications and standards mentioned in Section VI, Schedule of Requirements and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the Goods' country of origin.
 - (b) The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.
 - (c) Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the Schedule of Requirements. During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Purchaser and shall be treated in accordance with GCC Clause 33.

23. Packing and Documents

- 23.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. During transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where

appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.

- 23.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, **specified in the SCC**, and in any other instructions ordered by the Purchaser.

24. Insurance

- 24.1 Unless otherwise **specified in the SCC**, the Goods supplied under the Contract shall be fully insured—in a freely convertible currency from an eligible country—against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery, in accordance with the applicable Incoterms or in the manner specified in the **SCC**.

25. Transportation and Incidental Services

- 25.1 Unless otherwise **specified in the SCC**, responsibility for arranging transportation of the Goods shall be in accordance with the specified Incoterms.
- 25.2 The Supplier may be required to provide any or all of the following services, including additional services, if any, **specified in SCC**:
- (a) performance or supervision of on-site assembly and/or start-up of the supplied Goods;
 - (b) furnishing of tools required for assembly and/or maintenance of the supplied Goods;
 - (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;
 - (d) performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
 - (e) training of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.
- 25.3 Prices charged by the Supplier for incidental services, if not included in the Contract Price for the Goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services

26. Inspections and Tests

- 26.1 The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services as are **specified in the SCC**.
- 26.2 The inspections and tests may be conducted on the premises of the Supplier or its Subcontractor, at point of delivery, and/or at the Goods' final destination, or in another place in the Purchaser's Country as **specified in the SCC**. Subject to GCC Sub-Clause 26.3, if conducted on the premises of the Supplier or its Subcontractor, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.
- 26.3 The Purchaser or its designated representative shall be entitled to attend the tests and/or inspections referred to in GCC Sub-Clause 26.2, provided that the Purchaser bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.
- 26.4 Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Purchaser. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.
- 26.5 The Purchaser may require the Supplier to carry out any test and/or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications codes and standards under the Contract, provided that the Supplier's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of manufacturing and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.
- 26.6 The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.
- 26.7 The Purchaser may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser, and shall

repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice pursuant to GCC Sub-Clause 26.4.

- 26.8 The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report pursuant to GCC Sub-Clause 26.6, shall release the Supplier from any warranties or other obligations under the Contract.

27. Liquidated Damages

- 27.1 Except as provided under GCC Clause 32, if the Supplier fails to deliver any or all of the Goods by the Date(s) of delivery or perform the Related Services within the period specified in the Contract, the Purchaser may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage **specified in the SCC** of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage **specified in those SCC**. Once the maximum is reached, the Purchaser may terminate the Contract pursuant to GCC Clause 35.

28. Warranty

- 28.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.
- 28.2 Subject to GCC Sub-Clause 22.1(b), the Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in the country of final destination.
- 28.3 Unless otherwise **specified in the SCC**, the warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination **indicated in the SCC**, or for eighteen (18) months after the date of shipment from the port or place of loading in the country of origin, whichever period concludes earlier.
- 28.4 The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.

28.5 Upon receipt of such notice, the Supplier shall, within the period **specified in the SCC**, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.

28.6 If having been notified, the Supplier fails to remedy the defect within the period **specified in the SCC**, the Purchaser may proceed to take within a reasonable period such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

29. Patent Indemnity

29.1 The Supplier shall, subject to the Purchaser's compliance with GCC Sub-Clause 29.2, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:

- (a) the installation of the Goods by the Supplier or the use of the Goods in the country where the Site is located; and
- (b) the sale in any country of the products produced by the Goods.

Such indemnity shall not cover any use of the Goods or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, neither any infringement resulting from the use of the Goods or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the Supplier, pursuant to the Contract.

29.2 If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred to in GCC Sub-Clause 29.1, the Purchaser shall promptly give the Supplier a notice thereof, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

29.3 If the Supplier fails to notify the Purchaser within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf.

29.4 The Purchaser shall, at the Supplier's request, afford all available assistance to the Supplier in conducting such proceedings or claim, and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.

29.5 The Purchaser shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Supplier may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Purchaser.

30. Limitation of Liability

- 30.1 Except in cases of criminal negligence or willful misconduct,
- (a) the Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser and
 - (b) the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the supplier to indemnify the Purchaser with respect to patent infringement

31. Change in Laws and Regulations

- 31.1 Unless otherwise specified in the Contract, if after the date of 28 days prior to date of Bid submission, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in the place of the Purchaser's Country where the Site is located (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already

been accounted for in the price adjustment provisions where applicable, in accordance with GCC Clause 15.

32. Force Majeure

- 32.1 The Supplier shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- 32.2 For purposes of this Clause, “Force Majeure” means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- 32.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

33. Change Orders and Contract Amendments

- 33.1 The Purchaser may at any time order the Supplier through notice in accordance GCC Clause 8, to make changes within the general scope of the Contract in any one or more of the following:
- (a) drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
 - (b) the method of shipment or packing;
 - (c) the place of delivery; and
 - (d) the Related Services to be provided by the Supplier.
- 33.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier’s performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery/Completion Schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this Clause must be asserted within twenty-eight (28) days from the date of the Supplier’s receipt of the Purchaser’s change order.
- 33.3 Prices to be charged by the Supplier for any Related Services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not

exceed the prevailing rates charged to other parties by the Supplier for similar services.

