SELECTION OF CONSULTANTS

REQUEST FOR PROPOSALS

RFP No.: IN-IWAI-246888-CS-QCBS

Selection of Consulting Services for : Hiring of an Organization for Comprehensive Consultancy Services for preparation of Detailed Project Report (DPR) for IWT Sector Development for enhancement of Socioeconomic activities in and around Ganga – Bhagirathi - Hoogly river system (NW-1)

Client: Inland Waterways Authority of India, Ministry of Ports, Shipping, and Waterways, Government of India

Country: India

Project: Capacity Augmentation of National Waterway – 1 (Jal Marg Vikas)

Issued on: 09th August, 2021

PART I

Section 1. Letter of Invitation

RFP No.IN-IWAI-246888-CS-QCBS

Loan/Credit/Grant No 8752-IN

Noida, 09.08.2021

Dear Mr. /Ms.:

- 1. The Government of India (hereinafter called "Borrower") has applied for financing from the *[select:* International Bank for Reconstruction and Development (IBRD) (the "Bank") in the form of a "loan" (hereinafter called "loan" toward the cost of Capacity Augmentation of National Waterway 1 (Jal Marg Vikas). The Inland Waterways Authority of India *on behalf of the Government of India*, an implementing agency of the Client, intends to apply a portion of the proceeds of this loan to eligible payments under the contract for which this Request for Proposals is issued. Payments by the Bank will be made only at the request of Government of India and upon approval by the Bank, and will be subject, in all respects, to the terms and conditions of the loan agreement. The loan agreement prohibits a withdrawal from the *[loan/credit/grant]* 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 a decision of the United Nations Security council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall derive any rights from the loan agreement or have any claims to the proceeds of the loan.
- 2. The Client now invites proposals to provide the following consulting services (hereinafter called "Services"): Hiring of an Organization for Comprehensive Consultancy Services for preparation of Detailed Project Report (DPR) for IWT Sector Development for enhancement of Socio-economic activities in and around Ganga Bhagirathi Hoogly river system (NW-1). More details on the Services are provided in the Terms of Reference (Section 7).
- 3. A firm will be selected under Quality and Cost Based Selection (QCBS) and in a Full Technical Proposal (FTP) format as described in this RFP, in accordance with the policies of the Bank detailed in the Consultants' Guidelines which can be found at the following website: <u>www.worldbank.org/procure</u>.
- 4. The RFP includes the following documents:

Section 1 - Letter of Invitation Section 2 - Instructions to Consultants and Data Sheet Section 3 - Technical Proposal (FTP) - Standard Forms Section 4 - Financial Proposal - Standard Forms Section 5 – Eligible Countries Section 6 – Bank's Policy – Corrupt and Fraudulent Practices Section 7 - Terms of Reference Section 8 - Forms of Contract (Lump-Sum)

5. Details on the proposal's submission date, time and address are provided in Clauses 17.7 and 17.9 of the ITC.

Yours sincerely,

Jayant Singh Vice Chairman and Project Director, JMVP

Section 2. Instructions to Consultants and Data Sheet

["<u>Notes to the Client</u>": this Section 2 - Instructions to Consultants shall not be modified. Any necessary changes, acceptable to the Bank, to address specific country and project issues, to supplement, but not over-write, the provisions of the Instructions to Consultants (ITC), shall be introduced through the Data Sheet only. "Notes to the Client" should be deleted from the final RFP issued to the Consultants].

A. General Provisions

- 1. Definitions
- (a) "Affiliate(s)" means an individual or an entity that directly or indirectly controls, is controlled by, or is under common control with the Consultant.
- (b) "Applicable Guidelines" means the policies of the Bank governing the selection and Contract award process as set forth in this RFP.
- (c) "Applicable Law" means the laws and any other instruments having the force of law in the Client's country, or in such other country as may be specified in the **Data Sheet**, as they may be issued and in force from time to time.
- (d) "Bank" means the International Bank for Reconstruction and Development (IBRD) or the International Development Association (IDA).
- (e) "Borrower" means the Government, Government agency or other entity that signs the *loan*¹ agreement with the Bank.
- (f) "Client" means the implementing agency that signs the Contract for the Services with the selected Consultant.
- (g) "Consultant" means a legally-established professional consulting firm or an entity that may provide or provides the Services to the Client under the Contract.
- (h) "Contract" means a legally binding written agreement signed between the Client and the Consultant and includes all the attached documents listed in its Clause 1 (the General Conditions of Contract (GCC), the Special Conditions of Contract (SCC), and the Appendices).
- (i) "Data Sheet" means an integral part of the Instructions to Consultants (ITC) Section 2 that is used to reflect specific

¹ ["loan agreement" term is used for IBRD loans; "financing agreement" is used for IDA credits; and "grant agreement" is used for Recipient-Executed Trust Funds administered by IBRD or IDA]

country and assignment conditions to supplement, but not to over-write, the provisions of the ITC.

- (j) "Day" means a calendar day.
- (k) "Experts" means, collectively, Key Experts, Non-Key Experts, or any other personnel of the Consultant, Sub-consultant or Joint Venture member(s).
- (l) "Government" means the government of the Client's country.
- (m) "Joint Venture (JV)" means an association with or without a legal personality distinct from that of its members, of more than one Consultant where one member has the authority to conduct all business for and on behalf of any and all the members of the JV, and where the members of the JV are jointly and severally liable to the Client for the performance of the Contract.
- (n) "Key Expert(s)" means an individual professional whose skills, qualifications, knowledge and experience are critical to the performance of the Services under the Contract and whose CV is taken into account in the technical evaluation of the Consultant's proposal.
- (o) "ITC" (this Section 2 of the RFP) means the Instructions to Consultants that provides the Consultants with all information needed to prepare their Proposals.
- (p) "LOI" (this Section 1 of the RFP) means the Letter of Invitation being sent by the Client to the Consultants.
- (q) "Non-Key Expert(s)" means an individual professional provided by the Consultant or its Sub-consultant and who is assigned to perform the Services or any part thereof under the Contract and whose CVs are not evaluated individually.
- (r) "Proposal" means the Technical Proposal and the Financial Proposal of the Consultant.
- (s) "RFP" means the Request for Proposals to be prepared by the Client for the selection of Consultants, based on the SRFP.
- (t) "SRFP" means the Standard Request for Proposals, which must be used by the Client as the basis for the preparation of the RFP.

- (u) "Services" means the work to be performed by the Consultant pursuant to the Contract.
- (v) "Sub-consultant" means an entity to whom the Consultant intends to subcontract any part of the Services while remaining responsible to the Client during the performance of the Contract.
- (w) "TORs" (this Section 7 of the RFP) means the Terms of Reference that explain the objectives, scope of work, activities, and tasks to be performed, respective responsibilities of the Client and the Consultant, and expected results and deliverables of the assignment.
- 2. Introduction 2.1 The Client named in the Data Sheet intends to select a Consultant from those listed in the Letter of Invitation, in accordance with the method of selection specified in the Data Sheet.

2.2 The Consultants are invited to submit a Technical Proposal and a Financial Proposal, or a Technical Proposal only, as specified in the **Data Sheet**, for consulting services required for the assignment named in the **Data Sheet**. The Proposal will be the basis for negotiating and ultimately signing the Contract with the selected Consultant.

2.3 The Consultants should familiarize themselves with the local conditions and take them into account in preparing their Proposals, including attending a pre-proposal conference if one is specified in the **Data Sheet**. Attending any such pre-proposal conference is optional and is at the Consultants' expense.

2.4 The Client will timely provide, at no cost to the Consultants, the inputs, relevant project data, and reports required for the preparation of the Consultant's Proposal as specified in the **Data Sheet**.

 3. Conflict of Interest

 3.1 The Consultant is required to provide professional, objective, and impartial advice, at all times holding the Client's interests paramount, strictly avoiding conflicts with other assignments or its own corporate interests, and acting without any consideration for future work.

> 3.2 The Consultant has an obligation to disclose to the Client any situation of actual or potential conflict that impacts its capacity to serve the best interest of its Client. Failure to disclose such situations may lead to the disqualification of the Consultant or the termination of its Contract and/or sanctions by the Bank.

3.2.1 Without limitation on the generality of the foregoing, and unless stated otherwise in the **Data Sheet**, the Consultant shall not be hired under the circumstances set forth below:

- a. Conflicting Conflict between consulting activities and procurement (i) of goods, works or non-consulting services: a firm that activities has been engaged by the Client to provide goods, works, or non-consulting services for a project, or any of its Affiliates, shall be disqualified from providing consulting services resulting from or directly related to those goods, works, or non-consulting services. Conversely, a firm hired to provide consulting services for the preparation or implementation of a project, or any of its Affiliates, shall be disqualified from subsequently providing goods or works or non-consulting services resulting from or directly related to the consulting services for such preparation or implementation.
- b. Conflicting

 (ii) <u>Conflict among consulting assignments:</u> a Consultant (including its Experts and Sub-consultants) or any of its Affiliates shall not be hired for any assignment that, by its nature, may be in conflict with another assignment of the Consultant for the same or for another Client.
- c. Conflicting (iii) Relationship with the Client's staff: a Consultant (including its Experts and Sub-consultants) that has a relationships close business or family relationship with a professional of the Borrower (or of the Client, or of staff implementing agency, or of a recipient of a part of the Bank's financing) who are directly or indirectly involved in any part of (i) the preparation of the Terms of Reference for the assignment, (ii) the selection process for the Contract, or (iii) the supervision of the Contract, may not be awarded a Contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to the Bank throughout the selection process and the execution of the Contract.
- 4. Unfair
 Competitive
 Advantage
 4.1 Fairness and transparency in the selection process require that the Consultants or their Affiliates competing for a specific assignment do not derive a competitive advantage from having provided consulting services related to the assignment in question. To that end, the Client shall indicate in the Data Sheet and make available to all Consultants together with this RFP all information that would in that respect give such Consultant any unfair competitive advantage over competing Consultants.

5.	Corrupt and Fraudulent	5.1 The Bank requires compliance with its policy in regard to corrupt and fraudulent practices as set forth in Section 6.
	Practices	5.2 In further pursuance of this policy, Consultant shall permit and shall cause its agents, Experts, Sub-consultants, sub-contractors, services providers, or suppliers to permit the Bank to inspect all accounts, records, and other documents relating to the submission of the Proposal and contract performance (in case of an award), and to have them audited by auditors appointed by the Bank.
6.	Eligibility	6.1 The Bank permits consultants (individuals and firms, including Joint Ventures and their individual members) from all countries to offer consulting services for Bank-financed projects.
		6.2 Furthermore, it is the Consultant's responsibility to ensure that its Experts, joint venture members, Sub-consultants, agents (declared or not), sub-contractors, service providers, suppliers and/or their employees meet the eligibility requirements as established by the Bank in the Applicable Guidelines.
		6.3 As an exception to the foregoing Clauses 6.1 and 6.2 above:
	a. Sanctions	6.3.1 A firm or an individual sanctioned by the Bank in accordance with the above Clause 5.1 or in accordance with "Anti-Corruption Guidelines" shall be ineligible to be awarded a Bank-financed contract, or to benefit from a Bank-financed contract, financially or otherwise, during such period of time as the Bank shall determine. The list of debarred firms and individuals is available at the electronic address specified in the Data Sheet .
	b. Prohibitions	6.3.2 Firms and individuals of a country or goods manufactured in a country may be ineligible if so indicated in Section 5 (Eligible Countries) and:
		 (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the provision of 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 from that country or any payments to any country, person, or entity in that country.

c. Restrictions for Government- owned Enterprises	6.3.3 Government-owned enterprises or institutions in the Borrower's country shall be eligible only if they can establish that they (i) are legally and financially autonomous, (ii) operate under commercial law, and (iii) that they are not dependent agencies of the Client
	To establish eligibility, the government-owned enterprise or institution should provide all relevant documents (including its charter) sufficient to demonstrate that it is a legal entity separate from the government; it does not currently receive any substantial subsidies or budget support; it is not obligated to pass on its surplus to the government; it can acquire rights and liabilities, borrow funds, and can be liable for repayment of debts and be declared bankrupt; and it is not competing for a contract to be awarded by the government department or agency which, under the applicable laws or regulations, is its reporting or supervisory authority or has the ability to exercise influence or control over it.
d. Restrictions for public employees	6.3.4 Government officials and civil servants of the Borrower's country are not eligible to be included as Experts in the Consultant's Proposal unless such engagement does not conflict with any employment or other laws, regulations, or policies of the Borrower's country, and they
	(i) are on leave of absence without pay, or have resigned or retired;
	(ii) are not being hired by the same agency they were working for before going on leave of absence without pay, resigning, or retiring
	(in case of resignation or retirement, for a period of at least 6 (six) months, or the period established by statutory provisions applying to civil servants or government employees in the Borrower's country, whichever is longer. Experts who are employed by the government-owned universities, educational or research institutions are not eligible unless they have been full time employees of their institutions for a year or more prior to being included in Consultant's Proposal.; and
	(iii) their hiring would not create a conflict of interest.

B. Preparation of Proposals

- 7. General 7.1 In preparing the Proposal, the Consultant is expected to Considerations examine the RFP in detail. Material deficiencies in providing the information requested in the RFP may result in rejection of the Proposal. 8. Cost of 8.1 The Consultant shall bear all costs associated with the preparation and submission of its Proposal, and the Client shall not **Preparation of** be responsible or liable for those costs, regardless of the conduct or **Proposal** outcome of the selection process. The Client is not bound to accept any proposal, and reserves the right to annul the selection process at any time prior to Contract award, without thereby incurring any liability to the Consultant. 9. Language 9.1 The Proposal, as well as all correspondence and documents relating to the Proposal exchanged between the Consultant and the Client, shall be written in the language(s) specified in the Data Sheet. 10. **Documents** 10.1 The Proposal shall comprise the documents and forms listed Comprising in the Data Sheet. the Proposal 10.2 If specified in the **Data Sheet**, the Consultant shall include a statement of an undertaking of the Consultant to observe, in competing for and executing a contract, the Client country's laws against fraud and corruption (including bribery). 10.3 The Consultant shall furnish information on commissions, gratuities, and fees, if any, paid or to be paid to agents or any other party relating to this Proposal and, if awarded, Contract execution, as requested in the Financial Proposal submission form (Section 4). 11. **Only One** 11.1 The Consultant (including the individual members of any Joint Venture) shall submit only one Proposal, either in its own **Proposal** name or as part of a Joint Venture in another Proposal. If a Consultant, including any Joint Venture member, submits or participates in more than one proposal, all such proposals shall be disqualified and rejected. This does not, however, preclude a Subconsultant, or the Consultant's staff from participating as Key Experts and Non-Key Experts in more than one Proposal when circumstances justify and if stated in the Data Sheet. 12. **Proposal** 12.1 The Data Sheet indicates the period during which the
- 12.Proposal
Validity12.1The Data Sheet indicates the period during which the
Consultant's Proposal must remain valid after the Proposal
submission deadline.

12.2 During this period, the Consultant shall maintain its original Proposal without any change, including the availability of the Key Experts, the proposed rates and the total price.

12.3 If it is established that any Key Expert nominated in the Consultant's Proposal was not available at the time of Proposal submission or was included in the Proposal without his/her confirmation, such Proposal shall be disqualified and rejected for further evaluation, and may be subject to sanctions in accordance with Clause 5 of this ITC.

a. Extension of Validity Period 12.4 The Client will make its best effort to complete the negotiations within the proposal's validity period. However, should the need arise, the Client may request, in writing, all Consultants who submitted Proposals prior to the submission deadline to extend the Proposals' validity.

