

GOVERNMENT OF WEST BENGAL
IRRIGATION AND WATERWAYS DEPARTMENT
NATIONAL HYDROLOGY PROJECT
WORLD BANK FUNDED
NATIONAL COMPETITIVE BIDDING FOR
(Two-Envelope Bidding Process with e-Procurement)

“Supply, Installation, Testing and Commissioning of Surface Velocity Radar and Water Level Radar for real time monitoring of river discharge including comprehensive Annual Maintenance Contract for 4 years (after 1 year warranty) under National Hydrology Project”

Bid Reference	:	Memo No: 489/NHP-02/02 Date: 14.11.2019
Tender documents	:	Can be downloaded from Website www.wbtenders.gov.in
Online Bid Submission Starting date & time	:	09.12.2019; 11:00 HRS
Online Bid Submission Closing date & time	:	13.12.2019; 15:00 HRS
Bid Clarification Starting date & time	:	14.11.2019; 17:00 HRS
Bid Clarification Closing date & time	:	27.11.2019; 15:00 HRS
Pre Bid Meeting date, time & venue	:	28.11.2019; 11:30 HRS The Superintending Engineer, Investigation & Planning Circle-II, Jalasampad Bhawan, 5th Floor, Block-DF, Sector - I, Salt Lake City, Kolkata-700 091 Telephone: +91332358716 Facsimile number: +91332358716 Electronic mail address: seip2iwd@gmail.com Contact Persons: Sri Tapan Biswas (Superintending Engineer) Sri Manas Khan, (Executive Engineer)
Last date and time of Receipt of relevant document as mentioned (IFB) by Speed Post/Courier/by hand.	:	13.12.2019; 15:00 HRS
Date, Time and Venue of Opening of Bids	:	13.12.2019; 15:30 HRS O/O The Superintending Engineer, Investigation & Planning Circle-II, Jalasampad Bhawan, 5th Floor, Block-DF, Sector - I, Salt Lake City, Kolkata-700 091,

SECTION I: INVITATION FOR BIDS (IFB)

NATIONAL COMPETITIVE BIDDING FOR

“Supply, Installation, Testing and Commissioning of Surface Velocity Radar and Water Level Radar for real time monitoring of river discharge including comprehensive Annual Maintenance Contract for 4 years (after 1 year warranty) under UNDER NATIONAL HYDROLOGY PROJECT”

(Two-Envelope Bidding Process with e-Procurement)

INVITATION FOR BIDS (IFB)

E-Procurement Notice

Memo No : 489/NHP-02/02

Date: 14.11.2019

IBRD Loan No.	: 8725IN
Package No	: NHP-2018-2019-WBSW-664351-GO-SH-SCB
IFB No.	: WBIW/NHP/IFB-09/2019-20

1. This Invitation For Bid follows the General Procurement Notice for this Project that appeared in Development Business on 9th March, 2017
2. The Government of India has received financing from the World Bank towards the cost of National Hydrology project and it is intended that part of the proceeds will be applied to eligible payments under the contract for **“Supply, Installation, Testing and Commissioning of Surface Velocity Radar and Water Level Radar for real time monitoring of river discharge including comprehensive Annual Maintenance Contract for 4 years (after 1 year warranty) under NATIONAL HYDROLOGY PROJECT”**.
3. *The Executive Engineer, Burdwan Investigation & Planning Division I&W Department, Govt. of West Bengal* now invites online bids from eligible bidders for **“Supply, Installation, Testing and Commissioning of Surface Velocity Radar and Water Level Radar for real time monitoring of river discharge including comprehensive Annual Maintenance Contract for 4 years (after 1 year warranty) under NATIONAL HYDROLOGY PROJECT”**.
4. *Bidding will be conducted through the National Competitive Bidding (NCB) procedures agreed with the World Bank. The bidding is open to all eligible bidders as defined in the Bank’s Procurement Guidelines. In addition, please refer to paragraphs 1.6 and 1.7 of the Guidelines setting forth the World Bank’s policy on conflict of interest.*
5. **Bidding documents are available online on www.wbtenders.gov.in for a non-refundable fee as indicated below, in the form of Demand Draft/Cashier's cheque/Certified cheque on any Scheduled/Nationalized bank payable at Burdwan in favour of The Executive Engineer, Burdwan Investigation & Planning Division, Govt. of West Bengal. Demand Draft to be submitted subsequently as per the procedure described in paragraph 7 below). Bidders will be required to register in the website, which is free of cost. The bidder would be responsible for ensuring that any addenda available on the website is also downloaded and incorporated.**
 - (a) Price of bidding document: Nil
 - (b) Online Bid Submission Starting date & time: 09.12.2019; 11:00 HRS
 - (c) Online Bid Submission Closing date & time: 13.12.2019; 15:00 HRS
 - (d) Last date and time of receipt of relevant document as mentioned (IFB) by Speed Post/Courier/by hand : 13.12.2019, 15:00 HRS
 - (e) Time and date of opening of bids : **13.12.2019, 15:30 HRS**

For submission of the bids, the bidder is required to have Digital Signature Certificate (DSC) from one of the authorized Certifying Authorities, authorised 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.wbtenders.gov.in**

6. Bids security of the amount specified in the bidding document, drawn in favour of The Executive Engineer, Burdwan Investigation & Planning Division, I&W Department Address: Purta Bhavan, 3rdFloor, Purba Bardhaman, 713103, WEST BENGAL be submitted as per the procedure described in paragraph 7 below. The Bid security will have to be in any one of the forms as specified in the bidding document and shall have to be valid for 45 days beyond the original validity period of the bids. Bids must be submitted online on www.wbtenders.gov.in or before the date and time for receipt of bids, and will be opened online on the specified time and date for opening of bids, as given above. 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. The electronic bidding system would not allow any late submission of bids.

7. The bidders are required to submit **(a) original power of attorney (b) original bid security in approved form; and (c) original affidavit regarding correctness of information** furnished with bid document with The Executive Engineer, Burdwan Investigation & Planning Division, I&W Department before the opening of the Bid given above, either by registered post/speed post/courier or by hand, failing which the bids will be declared non-responsive and will not be opened.

8. 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.

Seal of Office & Address

O/o The Executive Engineer, Burdwan Inv. & Planning Division,
I&W Department, Purta Bhavan, 3rd Floor, Purba Bardhaman,
713103, WEST BENGAL

E mail: eebipd2012@gmail.com

Tel: 0342 2646799

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PART 1 – BIDDING PROCEDURES

SECTION I – INSTRUCTIONS TO BIDDERS [ITB]

Section I. Instructions to Bidders

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Section I. Instructions to Bidders

A. General

1. Scope of Bid

- 1.1 The Purchaser **indicated in the Bidding Data Sheet (BDS)**, issues these Bidding Documents for the supply of Goods and Related Services incidental thereto as specified in Section VII, Schedule of Requirements. The name, identification and number of lots (contracts) of this National Competitive Bidding (NCB) procurement are **specified in the BDS**.
- 1.2 Throughout these Bidding Documents:
 - (a) the term “in writing” means communicated in written form (e.g. by mail, e-mail, fax, telex, including if **specified in the BDS**, distributed or received through the electronic-procurement system used by the Employer) with proof of receipt;
 - (b) if the context so requires, “singular” means “plural” and vice versa; and
 - (c) “day” means calendar day.

2. Source of Funds

- 2.1 The Government of India (hereinafter called “Borrower”) **specified in the BDS** has received financing (hereinafter called “funds”) from the International Bank for Reconstruction and Development (hereinafter called “the Bank”) in an amount **specified in 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 these Bidding Documents are 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 or other financing) account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import, to the knowledge of the Bank, is prohibited by 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 funds.

**3. Corrupt
&Fraudulent
Practices**

- 3.1 The Bank requires compliance with its policy in regard to corrupt and fraudulent practices as set forth in Section VI.
- 3.2 In further pursuance of this policy, Bidders shall permit and shall cause its agents (whether declared or not), sub-contractors, sub-consultants, service providers or suppliers and to permit the Bank to inspect all accounts, records and other documents relating to the submission of the application, bid submission (in case prequalified), 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, or a government owned entity subject to ITB 4.5.
- 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. participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which such Bidder is involved. However, this does not limit the inclusion of the same subcontractor in more than one bid; or
 - F. any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the goods/equipment that are the subject of the bid; or
 - G. any of its affiliates has been hired (or is proposed to be hired) by the Purchaser or Borrower for the Contract implementation; or
 - h. 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 ITB 2.1 that it provided or were provided by any of its affiliate that directly or indirectly controls, is controlled by, or

- is under common control with that firm; or
- i. 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 documents 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 procurement process and execution of the contract.
- 4.3 A Bidder may have the nationality of any country, subject to the restrictions pursuant to ITB 4.7. 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 sub-contractors or sub-consultants for any part of the Contract including related Services.
- 4.4 A Bidder that has been sanctioned by the Bank in accordance with the above ITB 3.1, including in accordance with the Bank's Guidelines on Preventing and Combating Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants ("Anti-Corruption Guidelines"), shall be ineligible to be prequalified for, bid 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.**
- 4.5 Bidders that are Government-owned enterprises or institutions in the Purchaser's Country may participate only if they can establish that they (i) are legally and financially autonomous (ii) operate under commercial law, and (iii) are not dependent agencies of the Purchaser. To be eligible, a government-owned enterprise or institution shall establish to the Bank's satisfaction, through all relevant documents, including its Charter and other information the Bank may request, that it: (i) is a legal entity separate from the government (ii) does not currently receive substantial subsidies or budget support; (iii) operates like any commercial enterprise, and, inter alia, is not obliged to pass on its surplus to the government, can acquire rights and liabilities, borrow funds and be liable for

repayment of its debts, and can be declared bankrupt; and (iv) is not bidding for a contract to be awarded by the department or agency of the government which under their applicable laws or regulations is the reporting or supervisory authority of the enterprise or has the ability to exercise influence or control over the enterprise or institution.

- 4.6 A Bidder shall not be under suspension from bidding by the Purchaser as the result of the operation of a Bid-Securing Declaration.
- 4.7 Firms and individuals may be ineligible if so indicated in Section V 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.
- 4.8 A bidder shall provide such evidence of eligibility satisfactory to the Purchaser, as the Purchaser shall reasonably request.

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 Clause, 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 Bidding Document

6. Sections of Bidding Documents

- 6.1 The Bidding Documents consist of Parts 1, 2, and 3, which include all the Sections indicated below, and should be read in conjunction with any Addendum issued in accordance with ITB Clause 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 Bank Policy-Corrupt and Fraudulent Practices

PART 2 Supply Requirements

- Section VII. Schedule of Requirements

PART 3 Contract

- Section VIII. General Conditions of Contract (GCC)
- Section IX. Special Conditions of Contract (SCC)
- Section X. Contract Forms

6.2 The Invitation for Bids issued by the Purchaser is not part of the 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, minutes of 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 Documents and to furnish with its Bid all information or documentation as is required by the Bidding Documents.

7. Clarification of Bidding Documents

7.1 The electronic bidding system **specified in the BDS** provides for online clarifications. A prospective Bidder requiring any clarification on the Bidding Documents may notify the Purchaser online. Clarifications requested through any other mode shall not be considered by the Purchaser. The Purchaser will respond to any request for clarification, provided that such request is received no later than fifteen (15) days prior to the deadline for submission of bids. Description of clarification sought and the

response of the Purchaser shall be uploaded for information of all Bidders without identifying the source of request for clarification. Should the Purchaser deem it necessary to amend the Bidding Documents as a result of a clarification, it shall do so following the procedure under ITB Clause 8 and ITB Sub-Clause 22.2. It is the bidder's responsibility to check on the e-procurement system, for any addendum/ amendment/ corrigendum to the bidding document.

8. Amendment of Bidding Documents

- 8.1 At any time prior to the deadline for submission of bids, the Purchaser may amend the Bidding Documents by issuing addendum. The addendum will appear on the e-procurement system under "Latest Corrigendum" and email notification is also automatically sent to those bidders who have started working on the tender, or as **otherwise specified in BDS**.
- 8.2 Any addendum thus issued shall be part of the Bidding Documents and shall be deemed to have been communicated to all the bidders.
- 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 Sub-Clause 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 English language. 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 English language, in which case, for purposes of interpretation of the Bid, such translation shall govern.

11. Documents Comprising the Bid

- 11.1 The Bid shall comprise two Parts, namely the Technical Part and the Financial Part. These two Parts shall be submitted simultaneously.
- 11.2 **The Technical Part** shall contain the following:
 - (a) Letter of Bid – Technical Part, in accordance with ITB

Clause 12;

- (b) Bid Security, in accordance with ITB Clause 19.1, if required;
- (c) Alternative bids– Technical Part, if permissible, in accordance with ITB 13, the Technical Part of any Alternative Bid;
- (d) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB Clause 20.2;
- (e) documentary evidence in accordance with ITB Clause 17 establishing the Bidder's qualifications to perform the contract if its bid is accepted;
- (f) documentary evidence in accordance with ITB 17 establishing the Bidder's eligibility to bid;
- (g) documentary evidence in accordance with ITB Clause 16, that the Goods and Related Services to be supplied by the Bidder are of eligible origin;
- (h) documentary evidence in accordance with ITB Clauses 16, that the Goods and Related Services conform to the Bidding Documents;
- (i) Manufacturer's authorization form; and
- (j) any other document **required in the BDS.**

11.3 The **Financial Part** 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; and
- (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 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. Process of Bid Submission

- 12.1 The Letter of Bid and Price Schedules shall be prepared 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 20.2. All blank spaces shall be filled in with the information requested.
- 12.2 Entire Bid including the Letter of Bid and filled-up Price Schedules shall be submitted online on e-procurement system specified in ITB 7.1. Details and process of online submission of the tender and relevant documents are given in the website mentioned above. Scanned copies of documents listed in clauses 11 and 12.3 should also be uploaded on this website.
- 12.3 **Submission of Original Documents:** The bidders are required to separately submit **(i) original power of attorney ; (ii) original bid security** in approved form; and **(iii) original affidavit regarding correctness of information** furnished with bid document, with the office **specified in the BDS**, before the opening of the Bid, either by registered/speed post/courier or by hand, failing which the bids will be declared non-responsive and will not be opened. Hard copy of rest of the bid is not to be submitted.

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 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, 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 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 29. 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. Discounts shall be submitted in accordance with ITB 14.4 provided the bids for all lots (contracts) are submitted and opened at the same time.
- 14.7 The terms EXW 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 the Price Schedule included in Section IV, Bidding Forms. The dis-aggregation 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:**
- (i) the price of the Goods quoted EXW (ex-works, ex-factory, ex-warehouse, ex-showroom, or off-the-shelf, as applicable), including all duties, and GST and other taxes already paid or payable on the components and raw material used in the manufacture or assembly of the Goods;
 - (ii) any GST and other taxes which will be payable in India 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 the 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).

14.9 Deemed Export Benefits

Bidders may like to ascertain availability of tax/duty exemption benefits, available for contracts financed under World Bank Credits/ Loans. They are solely responsible for obtaining such benefits, which they have considered in their bid and in case of failure to receive such benefits for reasons whatsoever, the Purchaser will not compensate the bidder.

Where the bidder has quoted taking into account such benefits, it must give all information required for issue of necessary Certificates in terms of the Government of India's relevant Notification along with its bid as perform stipulated in Section IV Bidding Forms. Where the Purchaser issues such Certificates, such taxes and duties will not be reimbursed separately.

If the Bidder has considered the Deemed Export Benefits in its bid, the Bidder shall confirm and certify that the Purchaser will not be required to undertake any responsibilities of the deemed export scheme or the benefits available during contract execution except issuing the required certificates. Bids which do not conform to this provision or any condition by the Bidder which makes the bid subject to availability of deemed export benefits or compensation on withdrawal of or any variations in the deemed export benefits scheme will make the bid non responsive and hence liable to rejection.

15. Currencies of Bid& Payment

- 15.1 The Bidder shall quote the Price in Indian Rupees only.

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 Clause 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 Documents, 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
&Qualifications
of the Bidder**

- 17.1 To establish Bidder's eligibility in accordance with ITB 4, Bidders shall complete the Letter of Bid, 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 the Bidder meets each of the qualification criterion Criteria specified in Section III, Evaluation and Qualification;
 - (b) (i) 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;

(ii) Supplies for any particular item in each schedule of the bid should be from one manufacturer only. Bids from agents offering supplies from different manufacturers for the same item of the schedule in the bid will be treated as non-responsive.

(iii) that, if **required in the BDS**, 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;

(c) Bids from Joint Ventures are not acceptable.

18 Period of Validity of Bids

18.1 Bids shall remain valid for the period **specified in the BDS** after the bid submission deadline date prescribed by the Purchaser in accordance with ITB 22.1. A bid valid for a shorter period shall be rejected by the Purchaser as non-responsive.

18.2 In exceptional circumstances, prior to the expiration of the bid validity period, 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 Clause 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 Sub-Clause 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** for each week or part of the week that has elapsed from the expiration of the initial bid validity to the date of notification of award to the successful bidder.

(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 its bid, a Bid Security, if required, as **specified in the BDS**.

Not used.19.3 The Bid Security shall be in the amount **specified in the BDS** and denominated in Indian Rupees or a freely convertible currency, and shall:

- (a) at the bidder's option, be in the form of either a certified check, demand draft, letter of credit, or a bank guarantee from a Nationalized /Scheduled Bank in India, or another security **specified in the BDS**;
- (b) be substantially in accordance with one of the forms of Bid Security included in Section IV, Bidding Forms, or other form approved by the Purchaser prior to bid submission;
- (c) be payable promptly upon written demand by the Purchaser in case the conditions listed in ITB Clause 19.7 are invoked;
- (d) be submitted in its original form; copies will not be accepted;
- (e) remain valid for a period of 45 days beyond the original validity period of the bids, or beyond any period of extension of bid validity, if so requested under ITB Clause 18.2.

19.4 If a Bid Security is required in accordance with ITB Sub-Clause 19.1, any bid not accompanied by a substantially responsive Bid Security shall be rejected by the Purchaser as non-responsive.

19.5 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 Clause 42.

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
 - (i) withdraws its bid during the period of bid validity specified by the Bidder in the Letter of Bid, except as provided in ITB

Sub-Clause 18.2;

or

(ii) does not accept the correction of errors in pursuant to ITB 35,

or

b) if the successful Bidder fails to:

(i) sign the Contract in accordance with ITB Clause 43; or
furnish a Performance Security in accordance with ITB
Clause 44.