33.4 **Value Engineering:** The Supplier may prepare, at its own cost, a value engineering proposal at any time during the performance of the contract. The value engineering proposal shall, at a minimum, include the following;

- (a) the proposed change(s), and a description of the difference to the existing contract requirements;
- (b) a full cost/benefit analysis of the proposed change(s) including a description and estimate of costs (including life cycle costs) the Purchaser may incur in implementing the value engineering proposal; and
- (c) a description of any effect(s) of the change on performance/functionality.

The Purchaser may accept the value engineering proposal if the proposal demonstrates benefits that:

- (a) accelerates the delivery period; or
- (b) reduces the Contract Price or the life cycle costs to the Purchaser; or
- (c) improves the quality, efficiency or sustainability of the Goods; or
- (d) yields any other benefits to the Purchaser,

without compromising the necessary functions of the Facilities.

If the value engineering proposal is approved by the Purchaser and results in:

- (a) a reduction of the Contract Price; the amount to be paid to the Supplier shall be the percentage specified **in the PCC** of the reduction in the Contract Price; or
- (b) an increase in the Contract Price; but results in a reduction in life cycle costs due to any benefit described in (a) to (d) above, the amount to be paid to the Supplier shall be the full increase in the Contract Price.

33.5 Subject to the above, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

34. Extensions of Time

34.1 If at any time during performance of the Contract, the Supplier or its subcontractors should encounter conditions impeding timely delivery of the Goods or completion of Related Services pursuant to GCC Clause 13, the Supplier shall promptly notify

the Purchaser in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract.

- 34.2 Except in case of Force Majeure, as provided under GCC Clause 32, a delay by the Supplier in the performance of its Delivery and Completion obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 26, unless an extension of time is agreed upon, pursuant to GCC Sub-Clause 34.1.

35. Termination

35.1 Termination for Default

- (a) The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate the Contract in whole or in part:
 - (i) if the Supplier fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 34;
 - (ii) if the Supplier fails to perform any other obligation under the Contract; or
 - (iii) if the Supplier, in the judgment of the Purchaser has engaged in Fraud and Corruption, as defined in paragraph 2.2 a of the Appendix 1 to the GCC, in competing for or in executing the Contract.
- (b) In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 35.1(a), the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed, and the Supplier shall be liable to the Purchaser for any additional costs for such similar Goods or Related Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

35.2 Termination for Insolvency.

- (a) The Purchaser may at any time terminate the Contract by giving notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect

any right of action or remedy that has accrued or will accrue thereafter to the Purchaser

35.3 Termination for Convenience.

- (a) The Purchaser, by notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.
- (b) The Goods that are complete and ready for shipment within twenty-eight (28) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:
 - (i) to have any portion completed and delivered at the Contract terms and prices; and/or
 - (ii) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Related Services and for materials and parts previously procured by the Supplier.

36. Assignment

- 36.1 Neither the Purchaser nor the Supplier shall assign, in whole or in part, their obligations under this Contract, except with prior written consent of the other party.

**37. Export
Restriction**

- 37.1 Notwithstanding any obligation under the Contract to complete all export formalities, any export restrictions attributable to the Purchaser, to the country of the Purchaser, or to the use of the products/goods, systems or services to be supplied, which arise from trade regulations from a country supplying those products/goods, systems or services, and which substantially impede the Supplier from meeting its obligations under the Contract, shall release the Supplier from the obligation to provide deliveries or services, always provided, however, that the Supplier can demonstrate to the satisfaction of the Purchaser and of the Bank that it has completed all formalities in a timely manner, including applying for permits, authorizations and licenses necessary for the export of the products/goods, systems or services under the terms of the Contract. Termination of the Contract on this basis shall be for the Purchaser's convenience pursuant to Sub-Clause 35.3.

APPENDIX 1

(Text in this Appendix shall not be modified)

Fraud and Corruption

1. Purpose

1.1 The Bank's Anti-Corruption Guidelines and this annex apply with respect to procurement under Bank Investment Project Financing operations.

2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (applicants/proposers), consultants, contractors and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption.

2.2 To this end, the Bank:

- a. Defines, for the purposes of this provision, the terms set forth below as follows:
 - i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
 - ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
 - iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - v. "obstructive practice" is:
 - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
 - (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.