12.5 If the Consultant agrees to extend the validity of its Proposal, it shall be done without any change in the original Proposal and with the confirmation of the availability of the Key Experts.

12.6 The Consultant has the right to refuse to extend the validity of its Proposal in which case such Proposal will not be further evaluated.

b. Substitution of Key Experts at Validity
Extension
12.7 If any of the Key Experts become unavailable for the extended validity period, the Consultant shall provide a written adequate justification and evidence satisfactory to the Client together with the substitution request. In such case, a replacement Key Expert shall have equal or better qualifications and experience than those of the originally proposed Key Expert. The technical evaluation score, however, will remain to be based on the evaluation of the CV of the original Key Expert.

12.8 If the Consultant fails to provide a replacement Key Expert with equal or better qualifications, or if the provided reasons for the replacement or justification are unacceptable to the Client, such Proposal will be rejected with the prior Bank's no objection.

c. Sub-12.9The Consultant shall not subcontract the whole of the
Services.

13. Clarification and and Amendment of RFP
 13.1 The Consultant may request a clarification of any part of the RFP during the period indicated in the Data Sheet before the Proposals' submission deadline. Any request for clarification must be sent in writing, or by standard electronic means, to the Client's address indicated in the Data Sheet. The Client will respond in

writing, or by standard electronic means, and will send written copies of the response (including an explanation of the query but without identifying its source) to all Consultants. Should the Client deem it necessary to amend the RFP as a result of a clarification, it shall do so following the procedure described below:

13.1.1 At any time before the proposal submission deadline, the Client may amend the RFP by issuing an amendment in writing or by standard electronic means. The amendment shall be sent to all Consultants and will be binding on them. The Consultants shall acknowledge receipt of all amendments in writing.

13.1.2 If the amendment is substantial, the Client may extend the proposal submission deadline to give the Consultants reasonable time to take an amendment into account in their Proposals.

13.2 The Consultant may submit a modified Proposal or a modification to any part of it at any time prior to the proposal submission deadline. No modifications to the Technical or Financial Proposal shall be accepted after the deadline.

Preparation of Proposals –
 Specific
 14.1 While preparing the Proposal, the Consultant must give particular attention to the following:

Considerations14.1.1 If a Consultant considers that it may enhance its
expertise for the assignment by associating with other
consultants in the form of a Joint Venture or as Sub-
consultants, it may do so.

14.1.2 The Client may indicate in the **Data Sheet** the estimated Key Experts' time input (expressed in personmonth) or the Client's estimated total cost of the assignment, but not both. This estimate is indicative and the Proposal shall be based on the Consultant's own estimates for the same.

14.1.3 If stated in the **Data Sheet**, the Consultant shall include in its Proposal at least the same time input (in the same unit as indicated in the **Data Sheet**) of Key Experts, failing which the Financial Proposal will be adjusted for the purpose of comparison of proposals and decision for award in accordance with the procedure in the **Data Sheet**.

14.1.4 For assignments under the Fixed-Budget selection method, the estimated Key Experts' time input is not disclosed. Total available budget, with an indication whether

it is inclusive or exclusive of taxes, is given in the **Data Sheet**, and the Financial Proposal shall not exceed this budget.

15. Technical proposal
 Proposal Format and Content 15.1 The Technical Proposal shall not include any financial information. A Technical Proposal containing material financial information shall be declared non-responsive.

15.1.1 Consultant shall not propose alternative Key Experts. Only one CV shall be submitted for each Key Expert position. Failure to comply with this requirement will make the Proposal non-responsive.

15.2 Depending on the nature of the assignment, the Consultant is required to submit a Full Technical Proposal (FTP), or a Simplified Technical Proposal (STP) as indicated in the **Data Sheet** and using the Standard Forms provided in Section 3 of the RFP.

- 16. Financial Proposal
 16.1 The Financial Proposal shall be prepared using the Standard Forms provided in Section 4 of the RFP. It shall list all costs associated with the assignment, including (a) remuneration for Key Experts and Non-Key Experts, (b) reimbursable expenses indicated in the Data Sheet.
 - **a. Price** 16.2 For assignments with a duration exceeding 18 months, a price adjustment provision for foreign and/or local inflation for remuneration rates applies if so stated in the **Data Sheet**.
 - **b. Taxes** 16.3 The Consultant and its Sub-consultants and Experts are responsible for meeting all tax liabilities arising out of the Contract unless stated otherwise in the **Data Sheet**. Information on taxes in the Client's country is provided in the **Data Sheet**.
 - **c. Currency of Proposal**16.4 The Consultant may express the price for its Services in the currency or currencies as stated in the **Data Sheet**. If indicated in the **Data Sheet**, the portion of the price representing local cost shall be stated in the national currency.

d. Currency of 16.5 Payment under the Contract shall be made in the currency or currencies in which the payment is requested in the Proposal.

C. Submission, Opening and Evaluation

 17. Submission, Sealing, and Marking of Proposals
 17.1 The Consultant shall submit a signed and complete Proposal comprising the documents and forms in accordance with Clause 10 (Documents Comprising Proposal). The submission can be done by mail or by hand. If specified in the **Data Sheet**, the Consultant has the option of submitting its Proposals electronically.

17.2 An authorized representative of the Consultant shall sign the original submission letters in the required format for both the Technical Proposal and, if applicable, the Financial Proposal and shall initial all pages of both. The authorization shall be in the form of a written power of attorney attached to the Technical Proposal.

17.2.1 A Proposal submitted by a Joint Venture shall be signed by all members so as to be legally binding on all members, or by an authorized representative who has a written power of attorney signed by each member's authorized representative.

17.3 Any modifications, revisions, interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Proposal.

17.4 The signed Proposal shall be marked "ORIGINAL", and its copies marked "COPY" as appropriate. The number of copies is indicated in the **Data Sheet**. All copies shall be made from the signed original. If there are discrepancies between the original and the copies, the original shall prevail.

17.5 The original and all the copies of the Technical Proposal shall be placed inside of a sealed envelope clearly marked "TECHNICAL PROPOSAL", "[Name of the Assignment]", reference number, name and address of the Consultant, and with a warning "DO NOT OPEN UNTIL [INSERT THE DATE AND THE TIME OF THE TECHNICAL PROPOSAL SUBMISSION DEADLINE]."

17.6 Similarly, the original Financial Proposal (if required for the applicable selection method) shall be placed inside of a sealed envelope clearly marked "FINANCIAL PROPOSAL" followed by the name of the assignment, reference number, name and address of the Consultant, and with a warning "DO NOT OPEN WITH THE TECHNICAL PROPOSAL."

17.7 The sealed envelopes containing the Technical and Financial Proposals shall be placed into one outer envelope and sealed. This outer envelope shall bear the submission address, RFP reference number, the name of the assignment, Consultant's name and the address, and shall be clearly marked "**Do NOT OPEN BEFORE** [insert the time and date of the submission deadline indicated in the Data Sheet]".

17.8 If the envelopes and packages with the Proposal are not sealed and marked as required, the Client will assume no responsibility for the misplacement, loss, or premature opening of the Proposal.

17.9 The Proposal or its modifications must be sent to the address indicated in the **Data Sheet** and received by the Client no later than the deadline indicated in the **Data Sheet**, or any extension to this deadline. Any Proposal or its modification received by the Client after the deadline shall be declared late and rejected, and promptly returned unopened.

18. Confidentiality 18.1 From the time the Proposals are opened to the time the Contract is awarded, the Consultant should not contact the Client on any matter related to its Technical and/or Financial Proposal. Information relating to the evaluation of Proposals and award recommendations shall not be disclosed to the Consultants who submitted the Proposals or to any other party not officially concerned with the process, until the publication of the Contract award information.

18.2 Any attempt by Consultants or anyone on behalf of the Consultant to influence improperly the Client in the evaluation of the Proposals or Contract award decisions may result in the rejection of its Proposal, and may be subject to the application of prevailing Bank's sanctions procedures.

18.3 Notwithstanding the above provisions, from the time of the Proposals' opening to the time of Contract award publication, if a Consultant wishes to contact the Client or the Bank on any matter related to the selection process, it should do so only in writing.

 19. Opening of Technical Proposals
 19.1 The Client's evaluation committee shall conduct the opening of the Technical Proposals in the presence of the Consultants' authorized representatives who choose to attend (in person, or online if this option is offered in the Data Sheet). The opening date, time and the address are stated in the Data Sheet. The envelopes with the Financial Proposal shall remain sealed and shall be securely stored with a reputable public auditor or independent authority until they are opened in accordance with Clause 23 of the ITC.

19.2 At the opening of the Technical Proposals the following shall be read out: (i) the name and the country of the Consultant or, in case of a Joint Venture, the name of the Joint Venture, the name of the lead member and the names and the countries of all members; (ii) the presence or absence of a duly sealed envelope

with the Financial Proposal; (iii) any modifications to the Proposal submitted prior to proposal submission deadline; and (iv) any other information deemed appropriate or as indicated in the **Data Sheet**.

20.Proposals
Evaluation20.1Subject to provision of Clause 15.1 of the ITC, the
evaluators of the Technical Proposals shall have no access to the
Financial Proposals until the technical evaluation is concluded
and the Bank issues its "no objection", if applicable.

20.2 The Consultant is not permitted to alter or modify its Proposal in any way after the proposal submission deadline except as permitted under Clause 12.7 of this ITC. While evaluating the Proposals, the Client will conduct the evaluation solely on the basis of the submitted Technical and Financial Proposals.

- 21. Evaluation of Technical Proposals
 21.1 The Client's evaluation committee shall evaluate the Technical Proposals on the basis of their responsiveness to the Terms of Reference and the RFP, applying the evaluation criteria, sub-criteria, and point system specified in the Data Sheet. Each responsive Proposal will be given a technical score. A Proposal shall be rejected at this stage if it does not respond to important aspects of the RFP or if it fails to achieve the minimum technical score indicated in the Data Sheet.
- 22.Financial
Proposals for
QBS22.1 Following the ranking of the Technical Proposals, when
the selection is based on quality only (QBS), the top-ranked
Consultant is invited to negotiate the Contract.

22.2 If Financial Proposals were invited together with the Technical Proposals, only the Financial Proposal of the technically top-ranked Consultant is opened by the Client's evaluation committee. All other Financial Proposals are returned unopened after the Contract negotiations are successfully concluded and the Contract is signed.

23. **Public Opening** 23.1 After the technical evaluation is completed and the Bank has issued its no objection (if applicable), the Client shall notify of Financial those Consultants whose Proposals were considered non-**Proposals** (for QCBS, FBS, and responsive to the RFP and TOR or did not meet the minimum qualifying technical score (and shall provide information relating LCS methods) to the Consultant's overall technical score, as well as scores obtained for each criterion and sub-criterion) that their Financial Proposals will be returned unopened after completing the selection process and Contract signing. The Client shall simultaneously notify in writing those Consultants that have achieved the minimum overall technical score and inform them of the date, time and location for the opening of the Financial Proposals. The opening date should allow the Consultants sufficient time to make arrangements for attending the opening. The Consultant's attendance at the opening of the Financial Proposals (in person, or online if such option is indicated in the **Data Sheet**) is optional and is at the Consultant's choice.

23.2 The Financial Proposals shall be opened by the Client's evaluation committee in the presence of the representatives of those Consultants whose proposals have passed the minimum technical score. At the opening, the names of the Consultants, and the overall technical scores, including the break-down by criterion, shall be read aloud. The Financial Proposals will then be inspected to confirm that they have remained sealed and unopened. These Financial Proposals shall be then opened, and the total prices read aloud and recorded. Copies of the record shall be sent to all Consultants who submitted Proposals and to the Bank.

- 24. Correction of
Errors24.1 Activities and items described in the Technical Proposal
but not priced in the Financial Proposal, shall be assumed to be
included in the prices of other activities or items, and no
corrections are made to the Financial Proposal.
 - a. Time-Based 24.1.1 If a Time-Based contract form is included in the RFP, the Client's evaluation committee will (a) correct any Contracts computational or arithmetical errors, and (b) adjust the prices if they fail to reflect all inputs included for the respective activities or items in the Technical Proposal. In case of discrepancy between (i) a partial amount (subtotal) and the total amount, or (ii) between the amount derived by multiplication of unit price with quantity and the total price, or (iii) between words and figures, the former will prevail. In case of discrepancy between the Technical and Financial Proposals in indicating quantities of input, the Technical Proposal prevails and the Client's evaluation committee shall correct the quantification indicated in the Financial Proposal so as to make it consistent with that indicated in the Technical Proposal, apply the relevant unit price included in the Financial Proposal to the corrected quantity, and correct the total Proposal cost.
 - **b. Lump-Sum** 24.2 If a Lump-Sum contract form is included in the RFP, the Consultant is deemed to have included all prices in the Financial Proposal, so neither arithmetical corrections nor price adjustments shall be made. The total price, net of taxes understood as per Clause ITC 25 below, specified in the

		Financial Proposal (Form FIN-1) shall be considered as the offered price.
25.	Taxes	25.1 The Client's evaluation of the Consultant's Financial Proposal shall exclude taxes and duties in the Client's country in accordance with the instructions in the Data Sheet .
26.	Conversion to Single Currency	26.1 For the evaluation purposes, prices shall be converted to a single currency using the selling rates of exchange, source and date indicated in the Data Sheet .
27. Combined Quality and Cost Evaluation		
C	Quality- and Cost-Based election (QCBS)	27.1 In the case of QCBS, the total score is calculated by weighting the technical and financial scores and adding them as per the formula and instructions in the Data Sheet . The Consultant achieving the highest combined technical and financial score will be invited for negotiations.
	. Fixed-Budget election (FBS)	27.2 In the case of FBS, those Proposals that exceed the budget indicated in Clause 14.1.4 of the Data Sheet shall be rejected.
		27.3 The Client will select the Consultant that submitted the highest-ranked Technical Proposal that does not exceed the budget indicated in the RFP, and invite such Consultant to negotiate the Contract.

c. Least-Cost Selection	27.4 In the case of Least-Cost Selection (LCS), the Client will select the Consultant with the lowest evaluated total price among those consultants that achieved the minimum technical score, and invite such Consultant to negotiate the Contract.
	D. Negotiations and Award
28. Negotiations	28.1 The negotiations will be held at the date and address indicated in the Data Sheet with the Consultant's representative(s) who must have written power of attorney to negotiate and sign a Contract on behalf of the Consultant.
	28.2 The Client shall prepare minutes of negotiations that are signed by the Client and the Consultant's authorized representative.
a. Availability of Key Experts	28.3 The invited Consultant shall confirm the availability of all Key Experts included in the Proposal as a pre-requisite to the negotiations, or, if applicable, a replacement in accordance with Clause 12 of the ITC. Failure to confirm the Key Experts' availability may result in the rejection of the Consultant's Proposal and the Client proceeding to negotiate the Contract with the next-ranked Consultant.
	28.4 Notwithstanding the above, the substitution of Key Experts at the negotiations may be considered if due solely to circumstances outside the reasonable control of and not foreseeable by the Consultant, including but not limited to death or medical incapacity. In such case, the Consultant shall offer a substitute Key Expert within the period of time specified in the letter of invitation to negotiate the Contract, who shall have equivalent or better qualifications and experience than the original candidate.
b. Technical negotiations	28.5 The negotiations include discussions of the Terms of Reference (TORs), the proposed methodology, the Client's inputs, the special conditions of the Contract, and finalizing the "Description of Services" part of the Contract. These discussions shall not substantially alter the original scope of services under the TOR or the terms of the contract, lest the quality of the final product, its price, or the relevance of the initial evaluation be affected.
c. Financial negotiations	28.6 The negotiations include the clarification of the Consultant's tax liability in the Client's country and how it should be reflected in the Contract.