19.8 Not used.

19.9 If a bid security is **not required in the BDS**, and

(a) if a Bidder withdraws its bid during the period of bid
validity specified by the Bidder on the Letter of Bid Form,
except as provided in ITB 18.2, or does not accept the
correction of errors pursuant to ITB 31; or

(b) if the successful Bidder fails to sign the Contract in
accordance with ITB 41; or furnish a performance security
in accordance with ITB 42;

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 as per details given in ITB 21.

20.2 The bid shall be signed by a person duly authorized to sign on
behalf of the Bidder. The authorization shall consist of a written
confirmation **as specified in the BDS** and shall be uploaded along
with the bid.

20.3 Not used.

20.4 Corrections if any in the bid can be carried out by editing the
information before electronic submission on e-procurement portal.

D. Online Submission of Bids

21 Preparation of Bids

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 Invitation for
Bids under this Project is published on this website. Any
citizen or prospective bidder can logon to this website and
view the Invitation for Bids and can view the details of
goods 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 (DSC) in the form of smart card/e-token obtained from any authorised certifying agency of Government of India (for class of DSC **specified in BDS**). 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, alongwith the bid, otherwise the bid will be rejected.

21.2 The completed bid comprising of documents indicated in ITB 12, 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.

21.3 All the documents are required to be signed digitally by the bidder. After electronic on line 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.

21.4 Physical, Email, Telex, Cable or Facsimile bids will be rejected as non-responsive.

22 Deadline for Submission of Bids

22.1 Bids must be uploaded online no later than the date and time **specified in the BDS**.

22.2 The Purchaser may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Documents in accordance with ITB Clause 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 electronic bidding system would not allow any late submission of bids after due date & time as per server time.

24 Withdrawal, Substitution, and Modification of Bids

24.1 Bidders may modify their bids by using appropriate option for bid modification on the e-procurement portal, before the deadline for submission of bids. For this the bidder need not make any additional payment towards the cost of bid document. For bid modification and consequential re-submission, the bidder is not

required to withdraw his bid submitted earlier. The last modified bid submitted by the bidder within the bid submission time shall be considered as the bid. For this purpose, modification/withdrawal by other means will not be accepted. In online system of bid submission, the modification and consequential re-submission of bids is allowed any number of times. A bidder may withdraw his bid by using appropriate option for bid withdrawal, before the deadline for submission of bids, however, if the bid is withdrawn, re-submission of the bid is not allowed.

- 24.2 Bids requested to be withdrawn in accordance with ITB Sub-Clause 24.1 shall not be opened.
- 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 or any extension thereof.

E. Public Opening of Technical Parts of Bids

25 Public Opening of Technical Parts of Bids

25.1 The Purchaser shall publicly open Technical Parts of all bids received by the deadline, at the date, time and place **specified in the BDS**, in the presence of Bidder's 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 12.3 shall be first scrutinized, and Bids that do not comply with the provisions of ITB 12.3 will be declared non-responsive and will not be opened. Thereafter, bidder's names, and such other details as the Purchaser may consider appropriate will be notified online as Technical Part bid opening summary.

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

25.2 The electronic summary of the bid opening will be generated and uploaded online. The Purchaser will also prepare minutes of the Bid opening, including the information disclosed and upload the same for viewing online. Only Bids, alternative bids if permitted in ITB 13, and discounts that are opened at Bid opening shall be

considered further for evaluation.

F. Evaluation of Bids – General Provisions

- 26 Confidentiality**
- 26.1 Information relating to the examination, evaluation, comparison, and post-qualification of bids, and recommendation of contract award, shall not be disclosed to bidders or any other persons not officially concerned with such process until information on Contract Award is communicated to all Bidders in accordance with ITB 40.
- 26.2 Any effort by a Bidder to influence the Purchaser in the examination, evaluation, comparison, and post-qualification of the bids or contract award decisions may result in the rejection of its Bid.
- 26.3 Notwithstanding ITB Sub-Clause 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 post-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, 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 Clause 31.
- 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, Omissions**
- (a) During the evaluation of bids, the following definitions apply:
- (b) "Deviation" is a departure from the requirements specified in the Bidding Documents;
- (c) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Documents; and
- (d) "Omission" is the failure to submit part or all of the

information or documentation required in the Bidding Documents

29 Nonconformities, Errors and Omissions

29.1 Provided that a Bid is substantially responsive, the Purchaser may waive any nonconformities or omissions in the Bid which do not constitute a material deviation, reservation or omission.

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 or substance of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.

29.3 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 in the manner specified in the BDS.

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 methodologies listed in ITB 31, ITB 32, and Section III, Evaluation and Selection. 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 31.

31.2 A substantially responsive Bid is one that meets the requirements of the Bidding Documents without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:

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 Documents, 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.

31.2.1 Bids from Agents, without proper authorization from the manufacturer as per Section IV, shall be treated as non-responsive.

31.3.1 The Purchaser shall examine the bids to confirm that all documents and technical documentation requested in ITB Clause 11 have been provided, and to determine the completeness of each document submitted.

31.3.2 The Purchaser shall examine the bid to confirm that the Bidder has accepted all terms and conditions specified in GCC and the SCC without material deviations or reservations. Deviations from or objections or reservations to critical provisions such as those concerning Performance Security (GCC Clause 18). Warranty (GCC Clause 28), Force Majeure (Clause 32), Limitation of liability (GCC Clause 30), Governing law (GCC Clause 9) and Taxes & Duties (GCC Clause 17) will be deemed to be a material deviation. The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.

31.4 If a bid is not substantially responsive to the Bidding Documents, it shall be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.

32 Qualification of the Bidders

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(s) different from the Bidder.

32.3 If a Bidder does not meet the qualifying criteria specified in Section III, Evaluation and Qualification Criteria, its Bid shall be rejected by the Purchaser and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

32.4 Only Bids that are both substantially responsive to the bidding document, and meet all Qualification Criteria shall have the Financial Parts of their Bids opened at the second public opening

H- Public Opening of Financial Parts of Bids

33 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) their Technical Part of Bid failed to meet the requirements of the bidding document;
- (b) their Financial Part of the Bid shall not be opened; and
- (c) notify them of the date and time for public opening of the Financial Parts of the Bids. Financial Parts of the bids shall not be opened earlier than seven (7) days from the communication of technical evaluation results to the bidders.

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;
- (b) their Financial Part of Bid will be opened at the public opening of Financial Parts;
- (c) notify them of the date and time of the second public opening of the Financial Parts of the Bids, as **specified in the BDS**.

33.3 The opening date should allow Bidders sufficient time to make arrangements for attending the opening. The Financial Part of

the Bid 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, the total amount of each bid, including any discounts and Alternative Bid – Financial Part, and such other details as the Purchaser may consider appropriate will be notified online by the Purchaser at the time of bid opening.

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

- 33.4 The electronic summary of the bid opening will be generated and uploaded online. The Purchaser will also prepare minutes of the Bid opening, including the information disclosed and upload the same for viewing online. Only 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.

I. Evaluation of Financial Parts of Bids

34 Evaluation of Financial Parts

- 34.1 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) Not used;
 - (c) price adjustment due to discounts offered in accordance with ITB 14.4;
 - (d) Not used;
 - (e) price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 29.3; and
 - (f) the additional evaluation factors specified in Section III, Evaluation and Qualification Criteria.
- 34.2 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.
- 34.3 If this bidding document allows Bidders to quote separate prices for different lots (contracts), the methodology to determine the lowest evaluated cost of the lot (contract) combinations, including any

discounts offered in the Letter of B-d - Financial Part, is specified in Section III, Evaluation and Qualification Criteria.

34.4 The Purchaser's evaluation of a Bid will exclude and not take into account:

- (a) in the case of Goods manufactured in India or goods of foreign origin already located in India, GST and other similar taxes, which will be payable on the goods if a contract is awarded to the Bidder;
- (b) Not used;
- (c) any allowance for price adjustment during the period of execution of the contract, if provided in the Bid.

34.5 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 34.1 (f).

**35 Correction of
Arithmetical
Errors**

35.1 The e-procurement system automatically calculates the total amount from unit rates and quantities and the system also automatically populates the amount in words from the amount in figures and therefore there is no scope of discrepancy and need for arithmetic correction.

**36 Conversion to
Single
Currency**

36.1 Not applicable.

**37 Margin of
Domestic
Preference**

37.1 Not applicable.

**38 Comparison of
Financial Parts**

38.1 The Purchaser shall compare the evaluated prices of all substantially responsive bids to determine the lowest-evaluated bid, in accordance with ITB Clause 34.

39.1 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

**39 Purchaser's
Right to Accept Any
Bid, and to Reject
Any or All Bids**

Bidders. In case of annulment, all documents submitted and specifically, bid securities, shall be promptly returned to the Bidders.

J. Award of Contract

40 Award Criteria

40.1 Subject to ITB 39.1, the Purchaser shall award the Contract to the Bidder whose bid has been determined to be the lowest evaluated bid and is substantially responsive to the Bidding Documents, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

**41. Purchaser's ight
to Vary Quantities
at Time of Award**

41.1 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 Documents.

**42 Notification of
Award**

42.1 Prior to the expiration of the period of bid validity, the Purchaser shall notify the successful Bidder, in writing, that its Bid has been accepted. The notification letter (hereinafter called "Letter of Acceptance") shall specify the sum that the purchaser will pay in consideration of the supply of Goods (hereinafter called "the Contract Price").

**Publication of
Award**

42.2 At the same time the Purchaser shall publish in a National website (GOI web si-e - www.wbtenders.gov.in or on the Purchaser's website with free access if available, or in the official gazette, the results identifying the bid and lot numbers and the following information: (i) name of each Bidder who submitted a Bid; (ii) bid prices as read out at bid opening; (iii) name and evaluated prices of each Bid that was evaluated; (iv) name of bidders whose bids were rejected and the reasons for their rejection; and (v) name of the successful Bidder, and the price it offered, as well as the duration and summary scope of the contract awarded.

**Recourse to
Unsuccessful Bidders**

42.3 The Purchaser shall promptly respond in writing to any unsuccessful Bidder who, after Publication of contract award, requests in writing the grounds on which its bid was not selected.

42.4 Until a formal Contract is prepared and executed, the notification of award shall constitute a binding Contract.

42.5 Upon the successful Bidder's furnishing of the performance security and signing the Contract Form pursuant to ITB Clause 42, the Purchaser will promptly notify each unsuccessful Bidder and will discharge its bid security, pursuant to ITB Clause 19.5

43. Signing of Contract

43.1 Promptly after notification, the Purchaser shall send the successful Bidder the Contract Agreement.

43.2 Within twenty-one (21) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Purchaser.

44. Performance Security

44.1 Within twenty one **(21) days** of the receipt of notification of award from the Purchaser, the successful Bidder, if required, shall furnish the Performance Security in accordance with the GCC, using for that purpose the Performance Security Form included in Section X Contract forms, or another Form acceptable to the Purchaser. 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 next lowest evaluated Bidder, whose bid is substantially responsive and is determined by the Purchaser to be qualified to perform the Contract satisfactorily.

SECTION –I - BIDDING DATA SHEET

The following specific data for the goods to be procured shall complement, supplement, 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 Clause Reference	A. General
ITB 1.1	<p>The Purchaser is:</p> <p><i>The Executive Engineer, Burdwan Investigation & Planning Division I&W Department, Govt of West Bengal</i></p>
ITB 1.1	<p>The name and identification number of the NCB is:</p> <p>“Supply, Installation, Testing and Commissioning of Surface Velocity Radar and Water Level Radar for real time monitoring of river discharge including comprehensive Annual Maintenance Contract for 4 years (after 1 year warranty) under National Hydrology Project”</p> <p style="text-align: center;">(Bid No: WBIW/NHP/IFB-09/2019-20)</p> <p>The number, identification and names of the (contracts): (one) lot.</p>
ITB 1.2(a)	<p>The Purchaser shall use the electronic-procurement system specified in BDS 7.1 to manage this Bidding process.</p>
ITB 2.1	<p>The Borrower is: Government of India</p> <p style="padding-left: 40px;">(i) Loan Agreement Amount: US\$ 175 million</p> <p style="padding-left: 40px;">(ii) <i>Loan no: 8725-IN</i></p>
ITB 2.1	<p>The name of the Project is: <i>National Hydrology Project.</i></p>
ITB 4.4	<p>A list of firms debarred from participating in World Bank projects is available at http://www.worldbank.org/debarr</p>

	B. Contents of Bidding Documents
ITB 7.1	<p>Electronic –Procurement System</p> <p>The Purchaser shall use the following electronic-procurement system to manage this Bidding process: www.wbtenders.gov.in</p>
ITB 7.1a	<p>A Pre-bid meeting shall be held shall be held at the following date ,time and place to clarify issues with respect to the bidding document:</p> <p>Date: 28.11.2019</p> <p>Time:11:30 Hrs</p> <p>Place: The Superintending Engineer, Investigation & Planning Circle-II, Jalasampad Bhawan, 5th Floor, Block-DF, Sect-r - I, Salt Lake City, Kolkata-700 091 ,</p> <p>Phone :+91332358716</p> <p>Contact Person: Sri Tapan Biswas Superintending Engineer Sri Manas Khan, Executive Engineer</p>
ITB 8.1	<p>The addendum will appear on the e-procurement system under latest corrigendum and email notification is also automatically sent to those bidders who have started working on this tender.</p>
	C. Preparation of Bids
ITB 11.1(j)	<p>The Bidder shall submit the following additional documents in its bid:</p> <ol style="list-style-type: none"> 1. <i>Certification</i> of incorporation of the bidder 2. The bidder shall clearly confirm that all facilities exist with him (or manufacturer, as applicable) in his factory for inspection and testing and these can be accessed by the Purchaser or his representative for inspection. 3. Technical schedules of goods as required by technical specifications. 4. Descriptive Documents, drawings, notes and references of operating and assembly of mechanical parts <p style="padding-left: 40px;">A detailed description of the Goods essential technical and performance characteristics.</p> <ol style="list-style-type: none"> 5. A clause-by-clause commentary on the Purchaser's technical specifications demonstrating substantial responsiveness of the Goods and Services to those specifications or a statement of deviations and exceptions to the provisions of the Technical Specification

	<p>6. For purposes of the commentary to be furnished pursuant to Paragraph 6 above, the Bidder shall note that standards for workmanship, material and goods, and references to brand names or catalogue numbers designated by the Purchaser in its Technical Specifications are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalogue numbers in its bid, provided that it demonstrates to the purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.</p> <p>7.</p> <p style="padding-left: 40px;">The documentary evidence of the goods and services eligibility shall consist of a statement in the Price Schedule on the country of origin of the goods and services offered which shall be confirmed by a certificate of origin at the time of shipment</p> <p style="padding-left: 40px;">Non-manufacturer bidders will submit the manufacturer's authorization Form as per proforma in Section IV.</p> <p style="padding-left: 40px;">The following details shall also be provided by Indian Bidder</p> <p style="padding-left: 40px;">a. Name, address, PAN and ward/circle where they are being assessed of the Directors of the Bidding Company.</p> <p style="padding-left: 40px;">b. Company's PAN and Income Tax clearance certificate and ward/circle where it is being assessed,</p> <p style="padding-left: 40px;">c. Registration details of the company under GST and other laws as may be applicable.</p> <p style="padding-left: 40px;">d. The bidders from outside India shall provide the corresponding details of Income Tax registration, Social Security Number, details regarding Registration under goods & services tax (as may be applicable) etc.</p> <p>8. The bidder shall disclose instance of previous past performance that may have resulted into adverse actions taken against the bidder during the last five years.</p> <p>9. All document required in Section 3: Evaluation & Qualification Criteria.</p>
ITB 11.3(a)	Note for Bidders: Bidders have to submit filled format of 'Letter of Bid-Financial Part' in 'Financial Folder' only.
ITB 11.3 (d)	The Bidder shall submit the following additional documents in its bid – financial part: <i>None</i>
ITB 12	Note for Bidders: Bidders have to submit the bids on the e-procurement portal along with the relevant required documents. For this purpose, 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.
ITB 12.3	For submission of original documents, the Purchaser's address is: Executive Engineer, Burdwan I & P Division, Purta Bhavan, 3 rd Floor PurbaBardhaman, 713103, WEST BENGAL. E mail: eebipd2012@gmail.com Tel: 0342 2646799
ITB 13.1	Alternative Bids shall not be 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 14.7	The Inco terms edition is Inco terms 2010 or higher.
ITB 14.8 (a) (iii)	"Final destination (Project Site)": <i>as mentioned in Schedule of Requirements.</i>
ITB 14.9	<i>As per latest instructions from Government of India.</i>
ITB 16.4	Period of time the Goods are expected to be functioning (for the purpose of spare parts): a minimum period of 10 years after commissioning).
ITB 17.2 (b) (i)	Manufacturer's authorization is: <i>required as per proforma in Section IV.</i>
ITB 17.2 (b)iii	After Sales service is required which shall be provided by the Supplier or alternatively by its Agent in case of a foreign bidder.
ITB 18.1	The bid validity period shall be 90 days .
ITB 18.3(A)	The factor will be 1.0007692 per week(multiplicative)
ITB 19.1	Bids shall include a Bid Security (issued by bank) included in Section IV Bidding Forms.
ITB 19.3	The amount of the Bid Security shall be: Rs.100000/- inthe form of either Bank Guarantee form issued by any nationalized bank/scheduled bank or NSC (present issue) by post office or post office Time Deposit (TD) within the West Bengal state (valid for 45 days beyond the original validity period of the bid) pledged duly in the name of <i>The Executive Engineer, Burdwan Investigation & Planning Division I&W Department, Govt of West Bengal.</i>
ITB 19.3 (a)	Other types of acceptable securities are: None
ITB 19.9	Omitted

ITB 20.2	<p>The written confirmation of authorization to sign on behalf of the Bidder shall consist of:</p> <ol style="list-style-type: none"> <i>1. Original Power of Attorney;</i> <i>2. Original affidavit vouching for the correctness of the information furnished and documents uploaded</i>
	D. Online Submission and Opening of Bids
ITB 21.1	Class of DSC required is: Class 2 with Signing Certificate
ITB 21	<p>The Envelope for submitting Document as per ITB 12.3 shall bear the following: ORIGINAL DOCUMENTS AS PER CLAUSE 12.3 for IFB No.(WBIW/NHP/IFB-09/2019-20) for “Supply, Installation, Testing and Commissioning of Surface Velocity Radar and Water Level Radar for real time monitoring of river discharge including comprehensive Annual Maintenance Contract for 4 years (after 1 year warranty) under National Hydrology Project”</p> <p><i>The Executive Engineer, Burdwan Investigation & Planning Division I&W Department, Govt of West Bengal E mail: eebipd2012@gmail.com Tel: 0342 2646799</i></p>
ITB 22.1	<p>The deadline for uploading of bids is: Date: 13.12.2019 Time: 15.00 HRS</p>
ITB 24.1	Re-submission of the bid is not allowed if withdrawn.
	E. Public Opening of Technical Parts
ITB 25.1	<p>The online bid opening shall take place at: Office of the Superintending Engineer, Investigation & Planning Circle-II, Jalasampad Bhawan, 5th Floor, Block-DF, Sector - I, Salt Lake City, Kolkata-700 091 Date:13.12.2019 Time: 15:30 HRS</p>
	F. Evaluation of Bids – General Provisions
ITB 29.3	<p>The adjustment shall be based on the highest price of the item or component as quoted in other substantially responsive Bids, subject to a maximum of the estimated price of the item. 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.</p>