- b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Anti-Corruption Guidelines, and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;¹ (ii) to be a nominated² sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding/request for proposals documents and in contracts financed by a Bank loan, requiring (i) bidders (applicants/proposers), consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents, personnel, permit the Bank to inspect³ all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

¹ For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

² A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

³ Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

APPENDIX 2

Sexual Exploitation and Abuse (SEA) and/or Sexual Harassment (SH) Performance Declaration for Subcontractors*

[The following table shall be filled in by each subcontractor proposed by the Supplier, that was not named in the Contract]

Subcontractor's Name: *[insert full name]*

Date: *[insert day, month, year]*

Contract reference *[insert contract reference]*

Page *[insert page number]* of *[insert total number]* pages

SEA and/or SH Declaration
<p>We:</p> <p><input type="checkbox"/> (a) have not been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations.</p> <p><input type="checkbox"/> (b) are subject to disqualification by the Bank for non-compliance with SEA/ SH obligations.</p> <p><input type="checkbox"/> (c) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations, and were removed from the disqualification list. An arbitral award on the disqualification case has been made in our favor.</p>
<p><i>[If (c) above is applicable, attach evidence of an arbitral award reversing the findings on the issues underlying the disqualification.]</i></p>
<p>Period of disqualification: From: _____ To: _____</p>

Name of the Subcontractor _____

Name of the person duly authorized to sign on behalf of the Subcontractor _____

Title of the person signing on behalf of the Subcontractor _____

Signature of the person named above _____

Date signed _____ day of _____, _____

Countersignature of authorized representative of the Supplier:

Signature: _____

Date signed _____ day of _____, _____

Section IX - Special Conditions of Contract

The following Special Conditions of Contract (SCC) shall supplement and / or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

GCC 1.1(i)	The Purchaser's Country is: <i>India</i>
GCC 1.1(j)	The Purchaser is: Assam Health Infrastructure Development & Management Society
GCC 1.1 (o)	The Project Site(s)/Final Destination(s) is: Guwahati Medical College & Hospital Campus, Bhangagarh, Guwahati, Assam, India.
GCC 1.1 (p)	<p>The term SEA/SH where used in the Contract has the following meaning:</p> <ul style="list-style-type: none"> “Sexual Exploitation and Abuse” “(SEA)” means the following: Sexual Exploitation is defined as any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another. Sexual Abuse is defined as the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions. “Sexual Harassment” “(SH)” is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature by supplier's personnel with other supplier's, or purchaser's personnel.
GCC 1.1 (q)	<p>The term CMC where used in the Contract has the following meaning:</p> <p>Comprehensive Maintenance Contract (CMC) which includes both preventive and breakdown maintenance for equipment, including all but not limited to replacement parts, consumables, special tools & tackles, calibration equipment, Specialized service engineer, labor etc. CMC period shall start after the end of Comprehensive Warranty Period.</p>
GCC 4.2 (a)	The meaning of the trade terms shall be as prescribed by Incoterms. If the meaning of any trade term and the rights and obligations of the parties thereunder shall not be as prescribed by Incoterms, they shall be as prescribed by: CIP
GCC 4.2 (b)	The version edition of Incoterms shall be 2020
GCC 5.1	The language shall be: English

GCC 8.1	<p>For notices, the Purchaser's address shall be:</p> <p>Attention: Project Director, AHIDM Society</p> <p>Address: Nayantara Super Market, Sixmile, Khanapara,</p> <p>Floor/Room number: 4th Floor</p> <p>City: Guwahati</p> <p>ZIP Code: 781022</p> <p>Country: : India</p> <p>Telephone: +913613501033</p> <p>Electronic mail address: pmu.ahidms@gmail.com</p>
GCC 9.1	The governing law shall be the law of: <i>India</i>
GCC 10.2	<p>The rules of procedure for arbitration proceedings pursuant to GCC Clause 10.2 shall be as follows:</p> <p>(a) Contract with foreign Supplier:</p> <p><i>If the Purchaser chooses the UNCITRAL Arbitration Rules, the following sample clause should be inserted:</i></p> <p>GCC 10.2 (a)—Any dispute, controversy or claim arising out of or relating to this Contract, or breach, termination or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules as at present in force.</p> <p>(b) Contracts with Supplier national of the Purchaser's Country:</p> <p>In the case of a dispute between the Purchaser and a Supplier who is a national of the Purchaser's Country, the dispute shall be referred to adjudication or arbitration in accordance with the laws of the Purchaser's Country.</p>
GCC 13.1	<p>Details of Shipping and other Documents to be furnished by the Supplier are</p> <ol style="list-style-type: none"> 1. A negotiable bill of lading 2. A non-negotiable sea way bill, 3. A road/Rail consignment note 4. Insurance certificate, 5. Manufacturer's warranty certificate, 6. Inspection certificate issued by Manufactures, 7. Supplier's factory shipping details etc. 8. Parts Catalogue

	<p>9. Exploded drawing of each component of Proton Therapy System.</p> <p>10. User and Service manual; trouble shooting manual.</p> <p>11. Periodic Maintenance Schedule.</p> <p>12. Training manual for use of Proton Therapy System.</p> <p>13. All other documents mentioned in the Technical Specification</p> <p>The above documents shall be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.</p>
GCC 14.9	Cyber Security applies