If the selection method included cost as a factor in the 28.7 evaluation, the total price stated in the Financial Proposal for a Lump-Sum contract shall not be negotiated. 28.8 In the case of a Time-Based contract, unit rates negotiations shall not take place, except when the offered Key Experts and Non-Key Experts' remuneration rates are much higher than the typically charged rates by consultants in similar contracts. In such case, the Client may ask for clarifications and, if the fees are very high, ask to change the rates after consultation with the Bank. The format for (i) providing information on remuneration rates in the case of Quality Based Selection; and (ii) clarifying remuneration rates' structure under Clause 28.8 above, is provided in Appendix A to the Financial Form FIN-3: Financial Negotiations - Breakdown of Remuneration Rates. 29. Conclusion of 29.1 The negotiations are concluded with a review of the finalized draft Contract, which then shall be initialed by the **Negotiations** Client and the Consultant's authorized representative. 29.2 If the negotiations fail, the Client shall inform the Consultant in writing of all pending issues and disagreements and provide a final opportunity to the Consultant to respond. If disagreement persists, the Client shall terminate the negotiations informing the Consultant of the reasons for doing so. After having obtained the Bank's no objection, the Client will invite the next-ranked Consultant to negotiate a Contract. Once the Client commences negotiations with the next-ranked Consultant, the Client shall not reopen the earlier negotiations. **30. Award of Contract** 30.1 After completing the negotiations the Client shall obtain the Bank's no objection to the negotiated draft Contract, if applicable; sign the Contract; publish the award information as per the instructions in the **Data Sheet**; and promptly notify the other Consultants. 30.2 The Consultant is expected to commence the assignment

30.2 The Consultant is expected to commence the assignmen on the date and at the location specified in the **Data Sheet**.

Instructions to Consultants

E. Data Sheet

["<u>Notes to Client</u>" shown in brackets throughout the text are provided for guidance to prepare the Data Sheet; they should be deleted from the final RFP to be issued to the Consultants]

	A. General		
ITC Clause Reference			
2.1	Name of the Client: Inland Waterways Authority of India, Ministry of Ports, Shipping and Waterways, Government of India.		
	Method of selection: Quality and Cost Based Selection (QCBS) as per		
	Applicable Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, dated January 2011 available on www.worldbank.org/procure		
2.2	Financial Proposal to be submitted together with Technical Proposal: Yes		
	The name of the assignment is : Hiring of an Organization for Comprehensive Consultancy Services for preparation of Detailed Project Report (DPR) for IWT Sector Development for enhancement of Socio-economic activities in and around Ganga – Bhagirathi - Hoogly river system (NW-1)		
2.3	A On – Line pre-proposal conference will be held: Yes		
	Zoom Link for the On-Line Pre Proposal Conference is as given below:		
	Join Zoom Meeting		
	https://us06web.zoom.us/j/85218494506?pwd=SEIXYjMyRUNFYINIc0 40NjI3Wk5Fdz09		
	Meeting ID: 852 1849 4506 Passcode: bvPaN0		
	Bidders are requested to submit the authorization from their firms to attend the Pre Proposal Conference on Zoom.		
	Date of pre-proposal conference : 18.08.2021 Time: 15:00 Hrs		
	Address: IWAI, A-13, Sector – 1, Noida – 201301, Uttar Pradesh, India		

	Telephone: 0120-2544004 Facsimile: 0120-2543976		
	E-mail: vc.iwai@nic.in Contact person/conference coordinator: Shri Jayant Singh, Vice Chairman and Project Director, JMVP		
2.4	The Client will provide the following inputs, project data, reports, etc. t facilitate the preparation of the Proposals: NA		
6.3.1	A list of debarred firms and individuals is available at the Bank's external website: www.worldbank.org/debarr		
	B. Preparation of Proposals		
9.1	This RFP has been issued in the English language.		
	Proposals shall be submitted in English language.		
	All correspondence exchange shall be in English language.		
10.1	The Proposal shall comprise the following: For FULL TECHNICAL PROPOSAL (FTP):		
	1 st Inner Envelope with the Technical Proposal:		
	(1) Power of Attorney to sign the Proposal		
	(2) TECH-1		
	(3) TECH-2		
	(4) TECH-3 (5) TECH-4		
	(5) TECH-4 (6) TECH-5		
	(7) TECH-6		
	AND		
	2d Inner Envelope with the Financial Proposal:		
	(1) FIN-1		
	(2) FIN-2		
	(3) FIN-3 (4) FIN-4		
10.2	Statement of Undertaking is required: No		
11.1	Participation of Sub-consultants, Key Experts and Non-Key Experts in more than one Proposal is permissible: Yes		

12.1	Proposals must remain valid for 120 calendar days after the proposal submission deadline.		
13.1	Clarifications may be requested no later than 14 days prior to the submission deadline.		
	The system will also send auto-e-mail regarding hosting of query and response to all the shortlisted Consultants. The shortlisted Consultants shall remain responsible to view query and response thereto. [Note: kindly modify or delete as applicable]		
13.1.1	The Client will host the amendment to RFP, if any on the e-procurement portal at any time prior to the submission deadline.		
	The system will also send auto-e-mail regarding hosting of amendment to RFP to all the shortlisted Consultants. The shortlisted Consultants shall remain responsible to view amendment to RFP.		
13.1.2	The Client will host extension of submission deadline on the e-procurement portal.		
13.2	A Consultant may modify its Proposal in the following manner, by using the appropriate option for proposal modification on e-procurement portal, before the deadline for submission of proposals.		
	(a) For proposal modification and consequential re-submission, the Consultant is not required to withdraw the proposal submitted earlier. The last modified proposal submitted by the consultant within the proposal submission time shall be considered as the 'Proposal'.		
	(b) For this purpose, modification/withdrawal by other means will not be accepted.		
	(c) The modification and consequential re-submission of proposals is allowed any number of times.		
	(d) A consultant may withdraw its proposal by using the appropriate option for proposal withdrawal, before the deadline for submission of proposals. However, if the proposal is withdrawn, re-submission is <i>not allowed</i> .		
14.1.2	Estimated input of Key Experts' time-input: 48 person-months.		
	Estimated input of non Key Experts' time input :40 person-months.		
14.1.3 for time- based contracts only	Not applicable		

14.1.4 and 27.2 use for Fixed Budget method	Not applicable		
15.2	The format of the Technical Proposal to be submitted is: FTP Submission of the Technical Proposal in a wrong format may lead to the		
	Proposal being deemed non-responsive to the RFP requirements.		
16.1	(1) a per diem allowance, including hotel, for experts for every day of absence from the home office for the purposes of the Services;		
	(2) cost of travel by the most appropriate means of transport and the most direct practicable route;		
	(3) cost of office accommodation, including overheads and back-stop support;		
	(4) communications costs;		
	(5) cost of purchase or rent or freight of any equipment required to be provided by the Consultants;		
	(6) cost of reports production (including printing) and delivering to the <i>Client;</i>		
	(7) other allowances where applicable and provisional or fixed sums (if any)]		
16.2	A price adjustment provision applies to remuneration rates: No		
16.3	Information on the Consultant's tax obligations in the Client's country should be checked with tax experts.		
	The Consultant is to submit an Undertaking for Input Tax Credit in GST along with their proposal as per format attached with the RFP.		
16.4	The Financial Proposal shall be stated in the following currencies: Indian Rupees		
	C. Submission, Opening and Evaluation		
17.1	The Consultants have to submit their Proposals electronically.		

	The Client shall use the following electronic-procurement system to manage this Selection process:	
	https://eprocure.gov.in/eprocure/app	
	The Consultants shall submit their Proposals electronically on the e- procurement portal.	
	The electronic submission procedures shall be as follows:	
	The Consultants shall submit their Proposals (both Technical and Financial) electronically following the procedure given below. Detailed guidelines for viewing proposals and for online submission are given on the website:	
	(a) To participate in the e-tendering process, it is mandatory for the consultants to have Class II Digital Signature Certificate (in the name of person who will sign the proposal) in the form of smart card/e-token, from any of the licensed Certifying Agency authorized by the Government of India. Consultants can see the list of licensed CAs from the link <u>www.cca.gov.in</u>	
	(b) The consultant 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 consultant can then login the website through the secured login by entering the password of the e-token & the user id/ password chosen during registration.	
	(c) The size of individual files containing the documents comprising the Proposal(s) shall not exceed 2 MB and there is no limit on the number of files to be uploaded. If any document is more than 2MB, it can be reduced through zip / rar and the same can be uploaded, if permitted.	
17.7 and 17.9	The Proposals must be uploaded on the e-procurement portal no later than:	
	Date: 09.09.2021	
	Time: 15:00 Hrs	
19.1	The procedure for online opening of technical proposals shall be: <i>Technical proposal will be opened on the e-procurement portal by the Client's</i> <i>Evaluation Committee at the date and time indicated below.</i>	
	Date: 09.09.2021	
	<i>Time:</i> 15:30 <i>Hrs</i>]	
	Consultants have an option to attend the opening of the Technical Proposals in person. The opening shall take place at:	

	Street Address: Inland Waterways Authority of India, A-13, Sector -1, Noida			
	[In the event of the specified date of proposal opening being declared a holiday for the Client, the proposals will be opened at the appointed time and location on the next working day]			
19.2	In addition, the following information will be read aloud at the opening of the Technical Proposals N.A.			
21.1	mentio meet. A, sha Techn evalua	nsultants technical proposal shall be evaluated in two parts. Part A (as ntioned below) shall be the mandatory criteria that the consultants must et. Technical Proposals of Consultants who do not meet the criteria in Part shall not be further evaluated, and the proposal shall be rejected. hnical Proposal of Consultants, who meet the criteria in Part A, shall be luated further using the scoring scheme contained in Part B below. t A: Mandatory Criteria:		
	S. No.	Criteria	Documents Required	
	1.	Consultant should be engaged in conducting similar activities for the past 5 years	Copy of Certificate of Incorporation to be submitted.	
	2.	Consultant should have a minimum average annual financial turnover of INR 2.16 Crore during the last 5 years	CA certified declaration for last 5 years to be submitted.	
	3.	Consultant should have completed 3 such studies of similar / related work during the last 5 years.	List of scope of work, date of commencement, date of completion, client's details, work order, Certificate issued by client declaring the work as completed to be submitted.	
	4.	Consultant should be having a minimum of 16 employees on their payroll	declaration to be submitted.	
	Part I	B: Evaluation Criteria:		
	Criteria, sub-criteria, and point system for the evaluation of the Full Tec Proposals:			

(i) Specific experience of the Consultant (as a firm Assignment:	n) relevant to the
٤	a minimum of 3 completed projects during last 5 yea to be submitted, with atleast 2 Projects of 2 requirem Detailed engineering studies / (2) morphological potential / (4) Rapid E&SIA studies or combination th shall be awarded 5 marks. [15]	ents out of 4 i.e. (1) study / (3) Traffic
(ii) Adequacy and quality of the proposed methodolog in responding to the Terms of Reference (TORs):	gy, and work plan [40]
	 a) Approach and methodology (15) b) Work Plan (15) c) Organization and staffing (10) 	
	{ <u>Notes to Consultant</u> : the Client will assess whe methodology is clear, responds to the TORs, work p implementable; overall team composition is bala	olan is realistic and inced and has an
	<i>appropriate skills mix; and the work plan has right in</i> (iii) Key Experts' qualifications and competence for t	
{		he Assignment: to the same for the
{	(iii) Key Experts' qualifications and competence for t <u>Notes to Consultant</u> : each position number corresponds	he Assignment: to the same for the
{	(iii) Key Experts' qualifications and competence for t (<u>Notes to Consultant</u> : each position number corresponds Key Experts in Form TECH-6 to be prepared by the Cons	he Assignment: to the same for the sultant}
{	(iii) Key Experts' qualifications and competence for t (<u>Notes to Consultant</u> : each position number corresponds Key Experts in Form TECH-6 to be prepared by the Cons Name	he Assignment: to the same for the sultant} Points
{	 (iii) Key Experts' qualifications and competence for the <u>Notes to Consultant</u>: each position number corresponds (Notes to Consultant): each position number corresponds Key Experts in Form TECH-6 to be prepared by the Constant Name a) Team Leader 	he Assignment: to the same for the pultant} Points [6]
{	 (iii) Key Experts' qualifications and competence for the <u>Notes to Consultant</u>: each position number corresponds (<u>Notes to Consultant</u>: each position number corresponds) (Key Experts in Form TECH-6 to be prepared by the Constant) Name a) Team Leader b) Dy. Team Leader / Terminal Planner 	he Assignment: to the same for the sultant} Points [6] [4]
{	 (iii) Key Experts' qualifications and competence for the <u>Notes to Consultant</u>: each position number corresponds (<u>Notes to Consultant</u>: each position number corresponds) (Key Experts in Form TECH-6 to be prepared by the Constant) Name a) Team Leader b) Dy. Team Leader / Terminal Planner c) Traffic Expert 	he Assignment: to the same for the bultant} Points [6] [4] [3]
{	 (iii) Key Experts' qualifications and competence for the <u>Notes to Consultant</u>: each position number corresponds (New Experts in Form TECH-6 to be prepared by the Construction Name a) Team Leader b) Dy. Team Leader / Terminal Planner c) Traffic Expert d) Procurement Expert 	he Assignment: to the same for the sultant} Points [6] [4] [3] [3]
{	 (iii) Key Experts' qualifications and competence for the <u>Notes to Consultant</u>: each position number corresponds (Key Experts in Form TECH-6 to be prepared by the Constant) Name a) Team Leader b) Dy. Team Leader / Terminal Planner c) Traffic Expert d) Procurement Expert e) Transport Economist 	he Assignment: to the same for the sultant} Points [6] [4] [3] [3] [3]
{	 (iii) Key Experts' qualifications and competence for the <u>Notes to Consultant</u>: each position number corresponds Key Experts in Form TECH-6 to be prepared by the Constant Name a) Team Leader b) Dy. Team Leader / Terminal Planner c) Traffic Expert d) Procurement Expert e) Transport Economist f) Business and Financial Analyst 	he Assignment: to the same for the sultant} Points [6] [4] [3] [3] [3] [4]
{	 (iii) Key Experts' qualifications and competence for the <u>Notes to Consultant</u>: each position number corresponds Key Experts in Form TECH-6 to be prepared by the Const Name a) Team Leader b) Dy. Team Leader / Terminal Planner c) Traffic Expert d) Procurement Expert e) Transport Economist f) Business and Financial Analyst g) Structural Engineer 	he Assignment: to the same for the fultant} Points [6] [4] [3] [3] [4] [3] [3]
{	 (iii) Key Experts' qualifications and competence for the Notes to Consultant: each position number corresponds (Key Experts in Form TECH-6 to be prepared by the Const Name a) Team Leader b) Dy. Team Leader / Terminal Planner c) Traffic Expert d) Procurement Expert e) Transport Economist f) Business and Financial Analyst g) Structural Engineer i) Geotechnical Engineer 	he Assignment: to the same for the fultant} Points [6] [4] [3] [3] [4] [3] [3] [3] [3]
{	 (iii) Key Experts' qualifications and competence for the Notes to Consultant: each position number corresponds (Notes to Consultant: each position number corresponds) (Notes to Consultant Expert) (Notes to Consultant Expert) (Notes to Consultant Engineer) (Notes to Consultant Expert) (Notes to Consultant	he Assignment: to the same for the sultant} Points [6] [4] [3] [3] [4] [3] [3] [4] [4]
{	 iii) Key Experts' qualifications and competence for the Constituent in Form TECH-6 to be prepared by the Const Name a) Team Leader b) Dy. Team Leader / Terminal Planner c) Traffic Expert d) Procurement Expert e) Transport Economist f) Business and Financial Analyst g) Structural Engineer i) Geotechnical Engineer j) Hydrographic Expert k) Naval Architect 	he Assignment: to the same for the bultant} Points [6] [4] [3] [3] [4] [3] [4] [3] [4] [3]