	H. Public Opening of Financial Parts
ITB 33.2 (c)	<p>Following the completion of the evaluation of the Technical Parts of the Bids, the Purchaser will notify all Bidders of the date and time of the public opening of Financial Parts.</p> <p>The online opening of the Financial Parts of bids (for technically qualified bidders) shall take place at:</p> <p>Office of the Superintending Engineer, Investigation & Planning Circle-II, Jalasampad Bhawan, 5th Floor, Block-DF, Sector - I, Salt Lake City, Kolkata-700091 Telephone: +91332358716</p> <p>Date: <i>[to be notified later]</i></p> <p>Time: <i>[to be notified later]</i></p>
	I. Evaluation and Comparison of Bids
ITB 34.1(a)	Evaluation will be done for whole lot in one package
ITB 34.3	Not Applicable.
ITB 34.4	<p>The Purchaser's evaluation of a bid will exclude and not take into account:</p> <ul style="list-style-type: none"> (a) In the case of Goods manufactured in India or goods of foreign origin already located in India, GST and other similar taxes, which will be payable on the goods if a contract is awarded to the Bidder; (b) Not Used. (c) any allowance for price adjustment during the period of execution of the contract, if provided in the bid. <p>But, the purchaser's evaluation of a bid will include i) price for inland transportation, insurance, and other local services required to convey the Goods to their Final Destination; and (ii) price for Related Services, if any</p>
ITB 34.5	<p>The adjustments shall be determined using the following criteria, from amongst those set out in Section III, Evaluation and Qualification Criteria:</p> <ul style="list-style-type: none"> (a) Deviation in Delivery schedule: Not Applicable (b) Deviation in payment schedule: Not Applicable (c) the cost of major replacement components, mandatory spare parts, and service: <i>Not Applicable</i> (d) the availability in the Purchaser's Country of spare parts and

	<p>after-sales services for the equipment offered in the bid <i>Not Applicable</i></p> <p>(e) the projected operating and maintenance costs during the life of the equipment <i>'Not Applicable'</i></p> <p>(f) the performance and productivity of the equipment offered; <i>'Not Applicable'</i></p> <p>(g) The cost of 4years comprehensive AMC after expiry of Warranty period of 1years beyond testing and commissioning by applying a discount factor of 10%.</p>
	J. Award of Contract
	<p>The maximum percentage by which quantities may be increased is: <i>15%</i></p> <p>The maximum percentage by which quantities may be decreased is: <i>15%</i></p>
ITB 41.1	

SECTION III. EVALUATION AND QUALIFICATION CRITERIA

This Section complements the Instructions to Bidders. It contains the criteria that the Purchaser shall use to evaluate a bid and determine whether a Bidder qualifies in accordance with ITB 34 & 32. No other criteria shall be used.

TECHNICAL PART

1Qualification (ITB 32)

1.1 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 qualifications.

I- Financial Capability

The Bidder shall furnish documentary evidence that it meets the following financial requirement(s):

- i) Capacity to have a cash flow - The Bidder must provide a letter from a reputed bank stating the availability of liquid assets and/or credit facilities exclusively for this Contract only, of not less than **INR 12.5.00 Lakh or its equivalent amount in a freely convertible currency**.
- ii) The Minimum required annual turnover in respect of supply, installation and commissioning of goods and services for the successful Bidder in any two of the last five (5) years shall be of **INR 50.00 Lakh or its equivalent amount in a freely convertible currency**. Period of 5 years shall be reckoned from 31st march of financial year preceding the year in which bid is published.
- iii) Further, bidder should be in continuous business of supplying and/or after sale services of products similar to that specified in the 'Schedule of requirement' during the last 5 years prior to date of bid submission.
- iv) Bidder shall furnish the legal status, place of registration and principal place of business of the company or firm or partnership, etc.;
- v) Details of experience and past performance on equipment offered and on those of similar nature within the past seven years (Prior to the date of bid submission) and details of current contracts in hand and other commitments (suggested Proforma given in Section IV)to be submitted by the bidder.
- vi) The bidder should furnish a brief write-up, backed with adequate data, explaining his available capacity and experience (both technical and commercial) for the supply of the required equipment within the specified time of completion after the meeting all their current commitments.
- vii) Reports on financial standing of the bidder such as profit and loss statements, balance sheets and auditor's report for the past three years, banker's certificate, etc.
- viii) A firm can submit only one bid in the same bidding process. A bidder who submits or participates in more than one bid will cause all the bids in which the bidder has participated to be disqualified.
- ix) Should possess GST Registration.

II- Experience and Technical Capacity of Bidder

The Bidder shall furnish documentary evidence to demonstrate that it meets the following experience requirement(s):

i) SVR with AWLR Operational experience

The bidder must have supplied, tested, operated and maintained the Surface Velocity Radar (SVR) with Automatic water Level Recorder (AWLR) similar to the type specified in the “Section – VII Schedule of Requirements” to the extent of at least 3 Nos of SVR with AWLR in any two of the year during a period of last 7 years from the last date of submission of bid document and should be in use satisfactorily with no adverse report for at least one year preceding the date of bid opening.

ii) Manufacturer Authorization for SVR with AWLR

If the bidder is not the manufacturer of the SVR with AWLR equipment (i.e. listed in table-1), the bidder shall furnish a legally enforceable authorization from manufacturer in the prescribed Form [Section-IV] assuring full guarantee and warranty obligations as per GCC and SCC for the goods offered;

If the bidder, himself is a manufacturer of the SVR with AWLR equipment (listed in Table-1), then a self-authorization suffices.

Further, bidder should furnish the documentary evidence from the manufacturer of the SVR with AWLR equipment to establish that the manufacturer has manufactured and supplied the quantity of the SVR with AWLR equipment as per Table-1 below in any two of the year during a period of last 7 years from the last date of submission of bid document.

Table-1 Compliance for equipment manufacturer

S No	Item	Total quantity to be supplied as per schedule of requirement	Minimum number of required quantity in any two of last seven years
1	Supply of SVR, AWLR and all accessories for real time discharge monitoring, required attachments at site, complete as per technical specifications	2	3

III- The bidder should have after sales support in the region (within a radius of 500 km from the State Capital). If bidder does not have any after sales support office within 500 km from state Capital at the time of bidding, he shall require to establish the same within one month after successful award of contract

IV- Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or record of poor performance such as, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.

FINANCIAL PART

2. Margin of Preference (ITB 37) – Not Applicable

3. Evaluation (ITB 30, 31, and 34)

3.1.Evaluation Criteria (ITB 34.5)

The Purchaser shall use the criteria and methodologies listed in this Section to evaluate Bids. By applying the criteria and methodologies, the Purchaser shall determine the substantially responsive lowest-evaluated bid.

The evaluation will take into account cost of comprehensive AMC for 4years after One year warranty period & operation and Maintenance period. The amount of comprehensive AMC of future years would be compared to current level by applying discount factor of 10%.

3.2. Multiple Contracts (ITB 34.3) Not Applicable

SECTION IV – BIDDING FORMS

1.

1A. LETTER OF BID– TECHNICAL PART

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

Note: All italicized text is for use in preparing these forms and shall be deleted from the final products.

No alterations to the text except as provided in ITB20.2, shall be permitted and no substitutions shall be accepted except as provided in ITB 12.]

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

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

Invitation for Bid No.: *[insert No of IFB]*

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

To:

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda No. issued in accordance with ITB 8: *[insert the number and issuing date of each Addenda]*;
- (b) We meet the eligibility requirements and have no conflict of interest in accordance with ITB 4;
- (c) We have not been suspended nor declared ineligible by the Purchaser based on execution of a Bid Securing Declaration in the Purchaser's country in accordance with ITB 4.6;
- (d) We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods and Related Services *[insert a brief description of the Goods and Related Services]*;
- (e) Our bid shall be valid for the period of time specified in ITB Sub-Clause 18.1, from the date fixed for the bid submission deadline in accordance with ITB Sub-Clause 22, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (f) If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Documents;

- (g) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with ITB 4.2(e), other than alternative bids submitted in accordance with ITB 13;
- (h) 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;
- (i) We are not a government owned entity/ We are a government owned entity but meet the requirements of ITB 4.5;¹
- (j) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (k) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive;
- (l) We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any type of fraud and corruption; and
- (m) We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely, "Prevention of Corruption Act 1988."

Name of the Bidder ***[insert complete name of person signing the Bid]***

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]***

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

¹Bidder to use as appropriate

1B. LETTER OF BID- FINANCIAL PART

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

Note: All italicized text is for use in preparing these forms and shall be deleted from the final products.

No alterations to the text except as provided in ITB 20.2, shall be permitted and no substitutions shall be accepted except as provided in ITB 12.]

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

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

Invitation for Bid No.: *[insert No of IFB]*

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

To:

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) Our bid shall be valid for the period of time specified in ITB Sub-Clause 18.1, from the date fixed for the bid submission deadline in accordance with ITB Sub-Clause 22, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (b) The total price of our Bid, excluding any discounts offered in item (c) below, is:

In case of only one lot, total price of the Bid **[insert the total price of the bid in words and figures];**

In case of multiple lots, total price of each lot **[insert the total price of each lot in words and figures];**

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];**

- (c) 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];Discounts.**

- (d) The following commissions, gratuities, or fees have been paid or are to be paid 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) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed.

Name of the Bidder ***[insert complete name of person signing the Bid]***

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]***

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

2. 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]*

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

Page _____ of _____ pages

1. Bidder's Legal Name <i>[insert Bidder's legal name]</i>
2. Bidder's actual or intended Country of Registration: <i>[insert actual or intended Country of Registration]</i>
3. Bidder's Year of Registration: <i>[insert Bidder's year of registration]</i>
4. Bidder's Legal Address in Country of Registration: <i>[insert Bidder's legal address in country of registration]</i>
5. 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>
6. 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 Registration of firm named in 1, above, in accordance with ITB Sub-Clauses 4.3. <input type="checkbox"/> In case of government owned entity from the Purchaser's country, documents establishing legal and financial autonomy and compliance with commercial law and not dependent agency of borrower or sub-borrower or purchaser, in accordance with ITB Sub-Clause 4.5. <input type="checkbox"/> Included are the organizational chart ,a list of Board of Directors, and the beneficial ownership

Price Schedule Forms

*[The Bidder shall fill in these Price Schedule Forms in accordance with the instructions indicated. The list of line items in column 1 of the **Price Schedules** shall coincide with the List of Goods and Related Services specified by the Purchaser in the Schedule of Requirements.]*

3. PRICE Schedule for Supply as per Schedule of Requirements

<div>Date:_____</div> <div>NCB No:_____</div> <div>Alternative No:_____</div> <div>Page No _____ of _____</div>										
Prices in Rs										
1	2	3	4	5	6	7	8	9	10	11
Line Item No	Description of Goods	Country of Origin	Delivery Date	Quantity	Unit	Unit price EXW	Total EXW price per line item (Col. 5×7)	Price per line item for inland transportation, insurance and other services required to convey the Goods to their final destination (ITB 14.8 (a)(iii))	Total GST and other taxes payable per item if Contract is awarded (in accordance with ITB 14.8(a)(ii))	Total Price per line item excluding GST (Col. 8+9)
1	Surface Velocity Radar (SVR)									
1	Supply of Automatic River Discharge Measurement System consisting of Surface Velocity Radar type sensor, related communication hardware and accessories with all complete as per desired specification, Warranty 1 year		90 days from date of signing of contract	02	No.					

	Automatic Water Level Recorder (AWLR)									
2	Supply of Automatic River Discharge Measurement System consisting of Water Level recorder of Radar type sensor, related communication hardware and accessories with all complete as per desired specification, Warranty 1 year		90 days from date of signing of contract	02	No.					
	Data Logger									
3	Supply of Data logger, Telemetry system with power supply and related communication hardware and accessories with all complete as per desired specification, Warranty 1 year		90 days from date of signing of contract	02	No.					
	Total Price (Excluding GST and other taxes)(A) Rs									
	GST(B) Rs.									
	Total Price (A+B) Rs.									

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

Signature of Bidder *[signature of person signing the Bid]*

Date *[insert date]*

B. PRICE AND COMPLETION SCHEDULE - RELATED SERVICES

						Date: _____ NCB No: _____ Alternative No: _____ Page No. _____ of _____		
1	2	3	4	5	6	7	8	9
Service No.	Description of Services	Country of Origin	Delivery Date at place of Final destination	Quantity	Unit	Unit price (excluding GST)	Total GST and other taxes payable per item if Contract is awarded	Total Price per Service excluding GST (col 5*7)
S-1	Surface Velocity Radar (SVR)							
S-1	Installation, testing and commissioning of Automatic River Discharge Measurement System consisting of Surface Velocity Radar type sensor, related communication hardware and accessories with all complete as per desired specification, Warranty 1 year		120 days from effective date of signing of Contract	02	No.			
S-2	Automatic Water Level Recorder (AWLR)							
S-2	Installation, testing and commissioning of Automatic River Discharge Measurement System consisting of Water Level Radar type sensor , related communication hardware and accessories with all complete as per desired specification, Warranty 1 year		120 days from effective date of signing of Contract	02	No.			
S-3	Data Logger							
S-3	Installation, testing and commissioning of Data logger, Telemetry system with power supply and related communication hardware and accessories with all complete as per desired specification, Warranty 1 year		120 days from effective date of signing of Contract	02	No.			
S-4	Comprehensive AMC for all SVR including AWLR along with all accessories, installed at designated locations within West Bengal after 1 year warranty period. This includes		1 st year after expiry of warranty period	01.	Lot			

	the replacement of batteries as and when required at bidder's cost;		of 1year					
			2 nd year after expiry of warranty period of 1 year	01	Lot			
			3 rd year after expiry of warranty period of 1 year	01	Lot			
			4 th year after expiry of warranty period of 1 year	01	Lot			
S-5	Training of the purchaser's personnel at the site in assembly, startup & operation of SVR with AWLR. Which includes installation, testing, operation at minimum 3 different days, retrieval of data, procedure for generating flow discharge with practical sessions and maintenance requirements & procedure for equipment configuration, necessary training manuals in soft and hard copies etc, Complete as per technical specifications		As per Training Schedule Continuous activity	04.	Nos			
						Total (Excluding GST and other taxes) (A)		
						GST(B)		
						Total Price (A+B)Rs.		

Name of Bidder [insert complete name of Bidder]

Signature of Bidder [signature of person signing the Bid]

Date [insert date]

5. FORMS OF BID SECURITY

Form of Bid Security - Bank Guarantee

[Guarantor letterhead or SWIFT identifier code]

Bank Guarantee No.....*[insert guarantee reference number]*

Date.....*[insert date of issue of the guarantee]*

WHEREAS, _____ *[name of Bidder]*² (hereinafter called "the Applicant") has submitted his Bid dated _____ *[date]* or will submit his Bid for the supply of _____ *[name of Contract]* (hereinafter called "the Bid") under Invitation for Bids No.....*[insert number]* (hereinafter called "the IFB")

KNOW ALL PEOPLE by these presents that We _____ *[name of bank]* of _____ *[name of country]* having our registered office at _____ (hereinafter called "the Bank") are bound unto _____ *[name of Purchaser]* (hereinafter called "the Purchaser ") in the sum of _____³ for which payment well and truly to be made to the said Purchaser the Bank binds itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this _____ day of _____ 20____.

THE CONDITIONS of this obligation are:

- (1) If after Bid opening the Applicant (a) withdraws his bid during the period of Bid validity specified in the Letter of Bid; or (b) does not accept the correction of the Bid Price pursuant to ITB 31;

or

- (2) If the Applicant having been notified of the acceptance of his bid by the Purchaser during the period of Bid validity:
 - (a) fails or refuses to execute the Contract Agreement in accordance with the Instructions to Bidders, if required; or
 - (b) fails or refuses to furnish the Performance Security, in accordance with the Instruction to Bidders.

²In the case of a JV, the bidder should be stated as "a Joint Venture consisting of, and".

³The Applicant should insert the amount of the guarantee in words and figures denominated in Indian Rupees. This figure should be the same as shown in Clause 19.1 of the Instructions to Bidders.

we undertake to pay to the Purchaser up to the above amount upon receipt of his first written demand, without the Purchaser having to substantiate his demand, provided that in his demand the Purchaser will note that the amount claimed by him is due to him owing to the occurrence of one or any of the four conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date 45 days after the deadline for submission of Bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Purchaser, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this guarantee should reach the Bank not later than the above date.

DATE _____ SIGNATURE OF THE BANK _____

WITNESS _____ SEAL _____

[signature, name, and address]

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

6. MANUFACTURER'S AUTHORIZATION

*[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are legally binding on the Manufacturer. The Bidder shall include it in its bid, if so indicated in the **BDS**.]*

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

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

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

To:

The Executive Engineer, Burdwan Investigation & Planning Division

I&W Department, Govt of West Bengal

WHEREAS

We *[insert complete name of Manufacturer]*, who are official manufacturers of *[insert type of goods manufactured]*, having factories at *[insert full address of Manufacturer's factories]*, do hereby authorize *[insert complete name of Bidder]* to submit a bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods]*, and to subsequently negotiate and sign the Contract against the above IFB.

We hereby extend our full guarantee and warranty in accordance with Clause 28 of the General Conditions of Contract, with respect to the Goods offered by the above firm against this IFB.

We as manufacturers of *[insert type of goods manufactured]* confirm to provide spares and service support for a minimum period of 10 years after commissioning.

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

Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title: *[insert title]*

Duly authorized to sign this Authorization on behalf of: *[insert complete name of Bidder]*

Dated on _____ day of _____, _____ *[insert date of signing]*

Note – Modify this format suitably in cases where manufacturer's warranty and guarantee are not applicable for the items for which bids are invited. If the supply consists of number of items, indicate the specific item (s) for which alone the above authorization is required.