GCC 14.10	<p>GCC 14.10.1 The Supplier shall have a code of conduct, and provide appropriate sensitization, for the Supplier's personnel carrying out installation, operation during training phase, maintenance that include, but not limited to, maintaining a safe working environment and not engaging in the following practices:</p> <ul style="list-style-type: none"> (i) any form of sexual harassment including unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature with other Supplier's or Purchaser's personnel; (ii) any form of sexual exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another; (iii) any form of sexual abuse, which means the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions; and (iv) any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage. <p>GCC 14.10.2 The Purchaser may require the Supplier to remove (or cause to be removed), from the site or other places where the installation, operation during training phase, maintenance is being executed, a Supplier's personnel that undertakes behaviors that are inconsistent with the code of conduct stated in GCC 14.9.1. Notwithstanding any requirement from the Purchaser to replace any such person, the Supplier shall immediately remove (or cause to be removed) any such person, from the site or other places where the installation, operation during training phase, maintenance is being executed. In either case, the Supplier shall promptly appoint, as appropriate, a suitable replacement with equivalent skills and experience.</p>
GCC 15.1	<p>The prices charged for the Goods supplied and the related Services performed shall not be adjustable.</p>
GCC 16.1	<p>GCC 16.1—The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:</p> <p>Payment for Goods supplied from abroad:</p>

	<p>Payment of foreign currency portion shall be made in (_____) [<i>currency of the Contract Price</i>] in the following manner:</p> <ul style="list-style-type: none"> (i) Advance Payment: Ten (10) percent of the Contract Price minus cost of 5 years CMC shall be paid within thirty (30) days of signing of the Contract, and upon submission of Integrated building design for civil construction including Good For Construction (GFC) drawing, Electrical, Mechanical, Plumbing drawing, Interior drawing, Bill of Quantity etc., Copy of Contract with Supervision engineers who will supervise during construction phase, claim for and a bank guarantee for equivalent amount valid until the Goods are commissioned and in the form provided in the bidding document or another form acceptable to the Purchaser. (ii) On Shipment: Twenty (20) percent of the Contract Price minus cost of 5 years CMC of the Goods shipped shall be paid through irrevocable confirmed letter of credit opened in favor of the Supplier in a bank in its country or through Bank transfer to the supplier account, upon submission of documents specified in GCC Clause 13 and submission of a bank guarantee for equivalent amount valid until the Goods are commissioned and in the form provided in the bidding document or another form acceptable to the Purchaser. (iii) On Acceptance: Seventy (70) percent of the Contract Price minus cost of 5 years CMC of Goods received shall be paid within thirty (30) days of receipt of the Goods upon submission of claim supported by the acceptance certificate issued by the Purchaser. <p>Payment of local currency portion shall be made in Indian Rupees within thirty (30) days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed.</p> <p>Payment for Goods and Services supplied from within the Purchaser's Country:</p> <p>Payment for Goods and Services supplied from within the Purchaser's Country shall be made in Indian Rupees, as follows:</p> <p>Advance Payment: Ten (10) percent of the Contract Price minus cost of 5 years CMC shall be paid within thirty (30) days of signing of the Contract, and upon submission of Integrated building design for civil construction including Good For Construction (GFC) drawing, Electrical, Mechanical, Plumbing drawing, Interior drawing, Bill of Quantity etc., Copy of Contract with Supervision engineers who will supervise during construction phase, claim for and a bank guarantee for equivalent amount</p>
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	<p>valid until the Goods are Commissioned and in the form provided in the bidding document or another form acceptable to the Purchaser.</p> <p>(ii) On Shipment: Twenty (20) percent of the Contract Price minus cost of 5 years CMC of the Goods shipped shall be paid through irrevocable confirmed letter of credit opened in favor of the Supplier in a bank in its country or through Bank transfer to the supplier account, upon submission of documents specified in GCC Clause 13 and and submission of a bank guarantee for equivalent amount valid until the Goods are commissioned and in the form provided in the bidding document or another form acceptable to the Purchaser</p> <p>(iii) On Acceptance: Seventy (70) percent of the Contract Price minus cost of 5 years CMC received shall be paid within thirty (30) days of receipt of the Goods upon submission of claim supported by the acceptance certificate issued by the Purchaser.</p> <p>Payment for CMC service shall be paid on yearly basis on completion of a year service at the yearly quoted rate and currency</p>
GCC 16.5	<p>The payment-delay period after which the Purchaser shall pay interest to the supplier shall be 90 days.</p> <p>The interest rate that shall be applied is as per the prevailing savings account interest rate (non-sr.citizen) of State Bank of India for per month of delay</p>
GCC 18.1	<p>Performance Securities shall be required as below:</p> <p>Performance Security upto end of CMC period shall be: 15% of Contract Value</p>
GCC 18.3	<p>Performance Security shall be in the form of a Demand/Bank Guarantee issued from a Indian Bank or from a foreign bank having branch/intermediary branch in Assam.</p> <p>The Performance security shall be denominated in “Indian Rupees”</p>
GCC 18.4	<p>Discharge of the Performance Securities shall take place as below:</p> <p>1) Performance Security up to end of CMC period shall be released 45 days following the date of completion of the Supplier’s performance obligations under the contract up to end of CMC period.</p>