	Total points for criterion (iii): 45			
	The number of points to be assigned to each of the above positions shall be determined considering the following three sub-criteria and relevant percentage weights:			
	[10%]	2) Adequacy for the Assignment (relevant education, training,		
	3)[If relevant to the task, add the 3d sub-criterion: Relevant e in the region (working level fluency in local language(s)/kno local culture or administrative system, government organizat	wledge of		
	Total weight:	100%		
	(Total points for the three criteria:	100		
		•••••		
	The minimum technical score (St) required to pass is: 75			
23.1	Notifications to the Consultants will be sent as following: The Client shall notify the Consultants online through e-procurement portal.			
	Consultants have an option to attend the opening of the Financial P in person through authorised representative.	roposals		
	The opening shall take place at:			
	Street Address: Inland Waterways Authority of India, A-13, Sector	-1, Noida		
	Floor, room number Ground Floor, Director (Technical) Office			
	City: Noida			
	Country: India			
	Date: To be notified to successful bidders at a later date.			
	Time: To be notified to successful bidders at a later date.			
	In the event of the specified date of proposal opening being declared a holiday for the Client, the proposals will be opened at the appointed time and location on the next working day]			

23.3	Following the completion of the evaluation of the Technical Proposals, the Client will notify online through e-procurement portal, all Consultants of the location, date and time of the public opening of Financial Proposals.			
	Any interested party who wishes to attend this public opening should contact [Sh. Jayant Singh, Vice Chairman & Project Director, JMVP, 0120-2544004 and request to be notified of the location, date and time of the public opening of Financial Proposals. The request should be made before the deadline for submission of Proposals, stated above.			
	A notice of the public opening of Financial Proposals shall be published on the Client's website.			
	The online opening procedure shall be as following:			
	Financial proposals will be opened on the e-procurement portal by the Client's Evaluation Committee at the date and time indicated in <u>https://eprocure.gov.in/eprocure/app</u>			
	The procedure for notifying the Consultants on the results of the Financial opening shall be as following: same as in ITB 23.2			
	An option of presence in person is provided at the place, date and time as specified in BDS 23.1			
25.1	For the purpose of the evaluation, the Client will exclude: all local identifiable indirect taxes such as GST, or similar taxes levied on the contract's invoices; If a Contract is awarded, at Contract negotiations, all such taxes will be discussed, finalized (using the itemized list as a guidance but not limiting to it) and added to the Contract amount as a separate line, also indicating which taxes shall be paid by the Consultant and which taxes are withheld and paid by the Client on behalf of the Consultant.			
26.1	Proposals should be submitted in Indian Rupees only.			
27.1 (QCBS only)	The lowest evaluated Financial Proposal (Fm) is given the maximum financial score (Sf) of 100.			
	The formula for determining the financial scores (Sf) of all other Proposals is calculated as following:			
	Sf = 100 x Fm/F, in which "Sf" is the financial score, "Fm" is the lowest price, and "F" the price of the proposal under consideration.			
	The weights given to the Technical (T) and Financial (P) Proposals are: $\mathbf{T} = 75\%$			

	P = 25% Proposals are ranked according to their combined technical (St) and financial (Sf) scores using the weights (T = the weight given to the Technical Proposal; P = the weight given to the Financial Proposal; T + P = 1) as following: S = St x T% + Sf x P%.	
	D. Negotiations and Award	
28.1	Expected date and address for contract negotiations: Date: Within 120 days of bid opening. Address: Inland Waterways Authority of India.	
30.1	The publication of the contract award information following the completion of the contract negotiations and contract signing will be done as following: <u>www.iwai.nic.in</u> ; www.devbusiness.com	
	The publication will be done within 15 days after the contract signing.	
30.2	Expected date for the commencement of the Services: Date: Within 135 days of bid opening at: Noida	

Section 3. Technical Proposal – Standard Forms

{<u>Notes to Consultant</u> shown in brackets { } throughout Section 3 provide guidance to the Consultant to prepare the Technical Proposal; they should not appear on the Proposals to be submitted.}

FORM	DESCRIPTION	Page Limit
TECH-1	Technical Proposal Submission Form.	
TECH-1	If the Proposal is submitted by a joint venture, attach a letter of	
Attachment	intent or a copy of an existing agreement.	
Power of	No pre-set format/form. In the case of a Joint Venture, several	
Attorney	are required: a power of attorney for the authorized	
	representative of each JV member, and a power of attorney for	
	the representative of the lead member to represent all JV members	
TECH-2	Consultant's Organization and Experience.	
TECH-2A	A. Consultant's Organization	
TECH-2B	B. Consultant's Experience	
TECH-3	Comments or Suggestions on the Terms of Reference and on	
	Counterpart Staff and Facilities to be provided by the Client.	
TECH-3A	A. On the Terms of Reference	
TECH-3B	B. On the Counterpart Staff and Facilities	
TECH-4	Description of the Approach, Methodology, and Work Plan for	
	Performing the Assignment	
TECH-5	Work Schedule and Planning for Deliverables	
TECH-6	Team Composition, Key Experts Inputs, and attached Curriculum Vitae (CV)	

CHECKLIST OF REQUIRED FORMS

All pages of the original Technical and Financial Proposal shall be initialled by the same authorized representative of the Consultant who signs the Proposal.

FORM TECH-1

TECHNICAL PROPOSAL SUBMISSION FORM

{Location, Date}

To: Vice Chairman & Project Director Inland Waterways Authority of India A-13, Sector-1, Noida – 201 301 (UP)

Dear Sirs:

We, the undersigned, offer to provide the consulting services for "Hiring of an Organization for Comprehensive Consultancy Services for preparation of Detailed Project Report (DPR) for IWT Sector Development for enhancement of Socio-economic activities in and around Ganga – Bhagirathi - Hoogly river system (NW-1)" in accordance with your Request for Proposals dated *[Insert Date]* and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal and a Financial Proposal sealed in a separate envelope.

{If the Consultant is a joint venture, insert the following: We are submitting our Proposal a joint venture with: {Insert a list with full name and the legal address of each member, and indicate the lead member}. We have attached a copy {insert: "of our letter of intent to form a joint venture" or, if a JV is already formed, "of the JV agreement"} signed by every participating member, which details the likely legal structure of and the confirmation of joint and severable liability of the members of the said joint venture.

{OR

If the Consultant's Proposal includes Sub-consultants, insert the following: We are submitting our Proposal with the following firms as Sub-consultants: {Insert a list with full name and address of each Sub-consultant.}

We hereby declare that:

- (a) All the information and statements made in this Proposal are true and we accept that any misinterpretation or misrepresentation contained in this Proposal may lead to our disqualification by the Client and/or may be sanctioned by the Bank.
- (b) Our Proposal shall be valid and remain binding upon us for the period of time specified in the Data Sheet, Clause 12.1.
- (c) We have no conflict of interest in accordance with ITC 3.

- (d) We meet the eligibility requirements as stated in ITC 6, and we confirm our understanding of our obligation to abide by the Bank's policy in regard to corrupt and fraudulent practices as per ITC 5.
- (e) In competing for (and, if the award is made to us, in executing) the Contract, we undertake to observe the laws against fraud and corruption, including bribery, in force in the country of the Client.
- (f) Except as stated in the Data Sheet, Clause 12.1, we undertake to negotiate a Contract on the basis of the proposed Key Experts. We accept that the substitution of Key Experts for reasons other than those stated in ITC Clause 12 and ITC Clause 28.4 may lead to the termination of Contract negotiations.
- (g) Our Proposal is binding upon us and subject to any modifications resulting from the Contract negotiations.

We undertake, if our Proposal is accepted and the Contract is signed, to initiate the Services related to the assignment no later than the date indicated in Clause 30.2 of the Data Sheet.

We understand that the Client is not bound to accept any Proposal that the Client receives.

We remain,

Yours sincerely,

Authorized Signature {In full and initials}:	
Name and Title of Signatory:	
Name of Consultant (company's name or JV's name):	
In the capacity of:	

Address:

Contact information (phone and e-mail):

{For a joint venture, either all members shall sign or only the lead member, in which case the power of attorney to sign on behalf of all members shall be attached}

FORM TECH-2

CONSULTANT'S ORGANIZATION AND EXPERIENCE

Form TECH-2: a brief description of the Consultant's organization and an outline of the recent experience of the Consultant that is most relevant to the assignment. In the case of a joint venture, information on similar assignments shall be provided for each partner. For each assignment, the outline should indicate the names of the Consultant's Key Experts and Subconsultants who participated, the duration of the assignment, the contract amount (total and, if it was done in a form of a joint venture or a sub-consultancy, the amount paid to the Consultant), and the Consultant's role/involvement.

A - Consultant's Organization

1. Provide here a brief description of the background and organization of your company, and - in case of a joint venture - of each member for this assignment.

2. Include organizational chart, a list of Board of Directors, and beneficial ownership

B - Consultant's Experience

1. List only previous similar assignments successfully completed in the last 5 years.

2. List only those assignments for which the Consultant was legally contracted by the Client as a company or was one of the joint venture partners. Assignments completed by the Consultant's individual experts working privately or through other consulting firms cannot be claimed as the relevant experience of the Consultant, or that of the Consultant's partners or sub-consultants, but can be claimed by the Experts themselves in their CVs. The Consultant should be prepared to substantiate the claimed experience by presenting copies of relevant documents and references if so requested by the Client.
| Duration | Assignment name/&
brief description of main
deliverables/outputs | Name of Client
& Country of
Assignment | Approx.
Contract value
(in US\$
equivalent)/
Amount paid to
your firm | Role on the
Assignment | |
|----------------------------------|--|--|--|--|--|
| {e.g.,
Jan.2016–
Apr.2018} | <pre>{e.g., "Improvement quality of": designed master plan for rationalization of; }</pre> | {e.g., Ministry of
, country} | {e.g., US\$1
mill/US\$0.5
mill} | {e.g., Lead
partner in a JV
A&B&C} | |
| {e.g., Jan-
May
2018} | {e.g., "Support to sub-
national government" :
drafted secondary level
regulations on | {e.g.,
municipality
of,
country} | {e.g., US\$0.2
mil/US\$0.2 mil} | {e.g., sole
Consultant} | |

COMMENTS AND SUGGESTIONS ON THE TERMS OF REFERENCE, COUNTERPART STAFF, AND FACILITIES TO BE PROVIDED BY THE CLIENT

Form TECH-3: comments and suggestions on the Terms of Reference that could improve the quality/effectiveness of the assignment; and on requirements for counterpart staff and facilities, which are provided by the Client, including: administrative support, office space, local transportation, equipment, data, etc.

A - On the Terms of Reference

{improvements to the Terms of Reference, if any}

B - On Counterpart Staff and Facilities

{comments on counterpart staff and facilities to be provided by the Client. For example, administrative support, office space, local transportation, equipment, data, background reports, etc., if any}

DESCRIPTION OF APPROACH, METHODOLOGY, AND WORK PLAN IN RESPONDING TO THE TERMS OF REFERENCE

Form TECH-4: a description of the approach, methodology and work plan for performing the assignment, including a detailed description of the proposed methodology and staffing for training, if the Terms of Reference specify training as a specific component of the assignment.

{Suggested structure of your Technical Proposal:

- a) Technical Approach and Methodology
- b) Work Plan
- c) Organization and Staffing}
- a) <u>Technical Approach and Methodology.</u> {Please explain your understanding of the objectives of the assignment as outlined in the Terms of Reference (TORs), the technical approach, and the methodology you would adopt for implementing the tasks to deliver the expected output(s), and the degree of detail of such output. <u>Please do not repeat/copy</u> the TORs in here.}
- b) <u>Work Plan.</u> {Please outline the plan for the implementation of the main activities/tasks of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and tentative delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing your understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents (including reports) to be delivered as final output(s) should be included here. The work plan should be consistent with the Work Schedule Form. }
- c) <u>Organization and Staffing.</u> {Please describe the structure and composition of your team, including the list of the Key Experts, Non-Key Experts and relevant technical and administrative support staff.}

WORK SCHEDULE AND PLANNING FOR DELIVERABLES

N°	Deliverables ¹ (D)	Months											
		1	2	3	4	5	6	7	8	9	 n TOTAL		
D-1	{e.g., Deliverable #1: Report A												
	1) data collection												
	2) drafting												
	3) inception report												
	4) incorporating comments												
-	5)												
	6) delivery of final report to Client}												
D-2	{e.g., Deliverable #2:}												
n													

1 List the deliverables with the breakdown for activities required to produce them and other benchmarks such as the Client's approvals. For phased assignments, indicate the activities, delivery of reports, and benchmarks separately for each phase.

2 Duration of activities shall be indicated in a form of a bar chart.

3. Include a legend, if necessary, to help read the chart.

TEAM COMPOSITION, ASSIGNMENT, AND KEY EXPERTS' INPUTS

N°	Name	Expert's input (in person/month) per each Deliverable (listed in TECH-5)								Total time-input (in Months)		
		Position		D-1	D-2	D-3		D		Home	Field	Total
KEY E	XPERTS				•	<u> </u>						
K-1	{e.g., Mr. Abbbb}	[Team Leader]	[Home] [Field]	[2 month] [0.5 m]	[1.0] [2.5]	[1.0] [0]						
К-2		-		[0.5 m]	[2.5]					_		
K-3												
K-3												
n										-		
								Subtotal				
NON	-KEY EXPERTS		1			<u> </u>			<u> </u>	1		
N-1			[Home] [Field]									
N-2												
			 					····		_		
n												
								Subtotal				
								Total				

1 For Key Experts, the input should be indicated individually for the same positions as required under the Data Sheet ITC21.1.

- 2 Months are counted from the start of the assignment/mobilization. One (1) month equals twenty two (22) working (billable) days. One working (billable) day shall be not less than eight (8) working (billable) hours.
- ³ "Home" means work in the office in the expert's country of residence. "Field" work means work carried out in the Client's country or any other country outside the expert's country of residence.



Full time input Part time input

FORM TECH-6 (CONTINUED)

CURRICULUM VITAE (CV)

Position Title and No.	{e.g., K-1, TEAM LEADER}
Name of Expert:	{Insert full name}
Date of Birth:	{day/month/year}
Country of Citizenship/Residence	

Education: {List college/university or other specialized education, giving names of educational institutions, dates attended, degree(s)/diploma(s) obtained}

Employment record relevant to the assignment: {Starting with present position, list in reverse order. Please provide dates, name of employing organization, titles of positions held, types of activities performed and location of the assignment, and contact information of previous clients and employing organization(s) who can be contacted for references. Past employment that is not relevant to the assignment does not need to be included.}

Period	Employing organization and your title/position. Contact information for references	Country	Summary of activities performed relevant to the Assignment
[e.g., May 2005- present]	[e.g., Ministry of, advisor/consultant to		
	For references: Tel/e- mail; Mr. Hbbbbb, deputy minister]		

Membership in Professional Associations and Publications:

Language Skills (indicate only languages in which you can work): _____

Adequacy for the Assignment:

Detailed Tasks Assigned on Consultant's Team of Experts:	Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks
{List all deliverables/tasks as in TECH- 5 in which the Expert will be involved)	

Expert's contact information: (e-mail, phone.....)