7. DECLARATION FOR CLAIMING TAX/ DUTY EXEMPTION⁴

(Name of the Project)

Bid No.

Description of item to be supplied
.....

(Information for issue of certificate for claiming exemption of Tax/ Duty in terms of Government of India's relevant notification)

(Bidder's Name and Address):

To
(Name of Purchaser)

.....

Dear Sir:

1. We confirm that we are solely responsible for obtaining deemed export benefits which we have considered in our bid and in case of failure to receive such benefits for reasons whatsoever, Purchaser will not compensate us.
2. We are furnishing below the information required by the Purchaser for issue of necessary certificate in terms of Government of India's relevant notification.

(i) Ex-factory price per unit on which the tax/duty is payable: *Rs.

(ii) No of Units to be supplied:

(iii) Total cost on which the tax/duty is payable (Rs.)

(The requirements listed above are as per Current notifications. These may be modified, as necessary, in terms of the rules in force)

(Signature) _____

(Printed Name) _____

(Designation) _____

(Common Seal) _____

⁴ This declaration refers to ITB 14.9 and shall be retained only if ITB 14.9 is retained. The format may be modified as per the latest instructions of Government of India.

** Please attach details item-wise with cost, if there are more than one items. The figures indicated should tally with what is given in the price schedule.*

8. PERFORMA FOR PERFORMANCE STATEMENT

[Please see ITB Clause 36.2 and Section III-
Evaluation and Qualification Criteria]

Proforma for Performance Statement (for a period of last three/five years)

Bid No. _____ Date of opening _____ Time _____ Hours

Name of the Firm _____

<u>Order placed by (full address of Purchaser)</u>	<u>Order No. and date</u>	<u>Description and Detail quantity of ordered equipment</u>	<u>Value of order</u>	<u>Date of completion of delivery</u>	<u>Remarks indicating reasons for late delivery, if any</u>	<u>Has the equipment been satisfactorily functioning? (Attach a certificate from the Purchaser/Consignee with details BOQ and approximate order value, Unpriced PO, with current status.)</u>
				As per contract	Actual	
1	2	3	4	5	6	1. 7 2. 8

Signature and seal of the Bidder _____

SECTION V. – ELIGIBLE COUNTRIES

Public Information Center

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

In reference to ITB 4.7 and 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 4.7(a) and 5.1: *None*

Under ITB 4.7(b) and 5.1: *None*

SECTION VI. BANK POLICY - CORRUPT AND FRAUDULENT PRACTICES

Guidelines for Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, dated January 2011.

“Fraud and Corruption:

1.16 It is the Bank’s policy to require that Borrowers (including beneficiaries of Bank loans), bidders, suppliers, contractors and their agents (whether declared or not), sub-contractors, sub-consultants, service providers or suppliers, and any personnel thereof, observe the highest standard of ethics during the procurement and execution of Bank-financed contracts.⁵ In pursuance of this policy, 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;⁶
- ii) “fraudulent practice” is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;⁷
- (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;⁸

⁵ In this context, any action to influence the procurement process or contract execution for undue advantage is improper.

⁶ For the purpose of this sub-paragraph, “*another party*” refers to a public official acting in relation to the procurement process or contract execution. In this context, “*public official*” includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

⁷ For the purpose of this sub-paragraph, “*party*” refers to a public official; the terms “*benefit*” and “*obligation*” relate to the procurement process or contract execution; and the “*act or omission*” is intended to influence the procurement process or contract execution.

⁸ For the purpose of this sub-paragraph, “*parties*” refers to participants in the procurement process (including public officials) attempting either themselves, or through another person or entity not participating in the procurement or selection process, to simulate competition or to establish bid prices at artificial, non-competitive levels, or are privy to each other’s bid prices or other conditions.

- (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;⁹
- (v) "obstructive practice" is:
 - (aa) 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
 - (bb) acts intended to materially impede the exercise of the Bank’s inspection and audit rights provided for under paragraph 1.16(e) below.
- (b) will reject a proposal for award if it determines that the bidder recommended for award, or 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) will declare misprocurement and cancel the portion of the loan allocated to a contract if it 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 or the implementation 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) will sanction a firm or individual, at any time, in accordance with the prevailing Bank’s sanctions procedures,¹⁰ including by publicly declaring such firm or individual ineligible, either indefinitely or for a stated period of time: (i) to be awarded a Bank-financed contract; and (ii) to be a nominated¹¹;

⁹ For the purpose of this sub-paragraph, “party” refers to a participant in the procurement process or contract execution.

¹⁰ A firm or individual may be declared ineligible to be awarded a Bank financed contract upon: (i) completion of the Bank’s sanctions proceedings as per its sanctions procedures, including, inter alia, cross-debarment as agreed with other International Financial Institutions, including Multilateral Development Banks, and through the application the World Bank Group corporate administrative procurement sanctions procedures for fraud and corruption; and (ii) as a result of temporary suspension or early temporary suspension in connection with an ongoing sanctions proceeding. See footnote 14 and paragraph 8 of Appendix 1 of these Guidelines.

¹¹ A nominated sub-contractor, consultant, manufacturer or supplier, or service provider (different names are used depending on the particular bidding document) is one which has either been: included by the bidder in its pre-qualification application or bid because it brings specific and

- (e) will require that a clause be included in bidding documents and in contracts financed by a Bank loan, requiring bidders, suppliers and contractors, and their sub-contractors, agents, personnel, consultants, service providers, or suppliers, to permit the Bank to inspect all accounts, records, and other documents relating to the submission of bids and contract performance, and to have them audited by auditors appointed by the Bank.”

critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

PART 2 - SUPPLY REQUIREMENTS

SECTION VII – SCHEDULE OF REQUIREMENTS

1. LIST OF GOODS AND DELIVERY SCHEDULE

Sl. No.	Description of Goods	Quantity	Physical unit	Final (Site) Destination as specified in BDS	Delivery (as per Incoterms) Date		
					Earliest Delivery Date	Latest Delivery Date	Bidder's offered Delivery date
	Surface Velocity Radar (SVR)						
	Supply of Automatic River Discharge Measurement System consisting of Surface Velocity Radar type sensor, related communication hardware and accessories with all complete as per desired specification, Warranty 1 year	02	No.	1) Iswar Gupta Setu over River Hooghly at Kalyani (for 1 set) 2) Kolaghat Bridge over River Rupnarayan at Howrah (for 1 set)	90 days from date of signing of contract	90 days from date of signing of contract	
	Automatic Water Level Recorder (AWLR)						
	Supply of Automatic River Discharge Measurement System consisting of Water Level recorder of Radar type sensor, related communication hardware and accessories with all complete as per desired specification, Warranty 1 year	02	No.	1) Iswar Gupta Setu over River Hooghly at Kalyani(for 1set) 2) Kolaghat Bridge over River Rupnarayan at Howrah (for 1 set)	90 days from date of signing of contract	90 days from date of signing of contract	
	Data Logger						
	Supply of Data logger, Telemetry system with power supply and related communication hardware and accessories with all complete as per desired specification, Warranty 1 year	02	No.	1) Iswar Gupta Setu over River Hooghly at Kalyani(for 1set) 2) Kolaghat Bridge over River Rupnarayan at Howrah (for 1 set)	90 days from date of signing of contract	90 days from date of signing of contract	

LIST OF RELATED SERVICES {[ITB CLAUSE 14.8B]} AND COMPLETION SCHEDULE

List of Related Services					
Sl. No.	Description	Quantity	Physical Unit	Place where service be performed	Final completion date of service
01	02	03	04	05	06
	Surface Velocity Radar (SVR)				
S-1	Installation, testing and commissioning of Automatic River Discharge Measurement System consisting of Surface Velocity Radar type sensor, related communication hardware and accessories with all complete as per desired specification, Warranty 1 year	02	No.	1) Iswar Gupta Setu over River Hooghly at Kalyani(for 1set) 2) Kolaghat Bridge over River Rupnarayan at Howrah (for 1 set)	120 days from the date of signing of Contract
3.	Automatic Water Level Recorder (AWLR)				
S-2	Installation, testing and commissioning of Automatic River Discharge Measurement System consisting of Water Level Radar type sensor , related communication hardware and accessories with all complete as per desired specification, Warranty 1 year	02	No.	1) Iswar Gupta Setu over River Hooghly at Kalyani(for 1set) 2) Kolaghat Bridge over River Rupnarayan at Howrah (for 1 set)	120 days from the date of signing of Contract
	Data Logger				
S-3	Installation, testing and commissioning of Data logger, Telemetry system with power supply and related communication hardware and accessories with all complete as per desired specification, Warranty 1 year	02	No.	1) Iswar Gupta Setu over River Hooghly at Kalyani(for 1set) 2) Kolaghat Bridge over River Rupnarayan at Howrah (for 1 set)	120 days from the date of signing of Contract
S-4	Comprehensive AMC for all SVR including AWLR along with all accessories, installed at designated locations within West Bengal after 1 years warranty period This includes the replacement of	01	Lot	1) Iswar Gupta Setu over River Hooghly at Kalyani(for 1set) 2) Kolaghat Bridge	1 st year after expiry of warranty period of 1 year

	batteries as and when required at bidder's cost;			over River Rupnarayan at Howrah (for 1 set)	
		01	Lot	1) Iswar Gupta Setu over River Hooghly at Kalyani(for 1set) 2) Kolaghat Bridge over River Rupnarayan at Howrah (for 1 set)	2 nd year after expiry of warranty period of 1 year
		01	Lot	1) Iswar Gupta Setu over River Hooghly at Kalyani(for 1set) 2) Kolaghat Bridge over River Rupnarayan at Howrah (for 1 set)	3 rd year after expiry of warranty period of 1 year
		01	Lot	1) Iswar Gupta Setu over River Hooghly at Kalyani(for 1set) 2) Kolaghat Bridge over River Rupnarayan at Howrah (for 1 set)	4 th year after expiry of warranty period of 1 year
S-5	Training of the purchaser's personnel at the site in assembly, startup & operation of SVR with AWLR. Which includes installation, testing, operation at minimum 3 different days, retrieval of data, procedure for generating flow discharge with practical sessions and maintenance requirements & procedure for equipment configuration, necessary training manuals in soft and hard copies etc, Complete as per technical specifications	04	Nos. (Trainings)	As per the training schedules	As per the training schedules Continuous activity

3. TECHNICAL SPECIFICATIONS

Introduction

Irrigation and Waterways Department (IWD), Govt. of West Bengal is entrusted with the surface water resources planning, development and management. The Ministry of Water Resources (MoWR), Government of India (GoI) has initiated 'National Hydrology Project (NHP)' (www.indiawrm.org) in which 'Real Time Data Acquisition System (RTDAS)' has been planned for different River basins of West Bengal as one step forward for development of 'Hydrological Information System (HIS)' for surface water resources in the State. As part of the RTDAS system automatic discharge measurement system with INSAT/GPRS/GSM Telemetry is proposed to be installed at two locations in the state for the purpose of proper Flood and Irrigation management within the State.

General

Real Time Hydro-Met data acquisition network which will be implemented under this project provides key data required for forecasting floods and other related activities. The concept of implementation on which the present technical specifications and special conditions are based intends to combine the advantages of modern Data Loggers, data storage, processing and data communication technologies with the requirements of high availability and sustainability required by such an important project. Preference will be given to robust, reliable technology. The real-time data acquisition system networks have the greatest possible reliability, thus minimizing the maintenance to the extent possible.

Scope of Work

- 1) Complete supply, installation, testing, commissioning of discharge measurement system at two stations including associated civil works, sensors, data logger, software, hardware and ancillaries' equipment, solar panel, mounting poles, cables, electrical and network cabling, lightening arrestors, earthing etc. complete.
- 2) Technical design, supply, installation, testing, commissioning of the real time hydrological data collection and establish data communications using **INSAT telemetry** between the hydrology observation stations and the central server of the department. This includes, but is not limited to acquiring service, and maintaining all aspects of the service during the warranty period as well as the maintenance period.
- 3) Establish a INSAT, GSM & GPRS receiving system along with all required data resection arrangement at State Data Centre. This shall include required communication software that will support the reception of the INSAT,GSM& GPRS Data stream.

- 4) Perform on-site assembly, start-up of the supplied goods.
- 5) Complete commissioning integration, testing & organization of the whole system. Bidder is responsible for, interfaces between the sensors and the DCP, DCP and transmission equipment and that between ERS, modeling centers & e-SWIS software, and ensure compatible data format as per bid document and trouble-free operation of system.
- 6) Provide operation & maintenance services during One (1) year warranty period and four (4) years CAMC period to commence immediately after the expiry of warranty period to include all components at the remote stations. The **CAMC** must be comprehensive without any exclusion except from physical damage or force majeure will be permitted.
- 7) Provide installation and maintenance reports as required by the Purchaser and any delay is not acceptable in time schedule provided by supplier.
- 8) Supply detailed operation and maintenance manual for each component in the system and compile Knowledge and working supply type Manual for training purpose (including multimedia training kits).
- 9) Onsite Calibration and validation of the installed system shall be performed on yearly basis which shall be continuous process during the entire warranty period & **AMC** period. This will include calibration of gate sensors to obtain discharge passing through gates for dams/weirs and calibration of canals against water level to obtain discharge data.
- 10) Supply on-site spares to repair any part of the remote stations upon determination of malfunction or failure. This includes, but is not limited to, DCP, sensors, batteries, solar panel and other accessories etc. required in seamless operation of the real time data acquisition system
- 11) All selected sites should conform to the extent practical to **WMO** guidelines. The purchaser will be responsible for obtaining permission to use property. River stage and discharge data will be logged every 1 hour and transmit data based on a schedule set in the data logger (e.g. once an hour) and/or in case of GSM/GPRS communication the data transmission on an event (e.g. a measurement reaching programmed threshold values).
- 12) The observation stations (DCPs) shall store the data for at least one year.
- 13) Bidder shall supply a detailed operation and maintenance manual for each appropriate unit of supplied goods and compile Knowledge and working supply type Manual.
- 14) A guarantee by the manufacturer that all equipment being provided will have maintenance & spare support for a minimum of ten years from the date of issuance of final acceptance certificate by engineer in charge including Warranty and Operation & Maintenance period;

General Features/ Specifications

- i. It is imperative that all instrumentation, other equipment shall operate effectively with the DCP's and the DCP's in turn shall operate effectively with the satellite equipment and other systems of ERS. In addition, the input/output protocols of individual items of equipment (AWLR , SVR, DCP's, solar power arrangements, etc) shall interface accurately. For this purpose, the interfaces between the sensors and the DCP, DCP and transmission equipment and that between ERS and data centers are ensured to be compatible and trouble free.
- ii. The specific electrical, electronic and mechanical design parameters mentioned in case of individual sensors are indicative of a typical design and variations therein can be considered provided the output, resolution accuracy and ruggedness against environment are not compromised in any manner. In such cases where the supplier proposes to deviate from the specifications a full technical justification shall be provided. The Purchaser is not bound to accept such justification.
- iii. It shall be the Suppliers responsibility to ensure that the installation is robust and shall continue to work in extreme weather conditions.
- iv. Reliability of operation during normal and extreme weather conditions is imperative.
- v. The sensors and all accessories and facilities shall be fully compatible with the data acquisition and transmission system. The sensors and DCPs shall form a complete automated data acquisition storage and transmission system.
- vi. In case of any of the sensors, the equipment is supplied with certain optional features which are required to be ordered separately and are not included as a part of the offer; the same shall be clearly mentioned in the bid along with the functions of such features. The purchaser shall be provided with all necessary information which shall enable him to take an informed decision at the time of entering into the Contract as to the ordering any such feature or otherwise.
- vii. The Bidder shall enclose technical literature with photographs in respect of all the sensors , datalogger and other equipment being quoted. The features which are mentioned in the literature but are not being quoted as a part of the current system shall be clearly brought out in the bid. In the event of failure of the Bidder to explicitly mention any such exclusion, it shall be taken as inclusion of all features mentioned in the bid as a part of the supply and the Bidder shall have to provide all such features/ accessories without claim of extra cost to the purchaser.
- viii. Although all accessories and fixtures required for installation of the equipment & their specifications have been specified in technical specifications however, bidder shall ensure the satisfactory performance & functioning of the system complete, for this if any accessory or items are required that shall be provided by bidder, the cost towards that is deemed to be included in the cost tendered by the bidder, no extra cost shall be paid to the bidder on this account.
- ix. Bidders shall give general layout of all the installations including all civil works for types of stations and materials including that for the equipment at the time of bidding. Afterwards, the successful Bidder shall furnish the details of all the mounting

arrangements, including civil works. Indian Standard codes of practice shall be followed for all civil works and mounting arrangements.

- x. The security arrangement provisions for sensors installed like fencing, locking etc. shall be provided by the Bidder.
- xi. Security of installed equipment's including theft and vandalism will be the responsibility of the Bidder till successful installation and commissioning
- xii. All fixings shall be non-corrodible.
- xiii. The Bidder has to specify how the calibration will be carried out and has to use his own calibration equipment during the period of warranty and CAMC.
- xiv. The bidder has to validate the discharge data calculated from the observed sensor data with the actual field data obtained by ADCP or by any other methods to the satisfaction of the purchaser.
- xv. Ensure that all software licenses and maintenance agreements are in the name of Purchaser and should seek full support and updates for such software for the duration of the **Warranty and CAMC** Period. Also, all the software licenses should be valid for the design life of the system, that is 10 years from date of commissioning.

EQUIPMENT ARRANGEMENT AT REMOTE STATIONS

Automated Water Level Recorder(AWLR) for River:

The AWLR shall be equipped with all necessary equipment's and peripherals including the following

- i. Data Collection Platform (DCP) mounted inside an enclosure which will house the following items.
 - Data Logger with INSAT, GSM & GPRS Transmission facilities with built-in display.
 - Battery for power requirements
 - Pre-wiring and configuration.
 - Solar panel-based power supply system.
 - Antenna's (INSAT, GPS, GSM / GPRS) & required accessories
- ii. Installation of suitable range of Non- contact type Water Level Radar sensor for Automatic Water Level Recorder (AWLR) with all fittings, accessories and cables and conduits.
- iii. Mast / tripod to mount DCP at the site (alternatively, where walled enclosure or tower is available, same can be mounted on the same).
- iv. Mast / tripod for solar panel & INSAT antenna. (provided locally by the Bidder)
- v. Mast can be shared with the DCP mast also
- vi. Civil works for mast (provided locally by the Bidder).