GCC 23.2	<p>The packing, marking and documentation within and outside the packages shall be:</p> <p>All packing must be as per international standard of shipping procured class of goods and capable of withstand the vigor of multiple mode of transportation and handling.</p> <p>Each package will be marked on three sides with proper paint/indelible ink with the following:</p> <p>(i) Project; (ii) Contract No.; (iii) Supplier's Name; (iv) Packing List Reference Number.</p>
GCC 24.1	The insurance coverage shall be as specified in the Incoterms.
GCC 25.1	Responsibility for transportation of the Goods shall be as specified in the Incoterms.
GCC 25.2	Incidental services to be provided are: As mentioned in GCC 25.2
GCC 26.1	The inspections and tests shall be in accordance with the regulatory guidelines of AERB
GCC 26.2	The Inspections and tests shall be conducted at: Guwahati, Assam, India
GCC 27.1	The liquidated damage shall be: 0.5% per week, in case delay is beyond the delivery schedule mentioned in "List of Goods & Delivery Schedule" in Section VII-Schedule & Requirement

GCC 27.1

The maximum amount of liquidated damages for delay shall be: 5%, in case delay is beyond the delivery schedule mentioned in “List of Goods & Delivery Schedule” in Section VII-Schedule & Requirement

Following provisions are added to GCC 27.1

In case bidder fails to comply, the technical requirement mentioned in the rated criteria (Technical Requirement), following damage shall be levied. Once the maximum damages are reached, the Purchaser may proceed with termination of the contract :

(i) Where RCP is not applicable i.e. evaluated price of Most Advantageous Bid provided the Bidder is the lowest of all Evaluated Bid Prices among responsive Bids, following damages shall be levied :

Technical Factor	Offered Value	Maximum Damages for Not Complying
Warranty Offered by the bidder beyond the minimum warranty of 2 years as stipulated		2.5% of contract Value (minus CMC Value)
Working Hours Per Day for the proton beam therapy unit		0.05% of contract Value (minus CMC Value) per occasion maximum of 0.5% of contract value (minus CMC value)
Preventive Maintenance Days for the proton beam therapy unit in a Year		0.05% of contract Value (minus CMC Value) per occasion maximum of 0.5% of contract value (minus CMC value)

	Onsite Availability of Spare Parts (Percentage of the total Spare Part)		0.05% of contract Value (minus CMC Value) per occasion maximum of 0.5% of contract value (minus CMC value)
	Uptime Committed in Percentage during CMC for the proton beam therapy unit (to be monitored on daily basis and assessed monthly to determine the actual uptime)		0.05 % of contract value per hour with maximum penalty of 15% of overall contract value
	Early commissioning of Equipment (Which is prior to 1 months from the date of intimation to supply whole or part of the goods)		0.25% of contract Value (minus CMC Value)
	Response time to attend breakdown of maintenance (Time taken to attend the complaint from the time of reported breakdown)		0.05% of contract Value (minus CMC Value) per occasion maximum of 0.25% of contract value (minus CMC value)
	(i) Where RCP is applicable i.e. evaluated price of Most Advantageous Bid provided the Bidder is not the lowest of all Evaluated Bid Prices among responsive Bids, following damages shall be levied :		
Technical Factor		Offered Value	Maximum Damages for Not Complying
Warranty Offered by the bidder beyond the minimum warranty of 2 years stipulated			2.5% of contract Value (minus CMC Value)

			<i>Plus 50% of RCP</i>
	Working Hours Per Day for the proton beam therapy unit		<i>0.05% of contract Value (minus CMC Value) Plus 1% of RCP per occasion Subject to maximum of 0.5% of contract Value (minus CMC Value) Plus 10% of RCP</i>
	Preventive Maintenance Days for the proton beam therapy unit in a Year		<i>0.05% of contract Value (minus CMC Value) Plus 1% of RCP per occasion Subject to maximum of 0.5% of contract Value (minus CMC Value) Plus 10% of RCP</i>
	Onsite Availability of Spare Parts (Percentage of the total Spare Part)		<i>0.05% of contract Value (minus CMC Value) Plus 0.5% of RCP per occasion Subject to maximum of 0.5% of contract Value (minus CMC Value)</i>