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience, and I am available to undertake the assignment in case of an award. I understand that any misstatement or misrepresentation described herein may lead to my disqualification or dismissal by the Client, and/or sanctions by the Bank.

		{day/month/year}
Name of Expert	Signature	Date
		{day/month/year}

Name of authorized Representative of the Consultant (the same who signs the Proposal) Signature

Date

Section 4. Financial Proposal - Standard Forms

{*Notes to Consultant* shown in brackets { } provide guidance to the Consultant to prepare the Financial Proposals; they should not appear on the Financial Proposals to be submitted.}

Financial Proposal Standard Forms shall be used for the preparation of the Financial Proposal according to the instructions provided in Section 2.

- FIN-1 Financial Proposal Submission FormFIN-2 Summary of CostsFIN-3 Breakdown of Remuneration
- FIN-4 Reimbursable expenses

FORM FIN-1 FINANCIAL PROPOSAL SUBMISSION FORM

{Noida, August, 2021}

To: Vice Chairman & Project Director Inland Waterways Authority of India A-13, Sector-1, Noida – 201 301 (UP)

Dear Sirs:

We, the undersigned, offer to provide the consulting services for "Hiring of an Organization for Comprehensive Consultancy Services for preparation of Detailed Project Report (DPR) for IWT Sector Development for enhancement of Socio-economic activities in and around Ganga – Bhagirathi - Hoogly river system (NW-1)" in accordance with your Request for Proposal dated 09thAugust, 2021 and our Technical Proposal.

Our attached Financial Proposal is for the amount of {Indicate the corresponding to the amount(s) currency(ies)} {Insert amount(s) in words and figures}, *[Insert "including" or "excluding"] of all indirect local taxes in accordance with Clause 25.1 in the Data Sheet.* The estimated amount of local indirect taxes is {Insert currency} {Insert amount in words and figures} which shall be confirmed or adjusted, if needed, during negotiations. {Please note that all amounts shall be the same as in Form FIN-2}.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal, i.e. before the date indicated in Clause 12.1 of the Data Sheet.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Commissions and gratuities paid or to be paid by us to an agent or any third party relating to preparation or submission of this Proposal and Contract execution, paid if we are awarded the Contract, are listed below:

Name and Address	Amount and	Purpose of Commission
of Agents	Currency	or Gratuity

{If no payments are made or promised, add the following statement: "No commissions or gratuities have been or are to be paid by us to agents or any third party relating to this Proposal and Contract execution."}

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,	
Authorized Signature {In full and Name and Title of Signatory:	-
In the capacity of:	
Address:	
E-mail:	

{For a joint venture, either all members shall sign or only the lead member/consultant, in which case the power of attorney to sign on behalf of all members shall be attached}

FORM FIN-2 SUMMARY OF COSTS

	Cost					
	{Consultant must state the proposed Costs in accordance with Clause 16.4 of the Data Sheet}					
Item	In Indian Rupees (Rs.)					
Cost of the Financial Proposal						
Including:						
(1) Remuneration						
(2) Reimbursables						
Total Cost of the Financial Proposal:						
{Should match the amount in Form FIN-1}						
Indirect Local Tax Estimates – to be discussed an	d finalized at the negotiations if the Contract is awarded					
Total Estimate for GST:						

FORM FIN-3 BREAKDOWN OF REMUNERATION

When used for Lump-Sum contract assignment, information to be provided in this Form shall only be used to demonstrate the basis for the calculation of the Contract's ceiling amount; to calculate applicable taxes at contract negotiations; and, if needed, to establish payments to the Consultant for possible additional services requested by the Client. This Form shall not be used as a basis for payments under Lump-Sum contracts

A. Rer	muneration				
No.	Name	Position (as in TECH-6)	Person-month Remuneration Rate	Time Input in Person/Month (from TECH-6)	Total in Rs.
	Key Experts				
K-1			[Home]		
	1		[Field]		
K-2					
	1				
]				
	<u> </u>				
	Non-Key Experts				
N-1			[Home]		
N-2	1		[Field]		
	1				
	1				
		•		Total Costs	

Sample Form

Consultant: Assignment: Country: Date:

Consultant's Representations Regarding Costs and Charges

We hereby confirm that:

(a) the basic fees indicated in the attached table are taken from the firm's payroll records and reflect the current rates of the Experts listed which have not been raised other than within the normal annual pay increase policy as applied to all the Consultant's Experts;

(b) attached are true copies of the latest pay slips of the Experts listed;

(c) the away- from- home office allowances indicated below are those that the Consultant has agreed to pay for this assignment to the Experts listed;

(d) the factors listed in the attached table for social charges and overhead are based on the firm's average cost experiences for the latest three years as represented by the firm's financial statements; and

(e) said factors for overhead and social charges do not include any bonuses or other means of profit-sharing.

[Name of Consultant]

Signature of Authorized Representative

Date

Name:

Title:

Consultant's Representations Regarding Costs and Charges (Model Form I)

Perso	onnel	1	2	3	4	5	6	7	8
Name	Position	Basic Remuneration Rate per Working Month/Day/Year	Social Charges ¹	Overhead	Subtotal	Profit ²	Away from Home Office Allowance	Proposed Fixed Rate per Working Month/Day/Hour	Proposed Fixed Rate per Workin Month/Day/Hou
Home	Office								
Client's	Country								

(Expressed in {insert name of currency*})

Expressed as percentage of 1
 Expressed as percentage of 4

FORM FIN-4 BREAKDOWN OF REIMBURSABLE EXPENSES

When used for Lump-Sum contract assignment, information to be provided in this Form shall only be used to demonstrate the basis for calculation of the Contract ceiling amount, to calculate applicable taxes at contract negotiations and, if needed, to establish payments to the Consultant for possible additional services requested by the Client. This form shall not be used as a basis for payments under Lump-Sum contracts

B. Reimbursable Expenses					
N°	Type of Reimbursable Expenses	Unit	Unit Cost	Quantity	{Local Currency- as in FIN-2}
	{e.g., Expenses for Site visits, proof checking, air travel, meetings, local transport and documentation etc.)				
	<u> </u>		-	Fotal Costs	

Legend:

"Per diem allowance" is paid for each night the expert is required by the Contract to be away from his/her usual place of residence. Client can set up a ceiling.

Undertaking for Input Tax Credit in GST (See clause ITC 16.3)

The Consultant shall undertake to pass on the input tax credit in GST and shall compensate the employer for any loss suffered on this account by employee (if any).

We, ______ (Name of Consultant) hereby certify that the for Input Tax Credit in GST in accordance with clause 16.3 of the agreement shall pass on the input tax credit in GST and shall compensate the employer for any loss suffered on this account by employee (if any).

Signed, Sealed and Delivered (Signature)

Section 5. Eligible Countries

In reference to ITC6.3.2, for the information of Consultants, at the present time firms, goods and services from the following countries are excluded from this selection:

Under the ITC 6.3.2 (a): None

Under the ITC 6.3.2 (b): None

Section 6. Bank Policy – Corrupt and Fraudulent Practices

(this Section 6 shall not be modified)

Guidelines for Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, dated January 2011:

"Fraud and Corruption

1.23 It is the Bank's policy to require that Borrowers (including beneficiaries of Bank loans), consultants, 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 selection and execution of Bank-financed contracts [footnote: In this context, any action taken by a consultant or any of its personnel, or its agents, or its sub-consultants, sub-contractors, services providers, suppliers, and/or their employees, to influence the selection process or contract execution for undue advantage is improper.]. 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 party²;
- (ii) "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation³;
- (iii) "collusive practices" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party⁴;

² For the purpose of this sub-paragraph, "another party" refers to a public official acting in relation to the selection process or contract execution. In this context "public official" includes World Bank staff and employees of other organizations taking or reviewing selection decisions.

³ For the purpose of this sub-paragraph, "party" refers to a public official; the terms "benefit" and "obligation" relate to the selection process or contract execution; and the "act or omission" is intended to influence the selection process or contract execution.

⁴ For the purpose of this sub-paragraph, "parties" refers to participants in the procurement or selection 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 prices at artificial, non-competitive levels, or are privy to each other's bid prices or other conditions.

- (iv) "coercive practices" 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 party⁵;
- (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;
- (b) will reject a proposal for award if it determines that the consultant recommended for award or any of its personnel, or its agents, or its sub-consultants, sub-contractors, services 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 were engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the selection process 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 they knew of the practices;
- (d) will sanction a firm or an individual at any time, in accordance with prevailing Bank's sanctions procedures⁶, including by publicly declaring such firm or an ineligible, either indefinitely or for a stated period of time: (i) to be awarded a Bank-financed contract, and (ii) to be a nominated⁷ sub-consultant, supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract.

⁵ For the purpose of this sub-paragraph, "party" refers to a participant in the selection process or contract execution.

⁶ A firm or an 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 of 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 proceedings. See footnote 12 and paragraph 8 of Appendix 1 of these Guidelines.

⁷ A nominated sub-consultant, supplier, or service provider is one which has been either (i) included by the consultant in its proposal because it brings specific and critical experience and know-how that are accounted for in the technical evaluation of the consultant's proposal for the particular services; or (ii) appointed by the Borrower.

Section 7. Terms of Reference

Comprehensive Consultancy Services for preparation of Detailed Project Report (DPR) for IWT sector development for enhancement of socio-economic activities in and around Ganga-Bhagirathi-Hooghly river system (NW-1)

1. Background & Introduction

- 1.1 Inland Waterways Authority of India (IWAI) (hereinafter referred to as "the Client") is a statutory body of the Ministry of Ports, Shipping and Waterways (MoPSW), Government of India (GoI). The Client was set up in 1986 and is primarily responsible for the regulation and development of inland waterways for purposes of shipping and navigation for Inland Water Transport (IWT). With five (5) National Waterways (NWs) up to 2016 and today, with the enactment of NWs Act, 2016, there are a total of onehundred eleven (111) waterways that have been declared as NWs.
- 1.2 The Allahabad-Haldia/Sagar stretch (1620km) of Ganga-Bhagirathi-Hooghly river system was declared as NW-1 in the year 1986 and is a waterway of national significance passing through four (4) states of West Bengal, Jharkhand, Bihar and Uttar Pradesh. It links the gateway ports of Haldia and Kolkata to Bhagalpur, Patna, Ghazipur, Varanasi and Allahabad, their industrial hinterland, and several other industrial hubs located along the Ganga basin.



Figure 1: Index Map of NW-1

 1.3 The entire length of NW-1 has been divided into ten (10) stretches namely (i) Haldia – Tribeni(158km); (ii) Tribeni - Farakka (351km); (iii) Farakka – Kahalgaon (146km); (iv) Kahalgaon – Sultanganj(56km); (v) Sultanganj – Mahendrapur (74km); (vi) Mahendrapur – Barh (71km); (vii) Barh - Digha (69km); (viii) Digha – Majhaua (98km); (ix) Majhaua – Ghazipur (120km); and (x) Ghazipur -Varanasi (133km).

- 1.4 IWT on NW-1 has the potential to provide a cost efficient, economic, reliable, safe and environment friendly mode of transport. When developed for use by modern inland vessels operating on dependable fairway, it can reduce congestion and investment needs in rail & road infrastructure, promote greater complementarities in the riparian states, enhance intra-regional trade and through increased economies of scale, significantly reduce overall logistics costs for the benefit of the entire economy and India's global trade competitiveness.
- 1.5 Considering the strong potential for transportation of multiple cargoes such as coal, fly ash, cement and clinker, stone chips, edible oils, petroleum products, foods grains and over dimensional cargo, the Client is implementing "*Jal Marg Vikas Project (JMVP*)" for capacity augmentation of NW-1 with the technical and financial assistance of the "*World Bank*" (hereinafter referred to as "**Bank**") to improve the navigability of NW-1 through: (i) fairway development by providing an assured depth of 2.2m to 3.0m throughout the corridor for atleast three hundred thirty (330) days in a year to make it navigable for comparatively larger vessels of 1,500-2,000 DWT; and (ii) civil structures, logistics and communications interventions required that includes multimodal terminals, jetties, navigational locks, barrages, channel marking systems etc.
- 1.6 With regard to the terminals, the Client has developed floating jetties at twenty (20) locations (list enclosed at Annex A) and four (4) Reinforced Cement Concrete (R.C.C)jetties / permanent terminals at GR Jetty-2 (Kolkata), Gaighat (Patna), Multi-modal terminals(MMTs) at Varanasi (Uttar Pradesh) and Sahibganj (Jharkhand) for handling / berthing of cargo vessels, cruise vessels and others inland vessels. Also, one (1) MMT at Haldia, one (1) Inter-modal terminal (IMT) at Kalughat (West Bengal) and a new navigational lock at Farakka(West Bengal) have also been taken up under JMVP. Presently, MMT at Haldia is in substantial completion stage and construction of new navigational lock at Farakka is in advance stage.
- 1.7 Assured depth dredging contracts have also been taken up under JMVP to achieve targeted Least Available Depth (LAD) of 3.0m between Haldia &Barh, 2.5m depth between Barh& Ghazipur and 2.2m between Ghazipur & Varanasi with minimum channel width of 45m.In order to provide safe navigation for various cargo vessels, tourist vessels and other IWT vessels by IWT operators and mechanized country boats moving in NW-1, day navigation marks with bamboos i.e. (left hand/right hand/snag/channel closing marks) are being provided in entire stretch of NW-1 allround the year. In order to provide twenty-four (24) hours safe navigation, night navigational aids comprising of solar powered lights fixed on country boats/ bamboo

structures/ MS Poles/Trestle beacon towers have also been provided from Tribeni to Varanasi stretch.

In addition to the above, a state-of-the-art River Information System (RIS) that includes vessel tracking and the dissemination of important navigation information to mariners is also being implemented. Further, the Client has also developed Differential Global Positioning System (DGPS) stations at Varanasi, Patna, Bhagalpur and Swaroopganj.