- vii. Conduit for cables GI Flexible conduits and HDPE pipe conduits.
- viii. Chain-link fencing and gate with lock if required (provided locally by the Bidder)
- ix. Power & signal cables with cable conduits.
- x. Grounding and lightning protection (provided locally by the Bidder)
- xi. All necessary software required for the system to operate properly.

Surface Velocity Radar (SVR) for River:

The SVR shall be equipped with all necessary equipment's and peripherals including the following

- i. Data Collection Platform (DCP) mounted inside an enclosure which will house the following items.
 - a. Data Logger with, INSAT, GSM & GPRS Transmission facilities with built-in display.
 - b. Battery for power requirements
 - c. Pre-wiring and configuration.
 - d. Solar panel-based power supply system.
 - e. Antenna's (, GPS, GSM / GPRS) & required accessories
- ii. Surface Velocity Radar (SVR) will have Non-contact Radar type water level sensor with all fittings, accessories and cables and conduits.
- iii. Mast / tripod to mount DCP at the site (alternatively, where walled enclosure or tower is available, same can be mounted on the same).
- iv. Mast / tripod for solar panel & INSAT antenna. (provided locally by the Bidder)
- v. Mast can be shared with the DCP mast also
- vi. Civil works for mast (provided locally by the Bidder).
- vii. Conduit for cables GI Flexible conduits and HDPE pipe conduits.
- viii. Chain-link fencing and gate with lock if required (provided locally by the Bidder)
- ix. Power & signal cables with cable conduits.
- x. Grounding and lightning protection (provided locally by the Bidder)
- xi. All necessary software required for the system to operate properly.

TELEMETRY

The data communications employed will use INSAT and GSM / GPRS radio communications. Both telemetry systems should work simultaneously for redundancy. The bidder will be ultimately responsible for establishing data communication at all sites.

The bidder will provide all associated civil works related to the installation of the antenna, including cabling, wiring and other such infrastructure.

INSTALLATION REQUIREMENTS

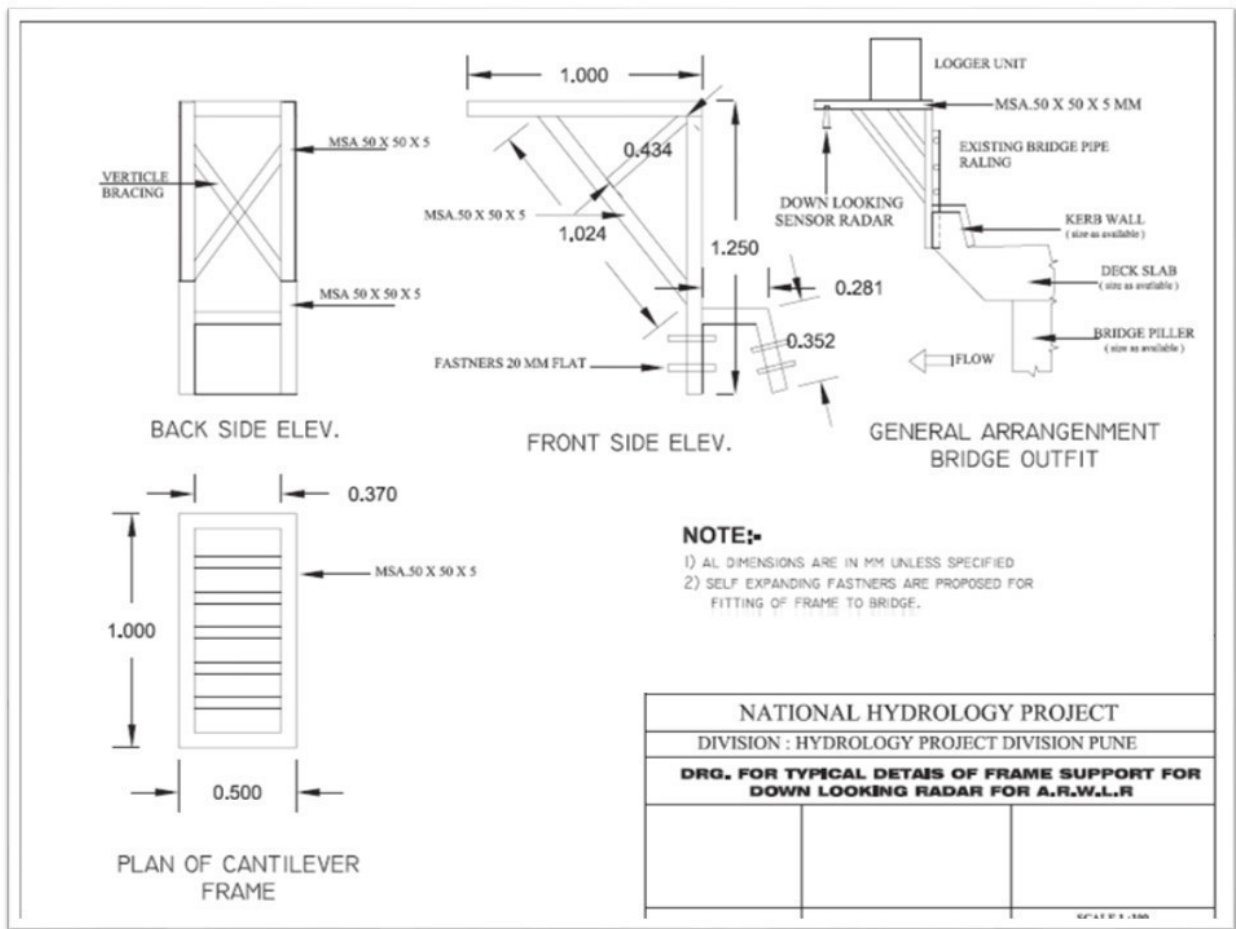
SITE PREPARATION AND INSTALLATION

1. The purchaser will provide details of the installation sites before the scheduled installation date to allow the Bidder to perform site inspection and construction of suitable structures before the installation of the hardware.
2. The location of antenna, sensors and related civil work will be decided by the respective Site Engineer-in-charge Depending on the site and river flow conditions.
3. The Bidder should complete the required works at the site for proper installation of the equipment before receipt of the equipment.
4. These are the basic guidelines for installation of the system however it may vary as per site conditions, in case of variation from installation guidelines drawings shall be approved by engineer-in charge prior to the start of installation work

5. SPECIFICATIONS FOR INSTALLATION

Automatic Water Level Recorder (AWLR) and Surface Velocity Radar (SVR)

- The sensor and its accessories should be protected from theft. The bidder is encouraged for minor modifications in installation of sensor and its accessories so as to minimize the chances of theft. Mortise lock is proposed to avoid theft. Due care must be taken while modifying the installations. In no case the basic principle and working of sensor is allowed to disturb.
- Radar sensors should be mounted such that they have a direct vertical shot to the water surface with no obstruction of their beams. Beam spread must be determined based on manufacturer's specification and the maximum expected distance to be measured at low flows. Consideration should be made in designing the mounting structure to allow for easy access to the instrument for maintenance
- Framework support to attach Radar sensor to Bridge Tower.
- Framework support made of fabrication of M.S. Angle 50mm x 50mm x 5mm with gusset plate 8mm thick (0.85m x 0.3m) including welding, riveting, anticorrosive paint, colour etc. complete as per FIG



Mast Foundation

- Foundation Dimensions: 750mm X 750mm (length x width) and 1.2m deep. The raised platform of the foundation must be 300 mm above the ground level.
- The height of the mast should be minimum 3 meters above raised platform.

Local Earthing

- Material required: Salt: 20 Kg; Charcoal: 20 Kg; Sand 100 Kg
- The lightning arrestor rod is made of copper which is mounted on the top most part of the Mast / Tripod /tower.
- It should be of thickness 12 mm and of one-meter length with a connected copper wire of 6mm thickness (gauge). At the other end of copper wire is the Earthing rod of dimensions 15mm thickness and 1.8-meter length, which is buried into the ground.
- On the bottom of earthing rod, one copper plate of dimensions 300mm x 300mm should be connected. Data logger enclosure should also be grounded with local earthing.
- A pit of 1200 mm depth, 600 x 600 mm wide at bottom (like a cone shaped pit) has to be dug.

- After leveling the bottom of the pit, uniform layer in the sequence of 150 mm of Salt + 150 mm Charcoal + 150 mm Sand is filled. Such sequence is repeated 3 times till the earth pit is filled to the top. The copper earthing rod is placed in the center of the pit. The pit is closed and leveled.

Painting

- The tower, fencing angles, chain-link fencing and gate should be properly painted with one coat of red lead oxide primer & two coats of silver paint every year to avoid rusting.
- All concrete foundations shall be painted using white cement paint every year.

The Goods and Related Services shall comply with following Technical Specifications and Standards:

i. RADAR TYPE WATER LEVEL SENSOR (35M)

Feature	Value
Site Conditions	
Ambient Temperature	From -5 to +60 °C
Humidity	0 to 100 %
Altitude	0 to 2500 meter
Sensor	
Sensor Type	Microwave non-contact sensor
Range	35 meter
Resolution	3 mm or better
Accuracy	0.02 % FSO
Output Interface	SDI-12 / RS 485 / 4-20mA
Power Supply	To be powered by Solar Panel provided by bidder.
Beam angle	Less than 16 degree.
General Features	
Housing Material	Corrosion Resistance (Stainless steel / die cast Aluminum or PVC/UV stabilized ABS with metal casing)
Enclosure	The Sensor shall be easy to dismount and replace in the event of malfunction.
Tools	Complete tool kit for operation and routine maintenance

Feature	Value
Manuals	Full Documentation and maintenance manual in English
Accessories	Sensor Mounting support, cables and other accessories as required
Protection	NEMA 4 or IP67 or better
Horizontal Mounting/Installation Arrangements	Above FRL, Below a bridge girder wherever available otherwise horizontal cantilever arrangement from a mast/wall/pedestal to be provided
Radar Sensor should have inbuilt diagnostic feature & averaging function	

Surface Velocity Radar

FUNCTIONAL REQUIREMENT: To measure the water surface velocity and calculate the discharge.

DESIGN REQUIREMENTS: The equipment offered should conform to the following technical Specifications:

Feature	Value
Site Conditions	
Ambient Temperature	From -5 to +60 Degree Celsius
Humidity	0 to 95 % non-condensing
Altitude	0 to 2500 meter
Sensor	
Sensor Type	Microwave non-contact sensor
Distance to water	25 meters
Velocity measurement Range	Up to 15 m/s (Configurable)
Resolution (Velocity)	2 mm/s or better
Accuracy (Velocity)	± 2% FSO
Output Interface	SDI-12 / RS 485 / 4-20mA
Power Supply	To be powered by Solar Panel provided by bidder with DCP
Beam angle	Less than 16 degrees.
General Features	

Housing Material	Corrosion Resistance (Stainless steel / die cast Aluminium/ PVC /UV stabilized ABS with metal casing)
Enclosure	The Sensor shall be easy to dismount and replace in the event of malfunction.
Tools	Complete tool kit for operation and routine maintenance
Manuals	Full Documentation and maintenance manual in English
Accessories	Sensor Mounting support, cables and other accessories as required
Protection	NEMA 4 or IP67 or better
Horizontal Mounting/Installation Arrangements	below a bridge girder wherever available otherwise horizontal cantilever arrangement from a mast/wall/pedestal to be provided
Sensor shall have facility of bidirectional flow measurement	

Data logger with 2 AI channels

Feature	Value
Site Conditions	
Ambient Temperature	From -5to +60 Degree C
Humidity	5 to 100 %
Altitude	0 to 2500meter
Sensor Interface	
Analogue Inputs	2-Analogue Input Channels 4 to 20 mA, 100% over range withstand (Analog input channels are required in datalogger, if any sensor offered by bidder requires Analog interface to integration with datalogger)
SDI Port	One SDI-12 Interface port
Serial Port for sensor interface	One RS-232 / RS-485 for sensor Interface port
Pulse Input	1 Input for Rain Gauge impulse
Input - Output Interfaces	
Data Transfer	USB stick option for Data transfer
Port for Configuration	One Serial Port (RS-232/USB) for communication with Laptop for

	programming
Port for Telemetry	2 Ports for Communication with Telemetry (GSM,GPRS and INSAT) device Both telemetry systems should work simultaneously for redundancy.
Display Port	Port for connecting external display screen for data in running text
Computer Software	
Operating System	Windows software for system configuration / communication
Version	English language version
Licenses	All required licenses shall be included
Analog to Digital Converter	
Resolution	16 bit or better
Conversion Accuracy	± 1 LSB
Sample intervals	1 Sec to 24 hours(user scalable)
General Features	
Flash memory	Non-volatile Flash memory that can store one year of data. & expandable upto1GB Via USB/SD Card.
Resolution	A/D resolution ≥ 16 bit
Recording Interval	Individual recording intervals for each sensor/parameter
Firmware Operating System	Multi-tasking operating system - must log data and transmit at same time
Display	Inbuilt Digital Display for viewing current data and setting values
Power Supply	Shall be powered by solar Power supply to be provided by bidder with DCP , low current drain (quiescent ≤ 10.0 mA)
Battery Voltage	Monitoring of battery voltage level
Internal battery	Internal battery backup for clock, lithium battery, storage 2 years
Charge Controller	Internal or External
User Permissions	Different user levels, system of user rights / passwords, access restricted to unauthorized personnel
Internal clock	Internal clock with drift less than 1 second per Week
Keypad	For displaying or transferring data to memory stick, configuration of data logger and sensors
Real time clock	GPS synchronized & timing in IST format required
System integrity	System integrity check procedures
Enclosure	for wall-mounting in a shelter / enclosure with IP65 (NEMA 4 or equivalent) protection or better
Accessories	Serial cable + adaptor (if required) for notebook connection. All

	accessories (fixing units, etc.) as required
Tools	complete tool kit for installation and routine maintenance giving full detail (number of pieces and type)
Manuals	full documentation and maintenance instructions in English (1 copy per station).
GSM / GPRS MODEM	
Ambient Site Conditions	
Operating Temperature	From -5 to +60 ⁰ C
Performance	Data Reception availability of 95% or better
Form factor	The GSM /GPRS modem should either be integral part of data logger specified above, or it should be supplied as independent unit compatible with supplied data logger
Specific Features	
Communication Direction	Utilize GPRS network for two-way connection with FTP, TCP/IP (INTERNET) connection and SMS
Transmission trigger	Data collection to be triggered by interrogation from Data Center, or by event-based transmission triggered by remote site
Power Saving	Ability to disable interrogation system in order to save power at remote site
Communication Protocol	Data transmission to execute HTTP Post, FTP, SMS to transmit and receiving data to the Data Center
Accessories	All associated equipment, including Antenna all cables and mounting hardware
Antenna features	
Frequency range	900 MHz: 824-960 MHz/1800MHz:1710-1880 MHz, 4G and better
Impedance	50 ohms
VSWR	≤ 2.0
Radiation	Omni-directional
Operating temperature	-5 to + 60 degrees Celsius
Connector	SMA or suitable RF connector adaptable to GSM/GPRS modem
Cable length	As required at site

INSAT Radio

FUNCTIONAL REQUIREMENT: To transmit data

DESIGN REQUIREMENTS: The equipment offered should conform to the following technical Specifications:

Feature	Value
Operating Temperature	From -5to +60 ⁰ C
Environment Relative Humidity	0 to 100 %
Career Frequency	402 – 403 MHz
Carrier Settability	In steps of 100Hz from 402.0 MHz to 403.0 MHz
Modulator	PCM/BPSK
Data coding	NRZ (L)
Output Power	3-10Watt, user settable
Data Bit Rate	4.8 kbps
Frequency Stability	
a. Long Term	Transmit frequency inaccuracy including aging of oscillator should not exceed ± 400 Hz per year. Oscillators/synthesizer should have provision to adjust for the long-term drift.
b. for temperature	± 1 ppm or better (-40 to +55 degrees Celsius)
Signal Bandwidth	6.0 KHz maximum or better
Power Stability	± 1 dB
Spurious	-60dB or better
Harmonics	-40dB or better
Antenna cable	LMR 400 grade or better
Performance	Data Reception availability of 99% or better
Form factor	The Transmitter should either be integral part of data logger specified above, or it should be supplied as independent unit compatible with supplied data logger
Operating Power	Switched 12V DC controlled by data logger
Yagi Antenna	
Polarization	LHCP or RHCP, switchable in field
Gain	Minimum 11 dbi or better
Center Frequency	402-403 MHz
Mounting	Proper mounting and Pointing arrangement for 360-degree azimuth and elevation adjustment
Operating Wind speed	250 kmph
Wind Survival	300 kmph
Material	Rust-proof and Oxidation-proof
Specific Features	
Satellite System	INSAT Radio System to be Used on the INSAT Satellite operated by ISRO
Certification	Certificate of acceptance required by ISRO or IMD as part of the bid package
Accessories	All associated equipment, including GPS,GPS Antenna, INSAT Antenna, all cables and mounting hardware

Data Collection Platform

1. The system shall automatically collect the observations from attached sensors, process and store them into its memory and transmit through GSM /GPRS communication link to central station as per the preprogrammed measurement interval, and also system shall transmit hourly basis data of every full hour IST to the ERS through satellite at preprogrammed transmission time
2. The DCP shall also continuously monitor the status of the instruments, power supply and communication. In the event of failure of an instrument or disruption of any of the power sources, an alarm shall be sent back to the State data center.
3. The sensor's signal conditioning unit should be an integral part of the system.
4. The number of analog/ digital/ SDI /RS232 / RS485 channels in the data logger must be compatible to the sensors being supplied and also for other battery monitoring systems
5. The System shall have provision to easily include and change the following information in field as mandatory requirements:
 - Unique station identification code.
 - Time of observation and Transmission.
 - Sensor identification
 - Data transmission time for INSAT & GSM/ GPRS communication
 - Programmable Sensor data measurement interval
 - Configuration of Measurement, logging & GPRS/GSM data transmission interval
 - Gain, offset, Datum parameterization for all sensors
 - Configuration of FTP server & mobile number of data center.
6. The system shall have an integrated microprocessor-based data acquisition and storage system having adequate hardware configuration and software support to serve as an interface between sensors and the communication link to perform tasks as stated below.
7. Providing necessary electrical power to the sensors and conversion of electrical output signals from the sensors into engineering value based on calibration information stored in the memory. Full compatibility with all types of sensors provided in the package is mandatory.
8. Storage of observed data along with time for all the parameters in the memory. Memory capacity to retain at least 365 days data is required. Data shall be available even if the power supply to the system has failed (RAM Backup battery) for one year
9. The stored data shall be retrievable via serial port to a PC/ laptop or USB device. The downloaded data shall be provided in the prescribed format provided for GSM/GPRS in

technical specifications

10. Full compatibility with all types of sensors provided in the packages shall be mandatory.
11. The system should be stand alone and all programming functions / setups to be carried out through system keypad and display independent of a PC / Laptop.
12. The system should be capable of continuous updating of the values of sensed parameters and post processing the instantaneous values into average values over a specified period of time for transmission to the DCP with earth receiving station.
13. Management of DCP transmitter to optimize the battery consumption
14. The system shall provide a complete health status of the battery, transmitter and other components
15. The system shall support the following functions:
 - Easy programming set up.
 - Multi-tasking capability.
 - User friendly software programming.
 - The system shall have self-diagnostic facility and be capable of displaying station ID / sensor ID code and messages of the display panel for general identification of the fault. It should have facility to monitor these codes and other health status through an external laptop / PC.
 - Setup shall be organized in a tree of menus and sub menus. Protection of setup parameters and data through password should be supported by the system. In addition, the DCP shall support the manual entry of data through keyboard and its display.
 - Data including the setup and program files shall be transferrable from the system via. A serial port to PC and SD card or other suitable memory device and vice versa. The scripts / software for configuration of data logger should be part of supply.
 - Facility for Pooling of data via GPRS shall available in datalogger
16. The DCP shall be housed in a weather proof and temper proof housing.
17. DCP Should be supplied with Software for configuration and troubleshooting
18. The data logger shall be programmable locally in field via laptop / PC.
19. The DCP shall be located in a place specified by the Engineer-in-charge at each site and shall be generally one meter above Highest Flood Level (HFL) attained at that site. The DCP at each site shall be located in such a way it is easily approachable even in floods.
20. The surge suppression in form of fuse or other appropriate device shall be provided for

all interfaces to protect the data logger from the surges emanating from the sensor.