			<i>Plus 5% of RCP</i>
	Uptime Committed in Percentage during CMC for the proton beam therapy unit (to be monitored on daily basis and assessed monthly to determine the actual uptime)		<i>0.05 % of contract value per hour with maximum penalty of 15% of overall contract value</i>
	Early commissioning of Equipment (Which is prior to 1 months from the date of intimation to supply whole or part of the goods)		<i>2.5% of contract Value (minus CMC Value) Plus 5% of RCP</i>
	Response time to attend breakdown of maintenance (Time taken to attend the complaint from the time of reported breakdown)		<i>0.05% of contract Value (minus CMC Value) Plus 0.5% of RCP per occasion Subject to maximum of 0.25% of contract Value (minus CMC Value) Plus 5% of RCP</i>
GCC 28.3	<p>Unless otherwise provided warranty for longer period under the rated criteria, the minimum mandatory warranty period shall be 24 months from date of acceptance of the Goods. For purposes of the Warranty, the place(s) of final destination(s) shall be:</p> <p>Guwahati, Assam, India</p> <p>If, for reasons attributable to the Supplier, this warranty is not attained in whole or in part, the Supplier shall, at its discretion, either:</p> <p>(a) make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests in accordance with GCC 26.7,</p>		

	or (b) pay liquidated damages to the Purchaser with respect to the failure to meet the contractual guarantees. The rate of these liquidated damages shall be 0.05% of contract value per occasion subject to maximum of 15% of contract value.
GCC 28.5 & 28.6	The period for repair or replacement shall be: 24 Hours.
GCC 33.4	Not applicable

Attachment: Price Adjustment Formula (Not Applicable)

Section X - Contract Forms

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Notification of Intention to Award

[This Notification of Intention to Award shall be sent to each Bidder that submitted a Bid, unless the Bidder has previously received notice of exclusion from the process at an interim stage of the procurement process.]

[Send this Notification to the Bidder's Authorized Representative named in the Bidder Information Form]

For the attention of Bidder's Authorized Representative

Name: *[insert Authorized Representative's name]*

Address: *[insert Authorized Representative's Address]*

Telephone/Fax numbers: *[insert Authorized Representative's telephone/fax numbers]*

Email Address: *[insert Authorized Representative's email address]*

[IMPORTANT: insert the date that this Notification is transmitted to Bidders. The Notification must be sent to all Bidders simultaneously. This means on the same date and as close to the same time as possible.]

DATE OF TRANSMISSION: This Notification is sent by: *[email/fax]* on *[date]* (local time)

Notification of Intention to Award

Purchaser: *[insert the name of the Purchaser]*

Project: *[insert name of project]*

Contract title: *[insert the name of the contract]*

Country: *[insert country where RFB is issued]*

Loan No. /Credit No. / Grant No.: *[insert reference number for loan/credit/grant]*

RFB No: *[insert RFB reference number from Procurement Plan]*

This Notification of Intention to Award (Notification) notifies you of our decision to award the above contract. The transmission of this Notification begins the Standstill Period. During the Standstill Period you may:

- a) request a debriefing in relation to the evaluation of your Bid, and/or
- b) submit a Procurement-related Complaint in relation to the decision to award the contract.

1. The successful Bidder

Name:	<i>[insert name of successful Bidder]</i>
Address:	<i>[insert address of the successful Bidder]</i>
Contract price:	<i>[insert contract price of the successful Bid]</i>

Total combined score:	<i>[insert the total combined score of the successful Bidder]</i>
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2. Other Bidders *[INSTRUCTIONS: insert names of all Bidders that submitted a Bid, Bid prices as read out and evaluated, technical scores and combined scores.]*

Name of Bidder	Technical Score	Bid Price	Evaluated Bid Cost	Combined Score
<i>[insert name]</i>	<i>[insert Technical score]</i>	<i>[insert Bid price]</i>	<i>[insert evaluated cost]</i>	<i>[insert combined score]</i>
<i>[insert name]</i>	<i>[insert Technical score]</i>	<i>[insert Bid price]</i>	<i>[insert evaluated cost]</i>	<i>[insert combined score]</i>
<i>[insert name]</i>	<i>[insert Technical score]</i>	<i>[insert Bid price]</i>	<i>[insert evaluated cost]</i>	<i>[insert combined score]</i>
<i>[insert name]</i>	<i>[insert Technical score]</i>	<i>[insert Bid price]</i>	<i>[insert evaluated cost]</i>	<i>[insert combined score]</i>
<i>[insert name]</i>	<i>[insert Technical score]</i>	<i>[insert Bid price]</i>	<i>[insert evaluated cost]</i>	<i>[insert combined score]</i>

3. Reason/s why your Bid was unsuccessful *[Delete if the combined score already reveals the reason]*

[INSTRUCTIONS: State the reason/s why this Bidder's Bid was unsuccessful. Do NOT include: (a) a point by point comparison with another Bidder's Bid or (b) information that is marked confidential by the Bidder in its Bid.]

4. How to request a debriefing

DEADLINE: The deadline to request a debriefing expires at midnight on *[insert date]* (local time).

You may request a debriefing in relation to the results of the evaluation of your Bid. If you decide to request a debriefing your written request must be made within three (3) Business Days of receipt of this Notification of Intention to Award.

Provide the contract name, reference number, name of the Bidder, contact details; and address the request for debriefing as follows:

Attention: *[insert full name of person, if applicable]*

Title/position: *[insert title/position]*

Agency: *[insert name of Purchaser]*

Email address: *[insert email address]*

Fax number: *[insert fax number] delete if not used*

If your request for a debriefing is received within the 3 Business Days deadline, we will provide the debriefing within five (5) Business Days of receipt of your request. If we are unable to provide the debriefing within this period, the Standstill Period shall be extended by five (5) Business Days after the date that the debriefing is provided. If this happens, we will notify you and confirm the date that the extended Standstill Period will end.