2. Studies on NW-1 undertaken in the past / being undertaken that are relevant to the Services

The following important studies have been undertaken in the past / are being undertaken in respect of NW-1 which in the opinion of the Client are important for understanding the ground realities and objectives of the Client for the current study:

- 2.1 **IWT Sector Development Strategy and Business Development Study for Capacity Augmentation of NW-1 from Haldia to Allahabad:** The principal objective of this study was to provide a comprehensive IWT development strategy. The strategy was based on the assessment of existing transport & freight supply/demand situation in NWland identification of all infrastructure, institutional, regulatory, environmental, safety and commercial challenges hindering IWT competitiveness. The strategy set out a framework that addresses IWT development challenges and dealt proactively with short-, medium- and long-term issues. The aim was to guide all IWT investment decisions and build on the competitive strength of IWT to reduce the cost of transport for the wider Indian economy. The study was undertaken by *M/s HPC Hamburg Port Consulting GmbH &Uniconsult Universal Transport Consulting GmbH* and was completed in June 2016 as part of JMVP.
- 2.2 Detailed Feasibility Study and Engineering Study for capacity augmentation of NW-1: The principal objective of this study was to undertake a detailed technoeconomic feasibility study that sets out options to improve the short & long term capacity of NW-1 to deliver increased freight movement at lower transport cost. The study was divided into two (2) parts: (a) techno-economic feasibility study for improving the navigability for larger deeper draft vessels for the entire stretch of NW-1 from Haldia to Allahabad; and (b) detailed engineering for providing and/or improving facilities for common user terminals and other navigational aids in the Haldia to Varanasi stretch. The study is being undertaken by *M/s Howe Engineering Projects (India) Pvt. Ltd., PMC Projects Pvt. Ltd. and Wallingford Ltd.* as part of JMVP.
- 2.3 **Study on potential ferry locations:** The principal objective of this study was to undertake a detailed strategic planning, design and techno-economic feasibility that sets out a broad planning framework for a proposed ferry network and improved mobility in six (6) major cities i.e. Varanasi (Uttar Pradesh), Patna (Bihar), Munger (Bihar), Bhagalpur (Bihar), Kolkata (West Bengal) and Haldia / Sagar (West Bengal). The study is aimed to provide sustainable and cost-effective transport for over twenty-five (25)

million citizens. The study is being undertaken by *M/s Massachusetts Institute of technology /TDG Group (USA)* as part of JMVP.

Note: Soft copies of the above-mentioned studies shall be provided by the Client to the Consultant on written request. It may, however, be noted that these study reports are to be used only as a reference and that these study reports do not purport to contain all the information that the Consultant may require. The Consultant should conduct its own investigations, due diligence and check the accuracy, reliability and completeness of the information provided in these study reports and obtain independent advice from appropriate sources. It may also be noted that the Consultant is required to fill up the missing gaps in the relevant data during the course of the Services.

3. **Objective of the Services**

3.1 *JMVP-II* (*Arth Ganga*) and its alignment with JMVP's objective: India, with a huge network of rivers and interconnecting canals is ideal for an efficient inland waterways system which has multifarious advantages and is the cheapest mode of transportation. However, this potential could not be tapped to its full extent as development of inland waterways as a means for passenger & cargo transportation, had not been a focus area till recently.





- 3.2 In India, almost half the population lives around the Ganges river belt. In terms of trade, 1/5th of all India's freight originates, and 1/3rd terminates in the states around the Ganges belt. Due to the congestion faced by the cities and space constraints, there is hardly any scope for land-based development in the region. Hence, river Ganga can play a pivotal role in generating growth prospects for sustainable economic development of the regions.
- 3.3 The conceptualization of JMVP-II (Arth Ganga) was finalized to energize economic activities which will impact the overall ecosystem along the riverbank. Inland waterways is one of the most important pillars of JMVP-II (Arth Ganga), that can lead to inclusive growth and play a key role in improving the livelihoods of the populations.

3.4 JMVP-II (Arth Ganga), is being developed on an approach based on principles of sustainable development model that focus on economic activities in & around the hinterland of NW-1 bv providing opportunity to communities local to transport their goods and passenger (including tourist) movements through waterways as well as skill



development and public / private sector Figure 3: Master Plan of JMVP-II (Arth Ganga), capability developments to support the following:

- (a) Economic benefits to the farmers, traders and public living around the Ganga belt;
- (b) Growth of small-scale industries;
- (c) Employment opportunities;
- (d) Easy, cost-effective and environment friendly transportation of cargo;
- (e) Improved logistics through small jetties; and
- (f) Wider choice of logistics mode for cargo movement

Since, efficient logistics and transport systems are a critical enabler for sustaining as well as accelerating the economic growth along river Ganga, in this regard, JMVP has the potential to greatly channelize economic activities along river Ganga, thus also aligning to the objective of JMVP-II (Arth Ganga).

- 3.5 The "*development works under JMVP-II (Arth Ganga)*," (hereinafter referred to as "**Project(s)**") will be implemented as part of JMVP through the technical assistance & investment support of the Bank. The major components that have been envisaged under JMVP-II (Arth Ganga), are: (a) fairway development through dredging including bandalling and navigational aids; (b) channel stabilisation works; (c) construction of Ro-Ro terminals; (d) construction of new community jetties (tentative list of locations identified is enclosed at **Annex A**); (e) modernization / rehabilitation of existing jetties; (f) modernization / rehabilitation of existing navigational lock at Farakka; (g) RIS and DGPS; (h) Hydrographic equipment, HDP Software, Automatic Gauge Stations etc.; and (i) IWT promotional activities.
- 3.6 With the aforesaid vision for JMVP-II (Arth Ganga), the Client intends to engage a Consultant to prepare its Detailed Project Report (DPR) to include (a) proposed IWT

development strategy for JMVP-II (Arth Ganga) with an aim to enhance socioeconomic activities in & around the hinterland of NW-1 by providing opportunity to local communities to transport their goods and passenger movements through waterways; (b) suggested infrastructure interventions in terms of fairway, navigation aids, jetties etc.; and (c) suggested policy interventions, in sufficient details to achieve the said aim.

- 3.7 The DPR shall inter-alia be based on feasibility assessment of the existing traffic supply and demand situation, along with assessment of all infrastructure, fiscal, institutional, regulatory, environmental, safety and commercial challenges hindering IWT competitiveness in the Project Influence Area (PIA) and recommend (a) additional community jetties; (b) modification/ upgradations in existing floating jetties (except navigational lock at Farakka for which a separate study shall be undertaken); (c) fairway earmarking for interconnectivity of these jetties with approximately 1.5m to 2.0m Least Available Depth (LAD) along with maintenance interventions viz. dredging, navigation aids, hydrographic surveys, vessel repair facilities etc.; and (d) institutional, regulatory, legal, environmental, commercial and safety measures for making JMVP-II (Arth Ganga) viable. The feasibility assessment and strategy as part of DPR shall be sufficiently forward looking and deal proactively with short, medium & long-term measures.
- 3.8 Basis the feasibility assessment, the DPR shall include Front End Engineering Designs (FEEDs) of all the proposed infrastructural interventions to fill all infrastructural gaps. The FEEDs shall be detailed enough to implement proposed infrastructural projects/ sub-projects in Engineering Procurement & Construction (EPC) and / or Item Rate mode. Necessary topographic & hydrographic surveys and geo-technical investigations for preparing layouts and FEEDs to be carried out by the Consultant will be limited to the scope defined under clause 4.6 respectively.

4. **Detailed Scope of Work for the Services**

Unless explicitly restricted, the Scope of Work of this RFP shall include but shall not be limited to following:

4.1 Collection and Review of available Reports, Studies and Data

The Consultant shall collect and review:

- (i) all data on road, rail, inland waterways modes of transport serving the NW-1 hinterland & PIA w.r.t transportation of goods and passenger movements;
- (ii) all relevant data relating to tidal, topographic surveys, hydrographic surveys (thalweg survey & detail surveys), flow and discharge conditions, water level variations, soil (suspended sediment, bed and bank) conditions, geological, geomorphologic and all other conditions on the Ganga Bhagirathi Hooghly river system available from: Client, Central Water Commission (CWC), Central Water and Power Research Station

(CWPRS) Pune, concerned State Departments, the National Remote Sensing Agency, Survey of India, National Water Development Authority, Central Ground Water Board, National Disaster Management Authority, Farakka Barrage project, Irrigation Department/Flood Control Departments, Ministry of Water Resources (MoWR), the Ganga Water Development Authority (GWDA), the Ganga Flood Control Commission, the Commissioner Ganga etc.; and

- (iii) all relevant documents and studies made on system tributaries, distributaries and other rivers connected with NW-1
- 4.2 **Reconnaissance Survey**
- (i) Soon after the kick-off meeting, a team of the Consultant comprising of their various domain experts shall conduct a reconnaissance survey of NW-1& its PIA and hold preliminary meetings with Client's field offices, IWT Directorates, State Government departments, District Administration, CWC & other statutory bodies to understand the ground realities and chalk out detailed action plan and way forward to carry out the task of preparation of a quality DPR as per the spirit of the Contract.
- (ii) During this reconnaissance survey, the Consultant shall also study and map all the existing passenger handling facilities (including private and public) on the entire length of NW-1.
- (iii) The Consultant shall also study, map & analyse the following:
 - (a) all existing, man-made structures on the river system (bridges, HT/ LT lines, underwater pipes, power cables, pontoon bridges across the river, river re-direction or river resistive or bank-protection works). The Consultant will also undertake survey to verify the vertical and horizontal clearance available for navigation on all these structures;
 - (b) carryout a detailed condition survey of the existing floating jetties (enlisted at Annex A) belonging to the Client. The condition survey shall determine physical condition, layout, size, road & rail connectivity (if any) and current utilization of each floating terminal etc.;
 - (c) historic and existing water & river reference levels, low & flood levels, flow characteristics, discharge velocity and other hydrological conditions;
 - (d) various ferry services / Ro-Ro services operated by State Government departments / Client etc.;
 - (e) cadastral conditions on riverbanks and in flood areas; and
 - (f) changes to river courses {based on satellite images for the past ten (10) years or more, collected by the Consultant from various agencies. The Client shall provide

the available satellite imageries free of cost to the Consultant however, any missing / additional data shall be arranged by the Consultant at his own cost}

4.3 Traffic Assessment

The Traffic Assessment shall comprise of Traffic Survey, Traffic Analysis and potential IWT Traffic Projections. The Consultant shall:

- determine/ suggest PIA along with its rationale in the context of increased utilization of NW-1 for IWT under JMVP-II (Arth Ganga);
- (ii) identify existing goods and passenger movement belonging to the PIA by different modes of transport (also taking into account new clusters such as mandis, trading centres, tourist spots etc. coming up in the next five (5) to ten (10) years). For this, primary traffic surveys will be carried out through solicitation of public input and stakeholder opinions from concerned local authorities i.e. Gram Panchayat, sub-division administration, district level etc. The details for goods movement such as goods type / category, quantity, shipment size, seasonality, mode of transport used and origin-destination (O-D) pairs etc., and for passenger movement such as type / category (local commuters / tourists), number, seasonality, mode of transport used and O-D pairs etc. shall also be presented in the Report. Methodology and planning for this traffic survey will be presented in the Inception Report in sufficient details;
- (iii) examine current costs of transportation for movement of goods and passengers by different modes;
- (iv) conduct a survey of user preferences towards choice of transportation mode based on key attributes such as: (a) price; (b) time; (c) reliability; (d) security; (e) frequency; (f) safety; and (g) capacity etc. Further, the Consultant shall also identify current bottlenecks / limitations / disadvantages faced by users in different modes of transportation (including IWT mode);
- (v) identify improvements required in existing IWT services used by the users; and
- (vi) prepare database of all stakeholders including existing and potential users of IWT such as shippers, regulators, vessel operators, transporters, freight forwarders, manufacturers, etc.

(Note: The data shall be compiled from primary surveys of nodal points as well as secondary sources (state level statistics, state government departments, district administration departments, local communities (including farmers, passengers, women etc.), inquiries with trade & commerce, enquiries at ghats, enquiries with vessel operators, manufacturers, shippers, transporters etc.) and documents to substantiate such surveys/ enquiries shall be included in the **Traffic Assessment Report**)

(vii) conduct an analysis on the information gathered in the traffic survey including user preferences identified in clause 4.3 (iv) above to identify O-D pairs(specifically jetty-

wise for locations enlisted in **Annex A**)which are addressable by IWT mode and corresponding traffic volume;

- (viii) assess and compare the transportation cost currently involved/ expected in IWT mode (including cost involved in first mile, last mile, handling and any other activity required for movement)and other available modes of transportation for the O-D pairs identified above;
- (ix) identify O-D wise traffic which can be diverted to IWT mode;
- (x) assess the potential tariff level for the divertible traffic for different IWT services; and
- (xi) provide traffic demand projection for IWT mode; (a) with the available infrastructure; and (b) after implementation of the Project(s), policies and measures suggested in the DPR. The demand projections shall be provided for a thirty (30) year horizon period keeping FY 2021-22 as the base year. This projection shall also be given for time periods of 5, 10, 15, 20, 25 and 30 years counted from the base year and also for pessimistic, most likely and optimistic scenarios with necessary justification and details.

The above traffic projection shall also be broken into main commodities, O-D pairs and incoming/ terminating & outgoing/ originating quantities.

4.4 Waterway Infrastructure Analysis

- (i) There are three (3) basic IWT infrastructure facilities necessary for making a waterway navigable for transportation of goods and passengers. These are; (a) fairway or navigation channel with targeted width and depth for plying of a reasonable size of vessel; (b) navigation aids to facilitate fast, reliable and safe navigation; and (c) jetties for loading and unloading of goods (including accessibility to passengers) and last mile connectivity through road or rail (if any); and
- (ii) After studying and analyzing traffic demand for IWT mode and making traffic projections for thirty (30) years horizon, as per clause 4.3 above, the Consultant shall critically examine the sufficiency (or otherwise) of all the above three (3) mentioned infrastructure facilities already existing and being maintained by the Client on NW-1. This analysis should be presented in the DPR in sufficient details with specific recommendation including on increasing jetty handling capacity and operational efficiency.

(iii) Fairway Development and Maintenance:

Based on the above analysis, the Consultant shall recommend the following details in respect of fairway development and maintenance for the O-D pairs/ optimal ferry routes identified in clause 4.3 above:

(a) Sub-projects for development and maintenance of fairway i.e. jetty approach channel from the main navigational channel with optimum width and LAD for at

least 330 days in a year, preferably 45m bottom width & between 1.5m to 2.0m LAD for the O-D pairs.

[Note: These dimensions of fairway are only indicative. Based on the hydromorphological studies, channel identification &routing, siltation study etc., the Consultant will suggest optimum dimensions of the fairway with necessary justification]

- (b) For this purpose, the analysis shall include, but not be limited to dredging, river conversancy works (channelization, bandalling and other flow directive works), channel stabilization works (bank protection and other erosion control works)or any other possible ways;
- (c) Segments where the lean season flow is not enough or there is too much braiding (where shoals are formed every year)due to which it has not been possible to maintain LAD between 1.5m to 2.0m during lean season between the O-D pairs / optimal ferry routes, the Consultant will suggest ways to improve LAD for round the year navigation viz. dredging or river conversancy etc.;
- (d) Since open river navigation techniques namely dredging and bandalling have been extensively used on Indian alluvial rivers for maintaining fairways all along, the Consultant shall critically examine strengths and limitations of these activities and suggest ways to improve them based on ground realities, the most important being the alluvial nature of NW-1 resulting in formation of shoals every year post monsoon. The Consultant shall make recommendations for preferred options for fairway development and maintenance projects on short-, medium- and long-term basis;
- (e) As far as dredging is concerned, the Consultant shall provide clear recommendations with regard to initial and maintenance dredging, type of dredger to be employed and assessment of the quantity of maintenance dredging to be carried out for maintaining the fairway;
- (f) In case of dredgers, a specific write up on owning vs hiring of dredgers for development and maintenance of fairway on the identified O-D pairs shall also be included in the DPR; and
- (g) The Consultant, if asked to do so by the EIC, shall carry out mathematical modelling studies through a reputed expert agency to verify design parameters. As a minimum, this shall include a numerical model to produce detailed pictures of flow in the river system under current & future flow conditions and also the required flow/ discharge to maintain LAD throughout the year with or without interventions in a specific stretch of the river which experience frequent shoaling or where the proposed jetty is extending into the river obstructing flow of the river. Detailed proposal for such mathematical modelling shall be submitted by the

Consultant along with methodology and cost with justification to enable the Client to reimburse the cost of mathematical modelling to the Consultant. In this regard, the necessary hydrographic data shall be provided by the Client.