21. The datalogger shall store data in memory, in case of GPRS/GSM communication failure. The data shall be transferred automatically once GPRS/GSM communication is retained. This will ensure no data loss during no communication also.

Transmitter & Antenna

The INSAT transmitter should be an internal or external component of DCU. It should have necessary hardware and software to receive data from the data logger and transmit in TDMA mode. The transmitter should have the capability to handle data transmission to the DRTs located on any of the INSAT series of satellites. The selection of frequency and mode of transmission shall be through software settings only. No hardware changes for switching from one satellite DRT to another are acceptable.

Lightning Protection

The entire unit has to be adequately protected against lightning and build of static charges. The lightning rod should protrude 1 m above the highest point (Antenna) and should be placed in the center of the pole. The mast should be electrically grounded by following as per CPWD earthing procedures. As a part of the maintenance, the lightning equipment shall be inspected on a yearly basis for its conductivity and effectiveness. Such inspection shall be carried out in the pre-monsoon period and any faults noticed shall be rectified.

Earthing For Equipment

The electrical grounding for all other electronic and electrical equipment should be done by following standard CPWD procedure. The earthing for the equipment's should be done separately and should have a minimum distance of 2.5 meter from the earthing done for lightning rod. In no case both the earths should be done in the same earthing rod.

As a part of the maintenance, the earthing equipment shall be inspected on a yearly basis for its conductivity and effectiveness. Such inspection shall be carried out in the pre-monsoon period and any faults noticed shall be rectified.

Solar Power Supply with Battery Backup

Solar Power Supply

Solar Panel mounting hardware shall be designed to allow a great variety of attachment methods and accommodate a variety of mounting surfaces. They may be used to mount a module on a horizontal or vertical surface, on surfaces at angles between horizontal and

vertical and on metal poles. Attachment methods include bolts, lag bolts, u – bolt brackets and stainless-steel hose clamps.

The Solar power supply shall be mounted at site. The Bidder shall supply a pole – mounted arrangement including a standard pole and necessary foundation and fixing arrangements. The location of solar power installation shall be indicated by the concerned engineer – in – charge of each DCP.

In order to guard against frequent theft of solar panels the mounting device shall be so designed as to make the solar panel detachable as and when required. It is intended to store the solar panel during the night hours as well for longer durations in the non-monsoon period and the arrangement should be designed in such a way that the arrangement is sturdy and capable of handling frequent disconnecting and re connections.

The power supply shall primarily function through a set of sealed maintenance free rechargeable batteries capable of preventing deep discharge.

Batteries

The batteries required for the equipment above shall be maintenance free, rechargeable sealed batteries with the following features:

- Overcharge and deep discharge protection
- Leak-proof
- Easy handling – no special shipping container required
- Long service life
- Excellent recharge ability

One battery pack shall be provided for each DCP. The batteries pack provided shall have adequate capacity to sustain the maximum sized DCP configuration of sensors and telemetry equipment for a period of 15days of continuous operation at the frequency of one observation per hour per sensor and one transmission per hour on a 24-hourly basis. This capacity shall be available, If it not, battery pack should be replaced with new one free of cost.

The necessary housing and configuration of the batteries shall be furnished in detail by the Bidder.

The battery pack shall also include arrangements of charging through a standard 220 V AC domestic power supply outlet and also from solar panels established as above. The normal supply to the DCP equipment shall be from battery pack only.

The Power Supply Unit shall have audio and/or visual alarms for overcharging and deep discharging conditions. The charge level shall also be indicated on the front panel of the pack. The sealed construction shall allow trouble-free, safe operation in any position. The battery case shall be high-impact, with sufficient resistance to shock, vibration, chemicals and heat.

Solar Power supply for DCP

Solar panel offered should confirm the following technical specifications:

Feature	Units
Battery	
Voltage	From 0 to +60 V/ as compatible with DCP and all sensors
Type	Sealed maintenance free
Capacity	Based on site conditions and telemetry method, power supply system shall provide 15 days of backup to all equipment's being powered up by the solar panel
Solar Panel	
Size	Based on site conditions and telemetry method, power supply system shall provide 15 days of backup to all equipment's being powered up by the solar panel
Mounts	The mounts should be sturdy in design and detachable but should not move or rotate with wind. It should have a provision to adjust direction and elevation during installation for optimal solar power generation
Charger	Smart solar charger with protection shall be provided by the bidder
General	
The supplier should determine optimal size of solar panels and batteries such that the system should be operational for at least 15 days in absence of charging.	

SPECIFICATION FOR CABLING AND CONDUITS

- i. The term cable shall always include necessary type of connectors at both the ends for connecting between two equipment. The connectors shall be properly anchored with protective sheathing of the cable in such a way that the loads due to pulling and twisting shall be borne by the protective sheathing and the conductors shall not be subjected to any stress.
- ii. The connectors shall be so fixed on the individual components of the system that the metal/plastic connector shall always transfer the loads due to pulling and twisting directly to the protective body of the component and the internal interface cards/connections shall not be subjected to any load.
- iii. Laying of necessary data and power supply cables for connecting various components and embedding them or protecting them with necessary conduits shall be carried out as per directions of engineer-in-charge.
- iv. Wherever the cables are to be laid indoors and the length of the individual cable run exceeds 1 meter, the cable shall be housed in a protective conduit made of electrical supply grade conduit of appropriate diameter and the conduit shall be fixed with the wall at a height not less than 1 meter above the floor surface. Whenever the indoor

cable is required to cross the floor, it shall be housed in a HDPE pipe of 25 mm internal diameter and the pipe shall be fixed to the floor with suitable protective covering to avoid tripping of personnel using the area or disturbance to the pipe due to such movement.

- v. Wherever cables are to run through open ground including the public road and pathways, the cable shall be armored/ shielded and shall be water ingress proof up to static water pressure of 5 kg/cm². All joints made in cable shall also meet the water proofing criteria. In addition, the cable shall be protected by housing the same in 25 mm HDPE pipe/flexible metallic conduit embedded at a depth of not less than 1.0 meter below the ground surface with a warning brick on the same. A sketch of the cable layout with respect to the identifiable marks of the area shall be prepared and handed over to the Engineer-in-charge for each such cable run on completion of the work of cable laying operation.
 - vi. The joints in the cable connecting between the sensor and data collection unit shall be avoided by measuring the appropriate length of the cable required and attaching the same in one piece. If the cable joints become necessary, prior permission of the Engineer-in-charge shall be obtained before executing the same. The joint fabricated through a splicing and jointing kit shall be stronger than the parent cable.
 - vii. The cable carrying data and electrical AC power shall be housed separately in different conduits separated by adequate distance to prevent leakage currents. The data cables shall also be laid out in such a way that the data integrity is not compromised due to mutual interference.
 - viii. Shielded (screened) cables shall be used for external Cabling, the power and control cables shall be generally as per IS 8130/34. For these cables, equivalent IEC/IS specifications are also acceptable
 - All cables shall have stranded copper conductor of suitable cross section depending on load.
 - The Communication cable/power cable shall be of shielded, twisted pair type.
- These are minimum requirements. Bidder is free to propose improved cabling technology

Preventive Maintenance

The bidder shall be responsible for operation and maintenance of all stations /components of installations, commissioning, site acceptance and operation tests. All equipment maintenance cost, repairs, replacements and repairs to civil work shall be borne by the

bidder during the warranty and CAMC Period. The scope of O&M support would include all materials and services including replacement of components including batteries, mandatory spare parts required to ensure smooth and sustainable operations of the entire system. The bidder shall provide monthly maintenance reports during the course of maintenance. The bidder shall supply a Manual specifying all the faults experienced by the system together with an account of how such faults have been rectified.

The bidders shall ensure the following minimum visits at remote site for preventive maintenance. The bidder should take time stamped geo tagged photographs of the equipment during each maintenance visit (either scheduled or unscheduled visit). The photographs should show the condition of equipment before maintenance, during maintenance and after maintenance.

System functionalities

Data Acquisition

- i. The Automatic Discharge system must support various data acquisition modes including at least:
 - Scheduled acquisition
 - On-demand acquisition
 - Alarm based acquisition
- ii. The data acquisition rate shall be individually configurable for each sensor. The rate shall be adjustable from 1 minute to 24 hours in steps of 1 minute.
- iii. Data messages shall be sent automatically by the system at the user set intervals. There shall be possibility to configure several data messages to serve different purposes and/or users.
- iv. It shall be possible to trigger any measurement on-demand basis, i.e. whenever the user wants to have the instantaneous real time data to be made available.
- v. Regardless of when the data logger samples, the user shall be able to set a threshold(s) for any measured or calculated parameter to detect whether a threshold has been exceeded. Once a threshold has been crossed the system shall immediately transmit the data without waiting for scheduled transmission time and automatically start using a new user set sampling interval until the value returns below the threshold level.

Data Transmission

- i. The equipment shall support various kinds of communication modules for GSM/GPRS, and satellite.
- ii. To increase the reliability and redundancy, the Automatic Discharge system shall have capacity to interface with minimum of two different telemetry devices at the same time.

Data Logging

- i. The system must be able to log measured and calculated data into a non-volatile flash memory.
- ii. The logging interval for each variable must be freely configurable.
- iii. In case the memory should run out of free space, the system must automatically clear more free memory by deleting the oldest data first, so that the most recent data will always be saved.
- iv. The file system on the memory card must be readable with any PC.

Data Quality Control

- i. The system must be able to check the measurement data quality to ensure accurate and complete data collection. It must be possible to automatically flag incorrect or missing data with a user-configurable symbol or text.
- ii. The system must be possible to automatically perform at least the following quality checks for every measurement:
 - a) For each measured parameter there shall be upper and lower hydrological limits that corresponds to the normal operating limits of the sensor in order to prevent the reporting of possibly false values. These parameters must be user configurable to adjust them to the local hydrological conditions.
 - b) For each parameter there shall be a 'step change' validation. If the sensor output value changes more than the set maximum value between two consecutive measurements, the value shall be set 'invalid' (e.g. erroneous). This parameter must be user configurable to adjust it to the local climatologically/ Hydrological conditions.
 - c) For each statistical calculation, there shall be the user configurable parameter for minimum number of the samples available for computing statistical values. If the number of samples is less than the user set value, the value shall be set 'invalid' (e.g. erroneous).
 - d) The system must be able to indicate the status of the connected sensors. This indication shall include both analog sensors as well as sensor with digital serial interface. For each sensors, there shall be value in the variable status, which can be included in the report(s) and/or monitored in order to produce an alarm e.g. for maintenance purposes.

Calculations

- i. Statistical calculations: The station must be able to perform statistical calculations for any of the variables. The period over which the calculations are made must be adjustable from 1 second to 24 hours. At least the following operations must be supported:
 - Average
 - Minimum
 - Maximum
 - Standard deviation
 - Cumulative sum

- Arithmetic operations

ALARM Function

In order to enable early warnings for severe water level, discharge or system malfunction, the station must support the alarm functions described here.

I. The system shall be possible for the user to freely set threshold limits for any of the measured or calculated parameters. It must be possible to configure an alarm to be launched whenever a parameter:

- exceeds a set upper limit (e.g. when the precipitation intensity exceeds 30mm/h),
- goes below a set lower limit (e.g. water level goes below 2.4 m),
- is between a set range (e.g. Rate of Change of water level is between 1cm to 50cm),
- is out of a user set reference range.
- Changes faster than a user set rate, selectable both descending and/ or ascending value.
- Once a threshold has been crossed the system shall immediately transmit the data without waiting for scheduled transmission time.

II. The possible actions to be taken automatically when an alarm is launched shall include:

- sending a message to the user configured destination
- storing the alarm event together with the measured value
- triggering the logging of user defined data group
- Triggering an external signal e.g. a relay contact, light switch etc.

III. The user shall be able to configure the alarm action to be taken:

- only once on the first occasion an alarm is detected,
- always when the alarm condition stays effective
- when the alarm condition disappears, i.e. the parameter return to its normal value
- define what the system should do upon detection of ALARM

System Clock

- i. The station must have a Real Time Clock (RTC) protected against power losses.
- ii. The system must be able to operate in UTC or local time.
- iii. Daylight saving time must be enabled to be adjusted automatically.
- iv. For supporting real-time messaging and alarm generation, the internal real-time clock's accuracy must be better than twenty (20) seconds per month.
- v. In addition, it must be possible to adjust RTC using at least the following methods:

- locally via terminal commands
- remote commands over a network
- automatically from a central data collections system or an NTP server
- using a GPS (Global Positioning System) signal if such a receiver is connected to the system

Power Saving Mode

- i. When there is insufficient power at a remote station, the system shall enter into low power mode. When in low power mode, the system shall switch off the communication module (PSTM modem, satellite transmitter etc) for most of the time, and will switch it on at user defined time(s) for narrow time window. Example: Communication module is switched off. It is switched on for 5 minutes at the beginning of the full hour.
- ii. After the user set period in low power mode, the system shall be capable to switch off the communication device to save the battery. The system shall continue to work as data logging station only
- iii. Alarm notification shall be provided regardless of power saving mode i.e Once a threshold has been crossed the system shall immediately transmit the data without waiting for scheduled transmission time.

Other requirements

Discharge monitoring site

The Automatic River Discharge Measurement System shall be installed in the sites given above. It is to be ensured that I&WD officials are present at the site during the installation commissioning of the site. Each site should have a good quality metal sign board (size: Height 60cm x width 100cm) in English with information details which will be provided during time of installation.

TECHNICAL RESPONSIVENESS FORM

Bidder shall furnish clause by clause commentary against the laid down technical specification and standards as per the format given below:

1) Specifications of the RADAR water Level Transmitter

Name of Goods- Its Features	Required Specifications and standards as per bidding document	Specification and standard as offered in by Bidder	Remarks
RADAR Level Sensor		Make: Model: Manufacturer Name, address, email, phone, website, fax	
Site Conditions			
Ambient Temperature	From -5 to +60 Degree Celsius		
Humidity	0 to 100 %		
Altitude	0 to 2500 meter		
Sensor			
Sensor Type	Microwave non-contact sensor		
Range	0-35meters		
Resolution	3 mm or better		
Accuracy	0.02 % FSO		
Output Interface	SDI-12 / RS-485 / 4-20mA		
Power Supply	To be powered by Solar Panel provided by bidder.		
Beam angle	Less than 16 degrees.		
General Features			
Material	Corrosion Resistance (Stainless steel / Aluminum PVC/ UV stabilized ABS with metal casing)		
Enclosure	The Sensor shall be easy to dismount and replace in the event of malfunction.		
Tools	Complete tool kit for operation and routine maintenance		
Manuals	Full Documentation and maintenance manual in English		

Accessories	Sensor Mounting support, cables and other accessories as required		
Protection	IP67 or NEMA 4 or better		
Horizontal Mounting/Installation Arrangements	Above FRL, Below a bridge girder wherever available otherwise horizontal cantilever arrangement from a mast/wall/pedestal to be provided		
Special Feature	Radar Sensor should have inbuilt diagnostic & averaging feature		

2) Specifications of the SVR

Name of Goods-Its Features	Required Specifications and standards as per bidding document	Specification and standard as offered in by Bidder	Remarks
SVR		Make: Model: Manufacturer Name, address, email, phone, website, fax	
Site Conditions			
Ambient Temperature	From -5 to +60 Degree Celsius		
Humidity	0 to 95 % non-condensing		
Altitude	0 to 2500 meter		
Sensor			
Sensor Type	Microwave non-contact sensor		
Distance to water	0-25meters		
Velocity measurement Range	Up to 15 m/s (Configurable)		
Accuracy (Velocity)	± 2% FSO		
Output Interface	SDI-12 / RS 485 / 4-20mA		
Power Supply	To be powered by Solar Panel provided by bidder with DCP		
Beam angle	Less than 16 degrees.		
General Features			

Housing Material	Corrosion Resistance (Stainless steel / die cast Aluminum/ PVC /UV stabilized ABS with metal casing”		
Enclosure	The Sensor shall be easy to dismount and replace in the event of malfunction.		
Tools	Complete tool kit for operation and routine maintenance		
Manuals	Full Documentation and maintenance manual in English		
Accessories	Sensor Mounting support, cables and other accessories as required		
Protection	NEMA 4 or IP67 or better		
Horizontal Mounting/Installation Arrangements	below a bridge girder wherever available otherwise horizontal cantilever arrangement from a mast/wall/pedestal to be provided		
Special Feature	Sensor shall have facility of bidirectional flow measurement		