The debriefing may be in writing, by phone, video conference call or in person. We shall promptly advise you in writing how the debriefing will take place and confirm the date and time.

If the deadline to request a debriefing has expired, you may still request a debriefing. In this case, we will provide the debriefing as soon as practicable, and normally no later than fifteen (15) Business Days from the date of publication of the Contract Award Notice.

5. How to make a complaint

Period: Procurement-related Complaint challenging the decision to award shall be submitted by midnight, *[insert date]* (local time).

Provide the contract name, reference number, name of the Bidder, contact details; and address the Procurement-related Complaint as follows:

Attention: *[insert full name of person, if applicable]*

Title/position: *[insert title/position]*

Agency: *[insert name of Purchaser]*

Email address: *[insert email address]*

Fax number: *[insert fax number] delete if not used*

At this point in the procurement process, you may submit a Procurement-related Complaint challenging the decision to award the contract. You do not need to have requested, or received, a debriefing before making this complaint. Your complaint must be submitted within the Standstill Period and received by us before the Standstill Period ends.

Further information:

For more information see the [Procurement Regulations for IPF Borrowers \(Procurement Regulations\)](#) (Annex III). You should read these provisions before preparing and submitting your complaint. In addition, the World Bank's Guidance "[How to make a Procurement-related Complaint](#)" provides a useful explanation of the process, as well as a sample letter of complaint.

In summary, there are four essential requirements:

1. You must be an 'interested party'. In this case, that means a Bidder who submitted a Bid in this bidding process, and is the recipient of a Notification of Intention to Award.
2. The complaint can only challenge the decision to award the contract.
3. You must submit the complaint within the period stated above.
4. You must include, in your complaint, all of the information required by the Procurement Regulations (as described in Annex III).

6. Standstill Period

DEADLINE: The Standstill Period is due to end at midnight on [*insert date*] (local time).

The Standstill Period lasts ten (10) Business Days after the date of transmission of this Notification of Intention to Award.

The Standstill Period may be extended as stated in Section 4 above.

If you have any questions regarding this Notification please do not hesitate to contact us.

On behalf of the Purchaser:

Signature: _____

Name: _____

Title/position: _____

Telephone: _____

Email: _____

Beneficial Ownership Disclosure Form

INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE FORM

This Beneficial Ownership Disclosure Form (“Form”) is to be completed by the successful Bidder¹. In case of joint venture, the Bidder must submit a separate Form for each member. The beneficial ownership information to be submitted in this Form shall be current as of the date of its submission.

For the purposes of this Form, a Beneficial Owner of a Bidder is any natural person who ultimately owns or controls the Bidder by meeting one or more of the following conditions:

- *directly or indirectly holding 25% or more of the shares*
- *directly or indirectly holding 25% or more of the voting rights*
- *directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder*

RFB No.: [insert number of RFB process]

Request for Bid No.: [insert identification]

To: [insert complete name of Purchaser]

In response to your request in the Letter of Acceptance dated [insert date of letter of Acceptance] to furnish additional information on beneficial ownership: [select one option as applicable and delete the options that are not applicable]

(i) we hereby provide the following beneficial ownership information.

Details of beneficial ownership

Identity of Beneficial Owner	Directly or indirectly holding 25% or more of the shares (Yes / No)	Directly or indirectly holding 25 % or more of the Voting Rights (Yes / No)	Directly or indirectly having the right to appoint a majority of the board of the directors or an equivalent governing body of the Bidder (Yes / No)
[include full name (last, middle, first), nationality, country of residence]			

OR

(ii) *We declare that there is no Beneficial Owner meeting one or more of the following conditions:*

- directly or indirectly holding 25% or more of the shares
- directly or indirectly holding 25% or more of the voting rights
- directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder

OR

(iii) *We declare that we are unable to identify any Beneficial Owner meeting one or more of the following conditions. [If this option is selected, the Bidder shall provide explanation on why it is unable to identify any Beneficial Owner]*

- directly or indirectly holding 25% or more of the shares
- directly or indirectly holding 25% or more of the voting rights
- directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder]

Name of the Bidder: **[insert complete name of the Bidder]*_____

Name of the person duly authorized to sign the Bid on behalf of the Bidder: ***[insert complete name of person duly authorized to sign the Bid]*_____

Title of the person signing the Bid: *[insert complete title of the person signing the Bid]*_____

Signature of the person named above: *[insert signature of person whose name and capacity are shown above]*_____

Date signed *[insert date of signing]* **day of** *[insert month]*, *[insert year]*_____

* In the case of the Bid submitted by a Joint Venture specify the name of the Joint Venture as Bidder. In the event that the Bidder is a joint venture, each reference to "Bidder" in the Beneficial Ownership Disclosure Form (including this Introduction thereto) shall be read to refer to the joint venture member.

** Person signing the Bid shall have the power of attorney given by the Bidder. The power of attorney shall be attached with the Bid Schedules.