(iv) Navigation Aids:

- (a) Navigation Aids include but are not limited to day navigation marks, twenty-four (24) hours navigation marks, snag marks, channel closing marks, danger ahead marks, DGPS connectivity, RIS, pilotage etc. All of these have already been developed by the Client on NW-1 and are being used extensively by IWT operators since long;
- (b) The Client has been erecting and maintaining various types of day and night navigation marks on NW-1 since its declaration as a NW. The Client also provides pilotage service to cargo vessels and passenger vessels on NW-1. These need to be studied by the Consultant and critically examined for their strengths, weaknesses and efficacy. Thereafter, these are to be compared with best practices being employed in similar waterways of USA, Europe, China etc. and specific projects to be recommended by the Consultant for improvement to the extent possible. The Consultant shall hold consultations and take feedback from the Client's field units and from existing users of NW-1;
- (c) As already brought out at clause 1.7 above, the Client has developed DGPS stations at Varanasi, Patna, Bhagalpur and Swaroopganj. These need to be studied and analysed by the Consultant and their gaps need to be listed out along with suggested mitigation measures in respect of their functioning, status, utility and allied facilities for operating staff, round the clock operation facility, availability of land for future expansion etc.;
- (d) After (b) & (c) above, the Consultant shall provide detailed recommendations along with justification for developing/ improving and maintaining different types of navigation aids for the identified O-D pairs on NW-1 in a productive and effective manner to provide value addition in this respect;
- (e) The DPR shall include preliminary design & drawings, BoQ and technical specifications for the works/ processes proposed to improve the navigation aids (including its integration with DGPS & RIS stations) for the identified O-D pairs on NW-1 including 24 hours day & night navigation facilities such as buoys with lights, lights on masts on banks, DGPS stations, buoy laying vessels, rescue vessels etc. along with their dimensions/ drawings and numbers with justification, Vessel Traffic Management System (VTMS), RIS, channel marking methods and semipermanent & permanent river training works at critical locations etc.;
- (f) The Consultant shall also suggest internationally accepted and feasible navigation aids maintenance mechanism for such types of alluvial rivers for smooth and safe

movement of waterway traffic. Further, the Consultant shall indicate if vertical channel marks on latest electronic route chart can be developed and provided to the operators as a replacement of physical channel marks. In this regard, the Consultant shall submit its cost, technical specifications including its integration with RIS, DGPS & Electronic Navigation Charts (ENC) etc.; and

(g) The Consultant shall also identify any software features and main operating systems for RIS, identification of communication requirement of voice and data firming detailed specifications for revamping/upgradation of existing communication network, details of networking equipment/IT equipment along with operating system, application software, data base, cyber security protection including firewall/antivirus which is compatible with current system as well as having potential for future growth.

(v) **Terminals:**

Based on reconnaissance survey, potential IWT traffic projections for identified O-D pairs, and stakeholders' consultations, the Consultant shall:

- (a) study and analyse all existing floating jetties (enlisted at Annex A) developed and being maintained by the Client at various locations on NW-1 and list out infrastructural gaps therein, along with suggested mitigation measures (in terms of projects/ sub-projects) in respect of berthing of vessels during daytime and nights, loading & unloading facilities, status of material handling equipment, handling capacity, traffic circulation for incoming and outgoing cargo, covered and open storage facilities, facilities for passenger/tourist traffic (sensitive to the needs of women, children, old and infirm) with basic amenities including embarkment & disembarkment and waiting etc. facilities, connectivity with national and state highways, rail connectivity (if any), POL bunkering facility, drinking water storage & facility for vessels, administrative block, round the clock operation facility, fire safety, general safety security, availability of land for current capacity and future expansion etc.
- (b) suggest and recommend with proper justification locations for new permanent and/or floating jetties / small community jetties including (but not limited to) all the necessary facilities listed out in (a) above. This shall include site selection, detailed layout, sections, traffic circulation plan, cost of construction, first mile /last mile connectivity and maintenance etc. Wherever necessary, alternative sites for location of such new jetties shall also be considered and proper justification shall be given for choosing the selected site. Each new proposed jetty shall be proposed in terms of projects/ sub-projects.
- (c) The jetties with the above infrastructural facilities at the respective locations shall be designed in such a way that total cost of each jetty will not exceed to INR 2.00
cr. Similarly in the case of the modernisation of the existing jetties (being maintained by the Client) the total development cost will not exceed to INR 1.50 cr.

(d) suggest with proper justification, sites/ location of new Ro-Ro / Ro-Pax terminals (over and above the ten (10) locations finalized by the Client) in consultation with the State Government including (but not limited to) all the necessary facilities listed out in (a) & (b) above.

Notes:

- (1) The site(s) for new jetties proposed to be developed shall be selected considering socio-economic development of the community /stakeholders along NW-1, capacity &type of principal commodities to be handled, connectivity to other modes of transport, availability of depth along the jetty throughout the year especially during lean season, stable river channel with sufficient draft, adequate turning radius for vessels, favourable hydraulic conditions for berthing and navigational safety, exhaustive consultation with community at local level / panchayat level on identification of jetty locations etc.; and
- (2) Ownership details of the land for all the alternative new sites shall be collected from State Revenue Departments and presented in the report. This will include all the details with adequate supporting documents for indicating Government or Private land, revenue/ cadastral maps, plot numbers/ khasra/ khata numbers, areas of each plot, details of district/ town/ tehsil/ village etc., circle rates, details of on-going litigation/ legal case for the plots, if any, etc. duly authenticated from the concerned authority of State Government. Further, this will include land not only required for the main jetty but also the land required for road connectivity as well as rail connectivity (if feasible).
- (e) In case of development of proposed new jetties, following shall be included/ considered in the DPR with due justifications:
 - 1. based on the traffic assessment, suggest capacity, size and type of jetty for handling of goods and passenger through local level consultation;
 - 2. based on LWL and HFL, ascertain the appropriate level(s) of the jetty;
 - 3. fix the location and type of berthing jetty to ensure safe berthing of loaded as well as empty vessels during highest and lowest water levels;
 - 4. examine the adequacy of the existing road linkages between the jetty and nearest National Highway / State Highway, propose improvements required to facilitate smooth two-way flow of trucks and trailers;

- 5. requirement of land acquisition / leasing (if any) for the jetty and other allied facilities as well as for widening of road/ improvement of bends shall also be studied and taken into account; and
- 6. examine the feasibility of providing rail connectivity and give sufficient details along with various activities involved in this regard

(vi) Vessels Sizes & Types:

Based on the optimum fairway dimensions for the identified O-D pairs, current velocity, radius of curvature at bends, type and quantity of potential traffic assessed, the Consultant shall:

- (a) recommend with proper details and justification, various types of vessels to meet the potential demand.; and
- (b) also suggest number and types of vessels such as, dredgers, tugs/ work boats, survey vessels, inspection vessels, rescue vessels, pontoons etc. required for fairway maintenance, inspection and management to effectively develop, maintain and manage NW-1 in a holistic and climate friendly manner for a period up to thirty (30) years.

The Consultant shall submit size & dimensions (overall length, beam width, light and loaded draft etc.) and broad technical specifications of these vessels as part of DPR.

[Note: It may be noted that detailed design of vessels mentioned *in* (*a*) and (*b*) above is not in the scope of this Services]

(vii) Vessel Repair Facility

Based on the fleet requirement as per clause 4.4. (vi) (a) & (b) above, the Consultant shall analyze possible new location and size of dry-docking as well as running floating repair maintenance facilities required for the proposed fleet. Necessity of land acquisition for executing projects/ sub-projects for this activity shall also be studied and all necessary details presented in the DPR.

In addition to the above, the Consultant shall also map the existing vessel repair facilities along NW-1, workout their modernization and suggest the training required to the local entrepreneurs, engaged in the field of vessel repair, at National Institute of Navigation Institute (NINI) so as to develop confidence in operators.

(viii) Others:

Based on reconnaissance survey and other information collected, the Consultant shall:

(a) prepare a list of all the cross structures over NW-1 (road & rail bridges, electric power lines, intake wells, floating pontoons stations for water supply schemes etc.) and give their all the relevant information including (but not limited to) chainage, horizontal clearance between piers, vertical clearances above high flood level;

- (b) also suggest measures to modification thereof if any to permit uninterrupted and safe navigation in the waterway round the year during both day and night; and
- (c) prepare a list of all major tributaries of NW-1 joining it both from north and south sides.

(ix) Hydrographic Surveys

- (a) The Client is conducting regular longitudinal thalweg surveys in the entire stretch of NW-1 every fortnight and issues river notices to disseminate navigational information to the users and other stakeholders of the waterway. The Client also carries out detailed pre & post hydrographic surveys at bandals and dredging sites as and when required. Further, the Client also carries out hydrographic surveys in front of various jetties from time to time. Soft or hard copies (as available) of all these hydrographic survey details shall be provided by the Client to the Consultant on demand on written request with justification, free of cost, provided the EIC is convinced that these are indeed required for carrying out any part of the scope of work of this Contract; and
- (b) Any additional hydrographic survey required for preparation of this DPR with regard to morphological study, channel identification & routing, siltation pattern study etc. shall be conducted the Consultant duly engaging professional survey agency subject to the requirement (if at all it is necessary), and at the discretion of EIC.

(x) **Topographic Surveys**

- (a) The Consultant shall undertake fresh topographic surveys of the new jetty locations and / or proposed expansion of existing floating jetty sites etc. for preparation of lay-outs, General Arrangement (GA) drawings, sections and elevations etc. These surveys shall be carried out up to the water line during the survey period as per standard norms and practices. Topographic survey of proposed new connectivity with road and rail (if feasible) shall also be undertaken;
- (b) Apart from the main jetty area, the Topographic Survey will also be carried out in approximately 1km downstream and 1km upstream areas between the HFL line and the water line during the survey period;
- (c) The Consultant shall also carry out Topographic Survey required for preparation of lay-outs, GA drawings, sections and elevations etc. in respect of all other facilities/projects/ sub-projects (e.g. proposed sites for bank protection sites etc.) proposed in the DPR as per the requirement; and
- (d) The Topographic Survey charts shall be prepared in the scale of 1:1000 and these will include spot levels in a grid of 25 m as well as other physical features (such as structures / houses, trees, natural drains etc.) and contours. Both hard and soft

copies of survey charts as well as raw data shall be submitted to the EIC as per normal practice.

4.5 Geo-technical Investigation of the finally selected new terminal land

- (i) The Consultant shall carry out geo-technical investigation (boreholes) on the finally selected new terminal land above HFL [at minimum two (2) locations] as well as between highest & lowest waterline[at minimum two (2) locations] at each terminal site for the purpose of design of structures [i.e. total four (4) bore holes per site]. The locations of the boreholes shall be clearly marked on the topographic survey charts;
- (ii) The geo-technical investigation shall be carried out as per relevant IS codes & manuals and structures being proposed; and
- (iii) The geo-technical report will include but not limited to the following:
 - (a) Methodology;
 - (b) Laboratory Tests including Bulk Density and Moisture content, Sieve analysis, Hydrometer analysis, Liquid limits & Plastic limits, Specific gravity, Shear test on undisturbed & remoulded saturated disturbed soil samples and determination of void ratio etc.;
 - (c) Detailed Bore logs for each Borehole; and
 - (d) Foundation Design Calculations including Scour Depth, Bearing Capacity and Recommendations

[Note: Since the extent of geo-technical investigations (number of sites and number of boreholes) which may be finally carried out by the Consultant cannot be fixed beforehand and the same will be known only during the course of this Services, for the sake of transparency and evaluation of the Bids on equal footing, it may be noted that:

- (1) the Consultant need not include the cost/ rate for carrying out geo-technical investigations in his Bid;
- (2) the actual cost of carrying out such geo-technical investigations shall be reimbursed to the Consultant provided, (a) the cost has been arrived at after obtaining competing Bids by the Consultant; (b) prior approval for the scope of work and the rates thereof have been taken by the Consultant from the Client / EIC; and
- (3) the claim for reimbursement is accompanied with the proper invoice from the agency which carried out the geo-technical investigations]

4.6 FEED / Preliminary Engineering Designs for new projects/ sub-projects

 The Consultant shall provide FEED/ preliminary designs, component / sub-component wise including, layouts, basic drawings (plans, sections & elevations etc.) and specifications for each of the project/ sub-project proposed in the DPR;

- (ii) The whole set of proposed projects shall be divided into separate logic-based packages so that their execution can be carried out in a systematic and efficient manner;
- (iii) The preliminary engineering designs shall include appropriate designs & drawings and construction standards, which are safe, economical, relevant to traffic projections, local site conditions, environmental requirements, social needs and have considerable design life & economic rate of return;
- (iv) It may be noted that preliminary engineering design & drawings and other details of every component/ sub-component covered in this DPR shall be detailed enough to enable preparation of bid document(s) for carrying out all the projects and sub-projects of the DPR on EPC and / or Item rate mode;
- (v) The preliminary engineering designs shall cover but not be limited to the following:
 - (a) detail jetty master plan/ detailed layout plan (including future expansion), land development plan, preliminary designs & drawings, BoQ and technical specifications for all structures like berthing jetty, internal roads, covered & open storage along with all allied structures / buildings / facilities like parking of vehicles, waiting room, toilets, refreshment / pantry provision, security office, bunkering of fuel, utilities including water supply, drainage, water treatment plant, fire-fighting, horticulture as well as external roads connectivity with nearest National / State Highway & electrical facilities including compound lighting, requirement of power and transformer / generator, etc., all complete to handle all goods and passengers;
 - (b) if berthing jetty is being proposed as a steel / HDPE pontoon setup along with steel / HDPE gangway, the preliminary design & drawings, GADs, BoQ, technical specifications sufficient for construction of the same shall also be covered in the report;
 - (c) detailed layout plan along with preliminary design & drawings, BoQ and technical specifications for the shore protection works required to prevent any erosion;
 - (d) detailed layout plan along with preliminary design & drawings, BoQ and technical specifications for internal roads, traffic circulation plan, drainage, boundary wall gate, other utilities and rail connectivity (if feasible); and
 - (e) Handling equipment required at the jetty including preliminary drawings, BoQ and technical specifications etc., considering the type and quantity of goods to be handled as per prevailing norms for operation

(vi) **Proof Checking**

(a) The Consultant shall submit detailed design basis reports of all components of the Project(s) after their review and vetting by an IIT/ NIT. The fee for such proof checking shall be borne by the Consultant itself; and (b) The Consultant shall facilitate coordination among with the proof consultant and other advisors/ consultants/ professionals appointed by the Client for monitoring of preparation of this DPR. In this process, the Consultant shall attend meetings and provide all necessary information drawings and details sufficient enough for systematic review/ vetting of the design proposals before and after submission to the Client.