3) Specifications of Data Logger with 2 AI Channel

Name of Goods-Its Features	Required Specifications and standards as per bidding document	Specification and standard as offered in by Bidder	Remarks
Data Logger with 2AI sensors		Make: Model: Manufacturer Name, address, email, phone, website, fax	
Site Conditions			
Ambient Temperature	From -5to +60 Degree C		
Humidity	5 to 100 %		
Altitude	0 to 2500meter		
Sensor Interface			
Analogue Inputs	2-Analogue Input Channels 4 to 20 mA, 100% over range withstand (Analog input channels are required in datalogger, if any sensor		

	offered by bidder requires Analog interface to integration with datalogger)		
SDI Port	One SDI-12 Interface port		
Serial Port for sensor interface	One RS-232 / RS-485 for sensor Interface port		
Pulse Input	1 Input for Rain Gauge impulse		
Input - Output Interfaces			
Data Transfer	USB stick option for Data transfer		
Port for Configuration	One Serial Port (RS-232/USB) for communication with Laptop for programming		
Port for Telemetry	2 Ports for Communication with Telemetry (GSM,GPRS and INSAT) device Both telemetry systems should work simultaneously for redundancy		
Display Port	Port for connecting external display screen for data in running text		
Computer Software			
Operating System	Windows software for system configuration / communication		
Version	English language version		
Licenses	All required licenses shall be included		
Analog to Digital Converter			
Resolution	16 bit or better		
Conversion Accuracy	± 1 LSB		
Sample intervals	1 Sec to 24 hours (user scalable)		
General Features			
Flash memory	Non-volatile Flash memory that can store one year of data and expandable up to minimum of 1 GB via. USB/SD card		

Resolution A/D resolution ≥ 16 bit

Recording Interval	Individual recording intervals for each sensor/parameter		
Firmware Operating System	Multi-tasking operating system - must log data and transmit at same time		
Display	Inbuilt Digital Display for viewing		

	current data and setting values		
Power Supply	Shall be powered by solar Power supply to be provided by bidder with DCP, low current drain (quiescent $\leq 10.0\text{mA}$)		
Battery Voltage	Monitoring of battery voltage level		
Internal battery	Internal battery backup for clock, lithium battery, storage 2 years		
Charge Controller	Internal or External		
User Permissions	Different user levels, system of user rights / passwords, access restricted to unauthorized personnel		
Internal clock	Internal clock with drift less than 1 second per Week		
Keypad	For displaying or transferring data to memory stick, configuration of data logger and sensors		
Real time clock	GPS synchronized & timing is required in IST format		
System integrity	System integrity check procedures		
Enclosure	for wall-mounting in a shelter / enclosure with IP65 (NEMA 4 or equivalent) protection or better		
Accessories	Serial cable + adaptor (if required for Notebook connection). All accessories (fixing units, etc.) as required		
Tools	complete tool kit for installation and routine maintenance giving full detail (number of pieces and type)		
Manuals	full documentation and maintenance instructions in English (1 copy per station).		
<u>GSM/GPRS MODEM</u>		Make: Model: Manufacturer Name, address, email, phone, website, fax	

Operating Temperature	From -5 to +60 °C		
Transmission System	GPRS/edge-based data transmission system		
Performance	Data Reception availability of 95% or better		
Form factor	The GSM /GPRS modem should either be integral part of data logger specified above, or it should be supplied as independent unit compatible with supplied data logger		
Specific Features			
Communication Direction	Utilize GPRS network for two-way connection with FTP, TCP/IP (INTERNET) connection and SMS		
Transmission trigger	Data collection to be triggered by interrogation from Data Center, or by event-based transmission triggered by remote site		
Power Saving	Ability to disable interrogation system in order to save power at remote site		
Communication Protocol	Data transmission to execute HTTP Post, FTP, SMS to transmit and receiving data to the Data Center		
Accessories	All associated equipment, including Antenna all cables and mounting hardware		
Antenna features			
Frequency range	900 MHz: 824-960 MHz/1800MHz:1710-1880 MHz, 4G and better		
Impedance	50 ohms		
VSWR	≤ 2.0		
Radiation	Omni-directional		
Operating temperature	-5 to +60 degrees Celsius		
Connector	SMA or suitable RF connector adaptable to GSM/GPRS modem		
Cable length	As required at site		

4) Specifications of INSAT Radio

Name of Goods-Its Features	Required Specifications and standards as per bidding document	Specification and standard as offered in by Bidder	Remarks
INSAT Transmitter Radio		Make: Model: Manufacturer Name, address, email, phone, website, fax	
Operating Temperature	From -5to +60°C		
Environment Relative Humidity	0 to 100 %		
Career Frequency	402 – 403 MHz		
Carrier Settability	In steps of 100Hz from 402.0 MHz to 403.0 MHz		
Modulator	PCM/BPSK		
Data coding	NRZ (L)		
Output Power	3-10Watt, user settable		
Data Bit Rate	4.8 kbps		
Frequency Stability			
a) Long Term drift	Transmit frequency inaccuracy including aging of oscillator should not exceed $\pm 400\text{Hz}$ per year. Oscillators/synthesizer should have provision to adjust for the long-term drift.		
for temperature	$\pm 1\text{ppm}$ or better (-40 to +55 degree Celsius)		
Signal Bandwidth	6.0 KHz maximum or better		
Power Stability	$\pm 1\text{dB}$		
Spurious	-60dB or better		
Harmonics	-40dB or better		
Antenna cable	LMR 400 grade or better		
Performance	Data Reception availability of 99% or better		
Form factor	The Transmitter should either be integral part of data logger specified		

	above, or it should be supplied as independent unit compatible with supplied data logger		
Operating Power	Switched 12V DC controlled by data logger		
Yagi Antenna		Make: Model: Manufacturer Name, address, email, phone, website, fax	
Polarization	LHCP or RHCP, switchable in field		
Gain	Minimum 11 dBi or better		
Center Frequency	402-403 MHz		
3dB Beam width	40°		
VSWR	1.2 : 1		
Impedance	50 ohms		
Axial Ratio	To be specified by tenderer		
Operating temperature	-5°C to +60°C		
Operating Relative Humidity	0 to 100% RH		
Size	Small, portable		
Operating rain rate	100 mm/hr and water proof		
Mounting	Proper mounting and Pointing arrangement for 360-degree azimuth and elevation adjustment		
Operating Wind speed	250 kmph		
Wind Survival	300 kmph		
Material	Rust-proof and Oxidation-proof		
Specific Features			
Satellite System	INSAT Radio System to be Used on the INSAT Satellite operated by ISRO		
Certification	Certificate of acceptance required by ISRO and / or IMD as part of the bid package		

Accessories	All associated equipment, including GPS, GPS Antenna, INSAT Antenna, all cables and mounting hardware		
TDMA Transmission Format	As specified in the table for channel specifications for TDMA transmission format		
GPRS / GSM transmission format	As specified in the table for GSM /GPRS communication format		

5) Specifications of Solar Power Supply System

Name of Goods-Its Features	Required Specifications and standards as per bidding document	Specification and standard as offered in by Bidder	Remarks
Battery		Make: Model: Manufacturer Name, address, email, phone, website, fax	
Voltage	From 0 to +60 V / as compatible with DCP and all sensors		
Type	Sealed maintenance free		
Capacity	Based on site conditions and telemetry method, power supply system shall provide 15 days of backup to all equipment's being powered up by the solar panel		
Solar Panel		Make: Model: Manufacturer Name, address,	

		email, phone, website, fax	
Size	Based on site conditions and telemetry method, power supply system shall provide 15 days of backup to all equipment's being powered up by the solar panel		
Mounts	The mounts should sturdy in design and be detachable but should not move or rotate with wind. It should have a provision to adjust direction and elevation during installation for optimal solar power generation		
Charger	Smart solar charger with protection shall be provided by the bidder		

D. Testing and Acceptance

1. Factory Acceptance Testing

The Bidder shall provide factory calibration & type testing certificate in respect of each component of the SVR with AWLR and its major sub-assemblies to the department before delivery/shipment.

2. Site Acceptance Protocol

In order to facilitate the site acceptance of the system by the engineer – in – charges, the Bidder should give a list of deliverables for each site to the respective sites as well as to the headquarters. The list shall be verified by the engineer – in – charge and accordingly will give a verification report whether all deliverables have been delivered properly at the site. For site acceptance test, the supplier should give a check – list of all components and their functions. This check list shall be decided in consultation with the engineer – in – charges. This check list shall indicate the tests to be conducted at the site and the results that are expected for each and every component that are to be installed at the site. This check list will have to be provided to each and every SVR with AWLR before the installation begins.

E. Documentation

Detailed operating and maintenance manuals for the instruments and other equipment supplied under the contract shall be provided. 2 hard as well as soft copies for each SVR with AWLR of the final manuals have to be given at **Office of the Director, R.R.I, Mohanpur, Nadia-741246, West Bengal.**

The manuals shall indicate full detail of the equipment supplied , including test certificates, and the software section shall be comprehensive with sufficient detail to allow personnel to easily modify any setting or operational parameter.

F. Trainings

The Bidder shall provide trainings as training modules as part of the Tender given as under:

Sl. No.	Description	Numbers of training	Number of Participants per session
1	User Training Course for senior management. (two days)	1(during commissioning)	10
2	Training of the purchaser's personnel at the site in assembly, startup& operation of SVR with AWLR. Course topics will include installation, testing, operation at minimum 3 different days(to be specified by purchaser) with different flow conditions. Also include retrieval of data, procedure for generating rating curve and maintenance requirements &equipment configuration, including training kit containing course material in soft and hard copies etc. complete in all respect. (2 days)	3(1 during commissioning and warranty per year and 2 during the CAMC)	20

G. Spare parts

Bidder shall ensure the availability of sufficient spare parts in its godown in India for fulfilling its service obligations during warranty period of 2years & CAMC period. The same can be inspected by Engineer-in Charge or its authorized representative.

H. Preventive Maintenance

The bidder shall be responsible for maintenance of all SVR with AWLR /components of installations, commissioning, site acceptance and operation tests. All equipment maintenance cost, repairs & replacements shall be borne by the bidder during the warranty Period. The scope of maintenance support would include all materials and services including major replacement components, Consumables, mandatory spare parts required to ensure smooth and sustainable operations of the entire system. The bidder shall supply a Manual specifying all the faults experienced by the system together with an account of how such faults have been rectified.

The bidders shall ensure the following visits at remote site for preventive maintenance.

SCHEDULE SHOWING FREQUENCY OF SCHEDULED VISITS FOR ROUTINE AND PREVENTIVE MAINTENANCE

Sl. No.	Station Category	Minimum Preventive Visits / Year	Remarks
1	SVR with AWLR& its peripherals	2	Every Six months and also on need basis

N. INSPECTIONS AND TESTS

The following inspections and tests shall be performed:

1. Inspection and tests prior to shipment of Goods and at final acceptance are as follows:
 - i. The inspection of the goods shall be carried out to check whether the goods are in conformity with the approved technical specifications and shall be in line with the inspection/test procedures laid down in the technical specifications and the General Conditions of contract. The supplier will dispatch the goods to the ultimate consignee after approval of engineer-in charge against the submission of internal inspection testing along with the supplier's inspection report, manufacturer's warranty certificate etc. The purchaser will test the equipment after completion of the installation and commissioning at the site of

the installation. For site preparation, the supplier should furnish all details to the purchaser sufficiently in advance so as to get the works completed before receipt of the equipment. Complete hardware and software as specified in section VI should be supplied, installed and commissioned properly by the supplier prior to commencement of performance tests.

- ii. The acceptance test will be conducted by the purchaser/their consultant or any other person nominated by the purchaser, at its option as per Section-3 Technical Specification. The acceptance will involve trouble-free operation for three consecutive days. There shall not be any additional charges for carrying out acceptance tests. No malfunction, partial or complete failure of any part of hardware or bugs in the software should occur. All the software should be complete and no missing modules/sections will be allowed. The supplier shall maintain necessary log in respect of the results of the tests to establish to the entire satisfaction of the purchaser, the successful completion of the test specified. An average uptake efficiency of 95% for the duration of test period shall be considered as satisfactory.
- iii. In the event of the hardware and software failing to pass the acceptance test, a period not exceeding two weeks will be given to rectify the defects and clear the acceptance test, failing which the purchaser reserves the rights to get the equipment replaced by the supplier at no extra cost to the purchaser.

2. Manuals

- i. Before the goods and equipment are taken over by the Purchaser, the Supplier shall supply operation and maintenance manuals of the goods and equipment. These shall be in such detail as will enable the Purchaser to operate, maintain, adjust and repair all parts of the equipment as stated in the specifications.
- ii. The manuals shall be in the ruling language (English) and in such form and numbers as stated in the contract.
- iii. Unless and otherwise agreed, the goods and equipment shall not be considered to be completed for the purpose of taking over until such manuals have been supplied to the Purchaser.

3. For the System and Other Software the following will apply:

- i. The Supplier shall provide complete and legal documentation of hardware, and licensed operating systems. The supplier shall also indemnify the purchaser against any levies/penalties on account of any default in this regard.
- ii. To be reviewed and revised for each procurement depending on the equipment to be procured.

4. Acceptance Certificates:

On successful completion of acceptability test, receipt of deliverables etc., and after the purchaser is satisfied with the working on the system, the acceptance certificate signed by the supplier and the representative of the purchaser will be issued. The date on which such certificate is signed shall be deemed to be the date of successful commissioning of the system

**1. PROFORMA OF CERTIFICATE FOR ISSUE BY THE PURCHASER AFTER
SUCCESSFUL INSTALLATION AND STARTUP OF THE SUPPLIED GOODS.**

[This is to be attached for supply, erection, supervision of erection and startup contracts only]

No.

Date:

M/S

Sub: Certificate of startup of the supplied Goods

1. This is to certify that the plants / Equipment as detailed below has/have been received in good condition along with all the standard and special accessories (subject to remarks in Para No. 2) and a set of spares in accordance with the Contract/Specifications. The same has been installed and commissioned.

a) Contract No. _____ dated _____

b) Description of the Equipment _____

c) Sl. No. _____

d) Quantity _____

e) Rail / Road ways Receipt No. _____ dated _____

f) Name of the consignee _____

g) Date of startup and proving test _____

2. Details of accessories/spares not yet supplied and recoveries to be made on that account.

Sl. No.	Description	Amount to be recovered
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1. The proving test has been done to our entire satisfaction and operators have been trained to operate the plant.

2. The supplier has fulfilled his contractual obligations satisfactorily. *

Or

The supplier has failed to fulfill his contractual obligations with regard to the following.

- (a)
 - (b)
 - (c)
 - (d)
3. The amount of recovery on account of non-supply of accessories and spares is given under Para No. 2
4. The amount of recovery on account of failure of the supplier to meet his contractual obligations is as indicated in endorsement of the letter.

Signature _____

Name _____

Designation with Stamp _____

* Explanatory notes for filling up the certificates

- a) He has adhered to the time schedule specified in the contract in dispatching the documents/drawings pursuant to Technical Specifications.
- b) He has supervised the startup of the plant in time i.e., within the period specified in the contract from the date of intimation by the Purchaser in respect of the installation of the plant.
- c) Training of personnel has been done by the supplier as specified in the contract
- d) In the event of documents/drawings having not been supplied or installation and startup of the plant have been delayed on account of the supplier, the extent of delay should always be mentioned.

Note: This form is for the information only. It is not to be filled and submitted / uploaded along with the bid.

PART 3 – CONTRACT

SECTION VIII – GENERAL CONDITIONS OF CONTRACT

Section VII. General Conditions of Contract

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Section VIII. General Conditions of Contract

1. Definitions 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 there from, 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 India.
- (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, start-up, 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 natural 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 natural 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. Corrupt & Fraudulent Practices

- 3.1 The Bank requires compliance with its policy in regard to corrupt and fraudulent practices as set forth in Appendix 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 there under shall be as prescribed by Incoterms.

- (b) The terms EXW 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 Non-waiver

- (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 English. 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 English language, 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. Deleted

- 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 Union of India.

- 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 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 The Supplier shall permit, and shall cause its Subcontractors to permit, the Bank and/or persons appointed by the Bank to inspect the Supplier's offices and all accounts and records relating to the performance of the Contract and the submission of the bid, and to have such accounts and records audited by auditors appointed by the Bank if requested by the Bank. The Supplier's and its Subcontractors and consultants' attention is drawn to Clause 3 [Fraud and Corruption], which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under this Sub-Clause 11.1 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 **Special Conditions of Contract.**

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.

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 payments shall be made in Indian Rupees to the Supplier under this Contract.
- 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 The Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser.

18. Performance Security

- 18.1 If required as specified in the SCC, the Supplier shall, within twenty-one (21) 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 shall be denominated in the Indian Rupees, and shall be in 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. 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 VII, 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—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 & 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 Schedule of Requirements and 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 India, 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 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 GCC Clause 3, 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.

APPENDIX TO GENERAL CONDITIONS

Bank's Policy- Corrupt and Fraudulent Practices

Guidelines for Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, dated January 2011:

"Fraud and Corruption:

1.16 It is the Bank's policy to require that Borrowers (including beneficiaries of Bank loans), bidders, suppliers, contractors and their agents (whether declared or not), sub-contractors, sub-consultants, service providers or suppliers, and any personnel thereof, observe the highest standard of ethics during the procurement and execution of Bank-financed contracts.ⁱ In pursuance of this policy, 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
 - (ii) "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;ⁱⁱⁱ
 - (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}
 - (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
 - (v) "obstructive practice" is:
 - (aa) 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
 - (bb) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 1.16(e) below.
- (b) will reject a proposal for award if it determines that the bidder recommended for award, or 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) will declare misprocurement and cancel the portion of the loan allocated to a contract if it 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 or the implementation 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) will sanction a firm or individual, at any time, in accordance with the prevailing Bank's sanctions procedures,¹² including by publicly declaring such firm or individual ineligible, either indefinitely or for a stated period of time: (i) to be awarded a Bank-financed contract; and (ii) to be a nominated¹³;
 - (e) will require that a clause be included in bidding documents and in contracts financed by a Bank loan, requiring bidders, suppliers and contractors, and their sub-contractors, agents, personnel, consultants, service providers, or suppliers, to permit the Bank to inspect all accounts, records, and other documents relating to the submission of bids and contract performance, and to have them audited by auditors appointed by the Bank.”

¹² A firm or individual may be declared ineligible to be awarded a Bank financed contract upon: (i) completion of the Bank's sanctions proceedings as per its sanctions procedures, including, inter alia, cross-debarment as agreed with other International Financial Institutions, including Multilateral Development Banks, and through the application the World Bank Group corporate administrative procurement sanctions procedures for fraud and corruption; and (ii) as a result of temporary suspension or early temporary suspension in connection with an ongoing sanctions proceeding. See footnote 14 and paragraph 8 of Appendix 1 of these Guidelines.

¹³ A nominated sub-contractor, consultant, manufacturer or supplier, or service provider (different names are used depending on the particular bidding document) is one which has either 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.