Letter of Acceptance

[letterhead paper of the Purchaser]

[date]

To: *[name and address of the Supplier]*

Subject: ***Notification of award Contract No.***

This is to notify you that your Bid dated *[insert date]* for execution of the
[insert name of the contract and identification number, as given in the SCC] for
the Accepted Contract Amount of ***[insert amount in numbers and words and name
of currency]***, as corrected and modified in accordance with the Instructions to Bidders is
hereby accepted by our Agency.

You are requested to furnish (i) the Performance Security within 28 days in accordance with
the Conditions of Contract, using for that purpose one of the Performance Security Forms
and (ii) the additional information on beneficial ownership in accordance with ITB 48.1
within eight (8) Business days using the Beneficial Ownership Disclosure Form, included in
Section X, - Contract Forms, of the Bidding Document.

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Agency: _____

Attachment: Contract Agreement

Contract Agreement

[The successful Bidder shall fill in this form in accordance with the instructions indicated]

THIS AGREEMENT made the [insert: **number**] day of [insert: **month**], [insert: **year**].

BETWEEN

- (1) [insert complete name of Purchaser], a [insert description of type of legal entity, for example, an agency of the Ministry of.... of the Government of { insert name of Country of Purchaser }], or corporation incorporated under the laws of { insert name of Country of Purchaser }] and having its principal place of business at [insert address of Purchaser] (hereinafter called “the Purchaser”), of the one part, and
- (2) [insert name of Supplier], a corporation incorporated under the laws of [insert: country of Supplier] and having its principal place of business at [insert: address of Supplier] (hereinafter called “the Supplier”), of the other part:

WHEREAS the Purchaser invited Bids for certain Goods and ancillary services, viz., [insert brief description of Goods and Services] and has accepted a Bid by the Supplier for the supply of those Goods and Services

The Purchaser and the Supplier agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other contract documents.
 - (a) the Letter of Acceptance
 - (b) Letter of Bid - Technical Part
 - (c) Letter of Bid - Financial Part
 - (d) the Addenda Nos. _____ (if any)
 - (e) Special Conditions of Contract
 - (f) General Conditions of Contract
 - (g) the Specification (including Schedule of Requirements and Technical Specifications)
 - (h) the completed Schedules (including Price Schedules)
 - (i) any other document listed in GCC as forming part of the Contract

3. In consideration of the payments to be made by the Purchaser to the Supplier as specified in this Agreement, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of *[insert the name of the Contract governing law country]* on the day, month and year indicated above.

For and on behalf of the Purchaser:

Signed: *[insert signature]*

in the capacity of *[insert title or other appropriate designation]*

in the presence of *[insert identification of official witness]*

For and on behalf of the Supplier:

Signed: *[insert signature of authorized representative(s) of the Supplier]*

in the capacity of *[insert title or other appropriate designation]*

in the presence of *[insert identification of official witness]*

Performance Security

Option 1: (Bank Guarantee)

[The bank, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated]

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: *[insert name and Address of Purchaser]*

Date: *[Insert date of issue]*

PERFORMANCE GUARANTEE No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that _ *[insert name of Supplier, which in the case of a joint venture shall be the name of the joint venture]* (hereinafter called "the Applicant") has entered into Contract No. *[insert reference number of the contract]* dated *[insert date]* with the Beneficiary, for the supply of _ *[insert name of contract and brief description of Goods and related Services]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in figures]* (_____) *[insert amount in words]*,¹ such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the Day of, 2...², and any demand for payment under it must be received by us at this office indicated above on or before that date.

¹ The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, and denominated either in the currency (ies) of the Contract or a freely convertible currency acceptable to the Beneficiary.

² Insert the date twenty-eight days after the expected completion date as described in GC Clause 18.4. The Purchaser should note that in the event of an extension of this date for completion of the Contract, the Purchaser would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

guarantee, the Purchaser might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

Advance Payment Security

Demand Guarantee

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: *[Insert name and Address of Purchaser]*

Date: *[Insert date of issue]*

ADVANCE PAYMENT GUARANTEE No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that *[insert name of Supplier, which in the case of a joint venture shall be the name of the joint venture]* (hereinafter called "the Applicant") has entered into Contract No. *[insert reference number of the contract]* dated *[insert date]* with the Beneficiary, for the execution of *[insert name of contract and brief description of Goods and related Services]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum *[insert amount in figures]* () *[insert amount in words]* is to be made against an advance payment guarantee.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in figures]* (____) *[insert amount in words]*¹ upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:

- (a) has used the advance payment for purposes other than toward delivery of Goods;
or
- (b) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.

¹ *The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency(ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Purchaser.*

A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the advance payment referred to above has been credited to the Applicant on its account number *[insert number]* at *[insert name and address of Applicant's bank]*.

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Applicant as specified in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount, has been certified for payment, or on the *[insert day]* day of *[insert month]*, 2 *[insert year]*, whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No.758, except that the supporting statement under Article 15(a) is hereby excluded.

[signature(s)]

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