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(j)	<p>The Purchaser is: <i>The Executive Engineer, Burdwan Investigation & Planning Division I&W Department, Govt. of West Bengal- 713103</i> E mail: eebipd2012@gmail.com Tel: 0342 2646799</p>
GCC 1.1 (o)	<p>The Project Site(s)/Final Destination(s) is/are: as mentioned in Schedule of Requirements Section IV.</p>
GCC 4.2 (a)	<p>The meaning of the trade terms shall be as prescribed by Incoterms.</p>
GCC 4.2 (b)	<p>The version edition of Incoterms shall be 2010.</p>
GCC 8.1	<p>For <u>notices</u>, the Purchaser's address shall be: Attention: The Executive Engineer Burdwan Investigation & Planning Division Irrigation & Waterways Directorate Govt. of West Bengal PurtaBhawan, 3rd Floor Purba Burdwan-713103, West Bengal, Pin code :713103 E mail: eebipd2012@gmail.com Tel: 0342 2646799 Country: INDIA</p>
GCC 10.2	<p>Settlement of Disputes</p> <p>The dispute settlement mechanism to be applied for adhoc arbitration shall be as follows:</p> <p>(a) (a) In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act 1996 as amended up-to date. The arbitral tribunal shall consist of 3 arbitrators one each to be appointed by the Purchaser and the Supplier. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties and shall act as presiding arbitrator. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from</p>

	<p>the appointment of the arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by the president of the institution of Engineers (India).</p> <p>(b) In the case of a dispute with a Foreign Supplier, the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules. The Arbitral Tribunal shall consist of three Arbitrators one each to be appointed by the Purchaser and the Supplier. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the parties, and shall act as presiding arbitrator. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed by the President of the Institution of Engineers (India).</p> <p>(c) If one of the parties fails to appoint its arbitrator in pursuance of subclause (a) and (b) above, within 30 days after receipt of the notice of the appointment of its arbitrator by the other party, then the president of the Institution of Engineers (India), both in cases of the Foreign supplier as well as Indian supplier, shall appoint the arbitrator. A certified copy of the order of the President of the Institution of Engineers (India), making such an appointment shall be furnished to each of the parties.</p> <p>(d) Arbitration proceedings shall be held at Kolkata, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English</p> <p>(e) The decision of the majority of arbitrators shall be final and binding upon both parties. The cost and expenses of Arbitration proceedings will be paid as determined by the arbitral tribunal. However, the expenses incurred by each party in connection with the preparation, presentation etc. of its proceedings as also the fees and expenses paid to the arbitrator appointed by such party or on its behalf shall be borne by each party itself.</p> <p>(f) Where the value of the contract is Rs. 10 million and below, the disputes or differences arising shall be referred to the Sole Arbitrator. The Sole Arbitrator should be appointed by agreement between the parties; failing such agreement, by the appointing authority namely the President of the Institution of Engineers (India).</p> <p>(g) Except otherwise agreed to by the Parties, Arbitrators should give a decision in writing within 120 days of receipt of notification of dispute.</p>
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GCC 12.1 and 25.2	The scope of supply for the Goods and Related Services to be supplied shall be as specified in the Schedule of requirement.
GCC 13.1	<p>Details of Shipping and other Documents to be furnished by the Supplier are given below:</p> <p>GCC 13.1 Upon delivery of the goods to the transporter/consignee, the supplier shall notify the purchaser and mail the following documents to the Purchaser :</p> <ul style="list-style-type: none"> (i) Four Copies of the Supplier invoice showing contract number, goods description, quantity, unit price, total amount; (ii) Delivery note, Railway receipt, or Road consignment note or equivalent transport document or acknowledgement of receipt of goods from the Consignee; (iii) Four Copies of packing list identifying contents of each package; (iv) Insurance certificate; (v) Manufacturer's/Supplier's warranty certificate; (vi) Inspection certificate issued by the nominated inspection agency, and the Supplier's factory inspection report; and (vii) Certificate of origin. <p>The above documents shall be received by the Purchaser before arrival of the Goods (except where it is handed over to the Consignee with all documents) and if not received, the supplier will be responsible for any consequent expenses.</p>
GCC 14.1	ADD to GCC;

	<p>The supplier is responsible for and obliged to conduct all contracted activities in accordance with the contract using state- of- the- art methods and economic principles and exercising all means available to achieve the performance specified in the Contract</p> <p>The Supplier is obliged to work closely with the Purchaser's staff, act within its own authority and abide by directives issued by the Purchaser and implementation activities.</p> <p>The Supplier will abide by the job safety measures prevalent in India and will free the Purchaser from all demands or responsibilities arising from accidents or loss of life the cause of which is the supplier's negligence. The Supplier will pay all indemnities arising from such incidents and will not hold the purchaser responsible or obligated</p> <p>The Supplier is responsible for managing the activities of its personnel or sub- contracted personnel and will hold itself responsible for any misdemeanors</p> <p>The Supplier will treat as confidential all data and information about the purchaser, obtained in the execution of his responsibilities, in strict confidence and will not reveal such information to any other party without the prior written approval of the Purchaser</p>
GCC 15.1	The prices charged for the Goods supplied and the related Services performed <i>shall not be</i> adjustable.
GCC 16.1	<p>GCC 16.1 Payment shall be made in Indian Rupees in the following manner:</p> <ol style="list-style-type: none"> a. 85% (Eighty Five Percent) of the contract price excluding AMC cost shall be released after 30 days of the successful testing, commissioning and training before/during commissioning and it's the final acceptance. b. 15% (Fifteen Percent) of the Contract Price excluding AMC cost (for 1year of warranty period) to be paid on Half Yearly basis (7.5% at every six month) inclusive of GST payable, subjected to satisfactory completion of warranty support & mandatory training as mentioned in technical specifications apart from above payment c. <i>AMC cost for four years inclusive of GST payable on it, shall be paid on half yearly basis after 1 year of onsite manufacturer warranty period.</i>

	<p><i>d. Payment of GST will be against valid Invoice as per GST Act & Rules and submission of GST Registration Certificate along with declaration that GST Registration is valid and all liabilities towards GST have been discharged by the vendor. GST amount will be reimbursed after 30 days of submission of valid Invoice and all required documents and declaration by vendor.</i></p> <p>The bidder shall indicate in the Price Schedules specifying all items prices shown therein including the unit prices and total prices of the goods and related services along with GST or any other duties and taxes applicable against the schedule of requirements. GST if liveable shall be paid as applicable. Any statutory variation shall be paid on submission of documentary evidence. Bidders shall be required to quote HSN code and applicable tax rates.</p> <p>“GST” means all four Acts CGST, SGST, UTGST, IGST and any other regulations by Government in relation to GST and rules thereto.</p> <p>Note: The award of CAMC for 4Years after expiring of warranty will be at the discretion of purchaser, subjected to NHP tenure</p>
GCC 16.5	<p>The payment-delay period after which the Purchaser shall pay interest to the supplier shall be 60 days.</p> <p>The interest rate that shall be applied is 02% per annum</p>
GCC 17	<p>In the case of tax/ duty waiver, the purchaser will issue only the certificates in terms of the Government of India’s notification as per information given by supplier in form stipulated in Section IV. Supplier is solely responsible for obtaining such benefits and in case of failure to receive such benefits, the purchaser will not compensate the supplier separately.</p>
GCC 18.1	<p>Within 21 days of notification of award, the supplier shall furnish the Performance Security to the Purchaser shall be for an amount of 5% of the contract value, valid up to 60 days after the date of completion of performance obligations including warranty obligations and Annual Maintenance services obligations.</p> <p>In the event of any correction of defects or replacement of defective material during the warranty period, the warranty for the corrected/ replaced material shall be extended to a further period of 12 months and</p>

	the Performance Bank guarantee for proportionate value shall be extended 60 days over and above the extended warranty period.
GCC 18.3	<p>The Performance Security shall be in the form of a “Bank Guarantee” drawn in favour of the Purchaser.</p> <p>The Executive Engineer Burdwan Investigation & Planning Division. Purta Bhaban, Purba Bardhaman -713103 I & W D, West Bengal.</p>
GCC 18.4	Discharge of the performance Security shall take place not later than 60 days following the date of completion of the Supplier’s performance obligations, including the warranty obligation, and comprehensive AMC under the contract.
GCC 18.5	<p>Add as Clause 18.5 to the GCC the following:</p> <p>In the event of any contractual amendment, the Supplier shall, within 21 days of receipt of such amendment, furnish the amendment to the Performance Security, rendering the same valid for the duration of the Contract, as amended for 60 days after the completion of performance obligations including warranty and Annual Maintenance services obligations.</p>
GCC 23.2	<p><u>Packing Instructions:</u> The Supplier will be required to make separate packages for each Consignee. Each package will be marked on three sides with proper paint/indelible ink with the following:</p> <p>(i) Project; (ii) Contract No.; (iii) Country of Origin of Goods; (iv) Supplier’s Name; (v) Packing List Reference Number.</p> <p>Suppliers should use recycled materials as much as possible for packing</p>
GCC 24.1	The insurance shall be paid in an amount equal to 110 percent of the EXW value of the Goods from “Warehouse to warehouse (final destination)” on “All Risks” basis including War Risks and Strikes.
GCC 25.1	The Supplier is required under the Contract to transport the Goods duly insured to the specified final destination, and until the commissioning & final acceptance of each equipment, and all related costs shall be included in the Contract Price.

GCC 25.2	Incidental services to be provided are: All services under GCC clause 25.2
GCC 26.1	<p>The inspections and tests shall be as detailed in Para 5 of Section VII- Schedule of Requirement:</p> <p>(a) The supplier shall get each item indicated in the Schedule of requirement inspected in manufacturer's works or at the premises of supplier and submit a test certificate and also manufacturer's guarantee /warranty certificate that the items are conforms to the laid down specification.</p> <p>The Purchaser or its representative may inspect and /or test any or all the items to confirm their conformity to the contract specification, prior to dispatch from the manufacturer's premises/supplier's premises. Such inspection and clearance will not prejudice the right of the consignee to inspect and test the items on receipt at destination to verify conformity to technical specification.</p> <p>If the items are fails to meet the laid down specifications the supplier shall take immediate steps to remedy the deficiency or replace the defective parts of the each to the satisfaction of the purchaser/ consignee.</p>
GCC 26.2	The Inspections and tests shall also be conducted at: <i>at remote site and Office of the Director, R.R.I, Mohanpur, Nadia-741246, West Bengal., India as specified in technical specification.</i>
GCC 27.1	The liquidated damages shall be: 0.1% of contract price per week or part thereof.
GCC 27.2	The maximum amount of liquidated damages shall be: 10% of the contract price.
GCC 28.3	<p>The period of validity of the onsite Warranty shall be 12(twelve) months after successful installation, testing, commissioning and acceptance. Warranty period shall be followed by 4years comprehensive AMC.</p> <p>For purposes of the Warranty, the place(s) of final destination(s) shall be: At the places as per Schedule of Requirement (Sec-VII).</p>
GCC 28.5	The period for repair or replacement shall be: 15 days. The maximum

	<p>response time for a complaint from the Purchaser/ authorized officer for the defect/breakdown after a request sms/ fax /e-mail is made or letter is written shall not exceed 48 hours. Upon receipt of such notice, the Supplier shall, visit the site and repair or replace the defective Goods or parts thereof, without cost to the Department within stipulated time of 15 days.</p> <p>If any one equipment continues to remain "breakdown" for more than 15 days, the Supplier is liable to pay penalty @ Rs.1000/- per Day/ equipment. The Day for the purpose of penalty shall be taken as failure period of 24 hours or part thereof for a particular equipment. The amount of penalty will be recovered from performance bank guarantee or payment due to bidder during warranty period or AMC period</p>
GCC 28.6	The period shall be 14 days
GCC 31.1	This clause will apply only to variations in GST and other taxes payable in India on the final product which is being supplied and not for variations in tax on the individual components / raw materials which go into the product.
GCC 37	<p>Add the following additional sub clauses.</p> <p>37.1 Supplier integrity:</p> <p>The supplier is responsible for and obliged to conduct all contracted activities in accordance with the contract using state- of- the- art methods and economic principles and exercising all means available to achieve the performance specified in the Contract.</p>

	<p>37.2</p> <p>Supplier's obligations :</p> <p>The Supplier is obliged to work closely with the Purchaser's staff, act within its own authority and abide by directives issued by the Purchaser and implementation activities.</p> <p>The Supplier will abide by the job safety measures prevalent in India and will free the Purchaser from all demands or responsibilities arising from accidents or loss of life the cause of which is the supplier's negligence. The Supplier will pay all indemnities arising from such incidents and will not hold the purchaser responsible or obligated.</p> <p>The Supplier is responsible for managing the activities of its personnel or sub- contracted personnel and will hold itself responsible for any misdemeanors.</p> <p>The Supplier will treat as confidential all data and information about the purchaser, obtained in the execution of his responsibilities, in strict confidence and will not reveal such information to any other party without the prior written approval of the Purchaser.</p>
	<p>37.3</p> <p>Site preparation and installation</p> <p>The supplier is responsible for associated civil work required for installation and commissioning of the supplies in the Schedule of Requirement under the heading of Relative services</p>
	<p>37.4</p> <p>Hardware installation:</p> <p>The Supplier is responsible for all unpacking, assemblies, wiring, installations, cabling between hardware units and connecting to power supplies. The Supplier will test all hardware operations and accomplish all adjustments necessary for successful and continuous operation of the hardware at all installation sites.</p>

Attachment: Price Adjustment Formula

(DELETED)

SECTION X – CONTRACT FORMS

1. 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 in Rupees]*, as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by our Agency.

You are requested to furnish the Performance Security within 21 days in accordance with the Conditions of Contract, using for that purpose the of the Performance Security Form included in Section X, Contract Forms, of the Bidding Document.

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Agency: _____

Attachment: Contract Agreement

2. CONTRACT AGREEMENT

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

THIS CONTRACT AGREEMENT is 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”), 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”).*

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 in the sum of *[insert Contract Price in words and figures, expressed in Rs]* (hereinafter called “the Contract Price”).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall constitute the Contract between the Purchaser and the Supplier, and each shall be read and construed as an integral part of the Contract Agreement. This Agreement shall prevail over all other contract documents: In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed below.
 - (a) The letter of Acceptance
 - (b) this Contract Agreement
 - (c) The Supplier’s letter of Bid and original completed Schedules including Price Schedules
 - (d) Special Conditions of Contract
 - (e) General Conditions of Contract
 - (f) Technical Requirements (including Schedule of Requirements and Technical Specifications)

(g) *[Add here any other document(s) listed in GCC/SCC as part of contract]*

3. In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, 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]*

3. Performance Security - Bank Guarantee

[Guarantor letterhead or SWIFT identifier code]

Performance Guarantee No.....*[insert guarantee reference number]*

Date.....*[insert date of issue of the guarantee]*

To: _____ *[name of Purchaser]*

_____ *[address of Purchaser]*

WHEREAS _____ *[name and address of Supplier¹⁴]* (hereinafter called "the Applicant") has undertaken, in pursuance of Contract No. _____ dated _____ to execute _____ *[name of Contract and brief description of Goods and related Services]* (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Applicant shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Applicant such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Applicant, up to a total of _____ *[amount of guarantee¹⁵]* _____ *[in words]*, such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____ *[amount of guarantee]* as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Applicant before presenting us with the demand.

¹⁴*In the case of a JV, insert the name of the Joint Venture*

¹⁵*An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract and denominated in Indian Rupees.*

We further agree that no change or addition to or other modification of the terms of the Contract or of the Goods and related Services to be supplied there under or of any of the Contract documents which may be made between you and the Applicant shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until (i.e.) 60 days following the Completion date of the Contract including any warranty obligations¹⁶, and any demand for payment under it must be received by us at this office on or before that date.

Signature and seal of the guarantor _____

Name of Bank _____

Address _____

Date _____

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

¹⁶ Completion date as described in GC Clause 18.4

4. Advance Payment Security
Demand Guarantee
[Guarantor letterhead or SWIFT identifier code]

Advance Payment Guarantee No.....*[insert guarantee reference number]*
Date.....*[insert date of issue of the guarantee]*

To: _____ *[name of Purchaser]*
_____ *[address of Purchaser]*
_____ *[name of Contract]*

Gentlemen:

In accordance with the provisions of the Conditions of Contract, Clause 16 ("Terms of Payment") of the above-mentioned Contract, _____ *[name and address of Supplier¹⁷]* (hereinafter called "the Applicant") shall deposit with _____ *[name of Purchaser]* a bank guarantee to guarantee his proper and faithful performance under the said Clause of the Contract in an amount of _____ *[amount of guarantee¹⁸]* _____ *[in words]*.

We, the _____ *[bank or financial institution]*, as instructed by the Applicant, agree unconditionally and irrevocably to guarantee as primary obligator and not as Surety merely, the payment to _____ *[name of Purchaser]* on his first demand without whatsoever right of objection on our part and without his first claim to the Applicant, in the amount not exceeding _____ *[amount of guarantee]* _____ *[in words]*.

We further agree that no change or addition to or other modification of the terms of the Contract or of Goods and related Services to be supplied there under or of any of the Contract documents which may be made between _____ *[name of Purchaser]* and the Applicant, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

¹⁷In the case of a JV, insert the name of the Joint Venture

¹⁸An amount shall be inserted by the bank representing the amount of the Advance Payment, and denominated in Indian Rupees.

This guarantee shall remain valid and in full effect from the date of the advance payment under the Contract until _____ [name of Purchaser] receives full repayment of the same amount from the Applicant. Consequently any demand for payment under this guarantee must be received by us at this office on or before that date.

Yours truly,

Signature and seal: _____

Name of Bank: _____

Address: _____

Date: _____

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

ⁱ In this context, any action to influence the procurement process or contract execution for undue advantage is improper.

ⁱⁱ For the purpose of this sub-paragraph, “another party” refers to a public official acting in relation to the procurement process or contract execution. In this context, “public official” includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

ⁱⁱⁱ For the purpose of this sub-paragraph, “party” refers to a public official; the terms “benefit” and “obligation” relate to the procurement process or contract execution; and the “act or omission” is intended to influence the procurement process or contract execution.

^{iv} For the purpose of this sub-paragraph, “parties” refers to participants in the procurement process (including public officials) attempting either themselves, or through another person or entity not participating in the procurement or selection process, to simulate competition or to establish bid prices at artificial, non-competitive levels, or are privy to each other’s bid prices or other conditions.

^v For the purpose of this sub-paragraph, “party” refers to a participant in the procurement process or contract execution.