4.7 Environment Impact Assessment (EIA)

The Consultant shall:

- (i) analyse and assess advantages of IWT mode vis-a-vis road and rail modes in respect of externalities such as energy saving, reduction in pollution, reduction in congestion, reduction in accidents, reduction in maintenance cost, significant less requirement of land etc.;
- (ii) assess the environmental impacts due to development works/ projects/ sub-projects proposed in the DPR and suggest suitable Environment Management Plan (EMP) to mitigate the adverse impacts, if any, including its cost. Only rapid EIA / EMP study is envisaged for which one season data shall be sufficient;
- (iii) analyse and assess disturbances to riverbed and river banks (mainly erosion & disturbance to the habitats). In the analyses, riverbed samples need to be collected for at least 1m below the maximum depth of dredging;
- (iv) analysis of alternatives (all feasible technical options) must be considered in the EIA / EMP study before finalizing the option that provides for the least amount of disturbance to riverbeds & bank erosion; and
- (v) assess and bring out in sufficient details along with supporting documents, the need of obtaining environmental clearances for construction of proposed new jetties and any other allied infrastructure projects/ sub-projects based on prevailing rules and regulations of Central & State Governments. If environmental clearance is not required, in that case, the list of statutory and regulatory clearances required for the Project(s) along with the timeline and concerned Government Agency needs to be given in the EIA / EMP study. The Consultant shall be required to submit the application of these statutory and regulatory clearances to the concerned Government Agency on behalf of the Client & also follow up and guide the Client for the same. Further, the Consultant shall also follow the environment operational policies of the Bank while carrying out EIA and preparation of EIA / EMP study thereof.

4.8 Social Impact Assessment (SIA)

The Consultant shall carry out social screening and SIA consequent to proposed projects/ sub-projects in the DPR. This SIA shall also include consultations with affected communities & people. The SIA chapter shall inter-alia contain the magnitude and other details of land acquisition, resettlement issues, impacts on gender &

livelihoods and the mitigation of impacts thereof. The SIA Report shall also include the baseline socio-economic characteristics of the Project Affected Families (PAFs) & Project Affected Person (PAPs), the R&R policy provisions & entitlements, outcome of the consultations held with the communities, implementation and monitoring mechanisms. It shall also contain the budget for implementing the R&R and other provisions related to SIA. The Consultant shall follow the social safeguard policies of the Bank regarding carrying out the SIA and preparation of SIA report thereof.

4.9 Socio-Economic Assessment

The Consultant shall have proper co-ordination & consultation with the NGOs/ Social Agencies engaged for community outreach at field level with regard to project interventions and devise the infrastructure in complete satisfaction of the local communities.

Accordingly, the Consultant shall assess the following:

- (i) potential economic development and increase in employment opportunities in the region/ hinterland of NW-1 due to development of IWT sector. The economic potential of the region along NW-1 shall be assessed. Economic Performance Index (EPI) of the districts along NW-1 shall be assessed and provided along with effect of IWT growth on EPI; and
- (ii) potential social effect including consideration of health, demographic, employment and generated wealth on account of the potential traffic;
- 4.10 **Cost Estimates**

The Consultant is required to submit both the Capital as well as O&M expenses (CAPEX & OPEX) for the Project(s) in sufficient details. The component / subcomponent wise cost estimates shall be based on the Schedule of Rates (SoR) and / or Delhi Schedule of Rates (DSR). Market Rates can be adopted for those items for which SoR is not available. Transportation of men & material to the construction sites taking into account the ground realities of geographical region will be suitably considered in the rates/ cost of various components / sub-components. The basis/ supporting documents/ SoRs considered for various rates used for preparing the cost estimate shall be given in the DPR.

4.11 Economic & Financial Analysis

The Consultant shall provide Cost benefit analysis (CBA), Financial Internal Rate of Return (FIRR) and Economic Internal Rate of Return (EIRR) for judicially chosen sets of projects/ activities with detailed back up calculations, basis, assumption, justification etc. along with their source of information.

4.12 **Organizational Structure**

The Consultant shall suggest:

(i) institutional mechanism for execution of the Project(s) including supervision of construction works without time and cost overrun; and

- (ii) organization structure for operation & maintenance/ management of the Project(s) after their commissioning.
- 4.13 Time Schedule for Project(s) execution for individual component / sub-components

The Consultant shall prepare:

- (i) detailed & realistic construction time schedule indicating the sequence of activities duly considering the river characteristics in different seasons and priority of works;
- (ii) suggestion shall also be given for executing the Project(s) in different phases with split up of the works (if required) and the costs thereto; and
- (iii) year wise physical and financial target statement for the first three (3) years

4.14 **Preparation of tender document(s) for execution of Project(s)**

The Consultant shall

- (i) prepare and recommend a detailed procurement strategy for the consideration of the Client which shall inter-alia include structuring of Bid packages, type & mode of contracts, interface requirements and planning among various project components / sub-components, procurement schedule etc. The structuring of the Bid packages shall take into account the state-wise clustering approach as shown below in the table in clause 6 (ii).; and
- (ii) prepare tender document(s) for execution of various works proposed in the DPR on EPC and / or Item rate mode, as per the Bank's Standard Procurement Guidelines, which will inter-alia include all necessary detailed technical specifications, BoQ, Price Schedule and Special Conditions of Contract. Accordingly, the preliminary designs and cost estimates of every component and sub-component of the DPR will have all such details, authenticity and backup/ supporting documents which are required for preparing and processing the tender document(s) for execution of the Project(s) on EPC and / or Item rate mode as per prevailing norms and practices.

4.15 Regulatory, Fiscal, Procedural issues and Public Private Partnership (PPP)

Based on information collected during the course of preparation of this DPR and the proposed projects/ sub-projects, the Consultant shall:

- (i) identify institutional, financial, regulatory, taxation issues and procedural bottlenecks including concerns (safety, security) that hinder growth of the IWT sector and propose solutions required for effective and optimum development of the sector; and
- (ii) clarify and formulate the expected role of the private sector in the development of Project(s) with regard to dredging, bandalling, jetty construction & management, shipyard and repair facility etc.

4.16 Stakeholders Consultation

At the time of submission of **Draft DPR**, the Consultant shall also submit list all the possible stakeholders for approval of the Client. Subsequently, the Consultant shall assist the Client in conducting a stakeholders meeting at Patna/ Kolkata / Varanasi or any other place chosen by the Client. In this stakeholders meeting, the Consultant shall

make detailed presentation on the DPR, seek views of local stakeholders, and incorporate those in the DPR by making suitable modifications in consultation with the Client. The cost for arranging the venue and other allied activities for making the presentation shall be borne by the Client however, the Consultant shall provide all the necessary assistance in conducting the stakeholders meeting.

5. Methodology, Standards and Assumptions

- (i) The Consultant, shall, be responsible for evolving an appropriate methodology in accordance with relevant industry standards, undertake all fieldwork and ensure that all data is quality assured & corrected wherever appropriate. The Consultant shall keep a record of all information collected and present this in a manner that allows making statistical comparisons. Qualitative or Quantitative assessments must be backed up by case studies and relevant industry examples.
- (ii) The methodology shall ensure that every proposed intervention align with broader longterm vision of the Client for JMVP-II (Arth Ganga). In particular, the methodology shall take into consideration medium to long-term need to reduce maintenance dredging and other works.
- (iii) The Consultant, shall, for the purposes of this study, take into account all recognized standards, guidelines and codes of practice as required in accordance with Indian law and as recognized internationally.
- (iv) All consultancy works which are included in the scope of work shall be carried out by the Consultant and the Consultant cannot transfer any responsibility for completion of DPR to the Client.
- (v) To facilitate the Consultant to obtain data from various Government and other agencies, the Client will only provide necessary assistance through letters authorizing the Consultant to obtain the data for the purpose of the study. All follow up etc. in this regard will have to be done only by the Consultant.

6. Time Schedule & Key Deliverables

- (i) The total duration of the Consultancy services shall be **eight (8) months** from the Effective Date, including twenty-one (21) days' time assumed to be taken by the Client in conveying its comments on the Reports at each stage of the Key Deliverables.
- (ii) The Consultant shall submit the following Key Deliverables (minimum two (2) copies) within the time schedule as summarized below:

S.	Reports to be delivered(Key Deliverables)	No. of	Time Schedule from
No.		Copies	Effective Date
(i)	Inception Report shall be submitted after Kick-off meeting and Reconnaissance Survey by the	2	Within 2 months

	Consultant (as per clause 4.2 above) and it will cover important observations, preliminary data/ reports collected (as per clause 4.1 above), stakeholders to be consulted, data requirement & availability, questionnaires, proposed benchmarks for comparison & reasons for their selection and detailed methodology, timelines and way forward, the Consultant intends to fulfil the entire Scope of Work as stipulated		
(ii)	Draft Traffic Assessment Report covering the aspects as mentioned in clause 4.3 above	2	Within 4 months
(iii)	Final Traffic Assessment Report (after seeking views of the Stakeholders and incorporating them in the report) covering the aspects as mentioned in clause 4.3 above	2	Within 5 months
(iv)	Waterway Infrastructure Analysis & Planning Report: After undertaking all the surveys as enlisted in clause 4.2, 4.3, 4.4 (ix) & (x) above, the Consultant shall undertake waterways infrastructure analysis in terms of clause 4.4 above and accordingly submit Waterway infrastructure Analysis & Planning Reports (refer Note below)	2 for each state	Within 6 months
	Note: The Consultant shall submit a separate state wise Report (Uttar Pradesh, Bihar, Jharkhand &W.B.), covering all the above mentioned aspects in sufficient details, having the following components:		
	(a) Fairway Development including Navigation Aids;		
	(b) Modernization of existing jetties;		
	(c) Development of proposed new jetties; and		
	(c) others project details envisaged in clause 4.4		
(v)	Draft DPR: This will cover the aspects of:	2 for each	Within 7 months
	(i) Geo-technical Investigation (as per clause 4.5 above),	state	
	(ii) FEED/ Preliminary Engineering Designs duly proof checked from reputed Institute as approved by the Client,		
	(iii) Environmental & Social Impact Assessment with mitigation plan,		

(iv) Cost Estimates,		
(v) Economic & Financial Analysis,		
(vi) Organization Structure,		
vii) Time Schedule for Project(s) execution,		
viii)Preparation of tender document(s) for execution of Project(s),		
ix)Regulatory, Fiscal& Procedural issues including Stakeholder Consultation, complete in all respect as detailed in this Section		
Note: The Consultant shall submit a separate state wise Report (Uttar Pradesh, Bihar, Jharkhand &W.B.), covering all the above mentioned aspects in sufficient details, having the following components:		
(a) Fairway Development and Maintenance including Navigation Aids;		
(b) Modernization of existing jetties;		
(c) Development of proposed new jetties;		
(d) Others project details envisaged in clause 4.4and		
(d) Other aspects as mentioned in the 1 st paragraph above		
(vi) Final DPR: Final DPR shall be submitted after addressing all the comments/ observations on the Draft DPR made by the Client including stakeholder consultations and will cover all the scope of work complete in all respect as detailed in this Section	2 for each state	Within 8 months
Note: The Consultant shall submit a separate state wise Report (Uttar Pradesh, Bihar, Jharkhand & West Bengal), covering all the above mentioned aspects in sufficient details, having the following components:		
(a) Fairway Development including Navigation Aids;		
(b) Modernization of existing jetties;		
(c) Development of proposed new jetties;		
(d) Others project details envisaged in clause 4.4and		
(d) Other aspects as mentioned in S. No. (v) (Draft DPR) above		

Notes:

- (a) The Consultant will have to conduct three (3) to five (5) presentations at the head office of the Client in Noida / Regional Offices at Patna / Varanasi / Kolkata as & when required by the Client at his own cost;
- (b) The report submission shall be signed by the relevant Key Experts for related chapters and final cover page shall be signed by the Team Leader. Moreover, all the correspondences shall be done mainly with the Team Leader; and
- (c) During the presentations and meetings, the Client may ask for presence of all the Key Experts to be present personally for necessary discussions and clarifications with respect to inputs

S. No.	Name of the Expert	Number	Estimated Man - Months
1.	Team Leader	1	4
2.	Dy. Team Leader / Terminal Planner	1	8
3.	Traffic Expert	1	4
4.	Procurement Expert	1	3
5.	Transport Economist	1	3
6.	Business & Financial Analyst	1	3
7.	Structural Engineer	1	3
8.	Naval Architect	1	3
9.	Geotechnical Engineer	1	4
10.	Hydrographic Expert	1	4
11.	Environment Expert	1	3
12.	Social Expert	1	3
13.	Survey Engineer	1	3
	Total of <i>Key Experts</i>	13	48
1.	<i>Non-Key Experts</i> (viz. traffic survey, site investigations and	5	8
	preparation of DPR etc.)		

7. Man-months estimated for the consultancy service are as tabulated below :-

8. Manpower Requirement & Eligibility Criteria

The Consultant shall from a multi-disciplinary team (the "Consultancy Team") for undertaking this assignment. The following Key Experts whose minimum & desired qualification and experience are briefly described herein would be considered for evaluation of the Technical Proposal.

S. No.	Key Personnel	Numbers	Educational Qualification	Relevant Experience
1.	Team Leader		Minimum Qualification Master's Degree / Post Graduate Diploma (PGD) in any field Preferred Qualification NA	Minimum experience of fifteen (15) years out of which minimum seven (7) years of experience in the Ports / IWT sector
2.	Dy. Team Leader / Terminal Planner		Minimum QualificationB. Tech / B.E. in CivilEngineeringPreferred QualificationPostGraduation(Master's Degree / PGD)in relevant field	Minimum experience of ten (10) years out of which minimum seven (7) years of experience in Port & Harbor/ IWT Terminal Planning, Port & Harbor/ IWT infrastructure planning and development of physical activities for operations
3.	Traffic Expert		Minimum Qualification Graduate in any field / CA Preferred Qualification Post Graduation (Master's Degree / PGD) in relevant field	Minimum overall experience of seven (7) years out of which minimum five (5) years of experience in traffic studies in the transport infrastructure sector

S. No.	Key Personnel	Numbers	Educational Qualification	Relevant Experience
4.	Procurement Expert	1	Minimum Qualification Graduate in any field Preferred Qualification Master's Degree in Law or any other related field	Minimum experience of seven (7) years out of which minimum five (5) years of experience in managing procurement of various goods / consultancy / works contracts in the infrastructure sector. Should also have relevant experience of working on working on multilateral funded (World Bank, ADB, JICA etc.) projects
5.	Transport Economist	1	Graduate in any field / CA <i>Preferred Qualification</i> Post Graduation	Minimum experience of seven (7) years out of which minimum five (5)years of experience having understanding of regional economics especially with reference to transport and logistics. He / She should have experience of estimating transport investments and implementing transport programs
6.	Business and Financial Analyst	1	Minimum Qualification Graduate in any field / CA Preferred Qualification Post Graduation (Master's Degree / PGD) in relevant field	Minimum experience of seven (7) years out of which minimum five (5) years of experience in financial & economic analysis / financial structuring (PPP & Non- PPP) / appraisal of transportation infrastructure projects
7.	Structural Engineer	1	Minimum Qualification	Minimum experience of ten (10) years out of which minimum seven (7)

S. No.	Key Personnel	Numbers	Educational Qualification	Relevant Experience
			Engineering Preferred Qualification	years of experience in Port / IWT structure related designs
			Master's Degree in Structural Engineering / Marine Engineering	
8.	Geotechnical Engineer		Minimum Qualification B. Tech / B.E. in Civil Engineering Preferred Qualification Master's Degree in Geotechnical Engineering	Minimum experience of seven (7) years out of which minimum five (5) years of experience in soil investigation, reclamation work, soil improvement and foundation design etc.
9.	Hydrographic Expert		Minimum Qualification ITI in Survey / Cat "B" International Hydrographic Course qualifier / Diploma in Civil Engineering or equivalent Preferred Qualification Higher Qualification / Certification course in	Minimum experience of seven (7) years out of which minimum five (5) years of experience in conducting hydrographic surveys, investigations & measurements, bathymetric surveys
10.	Naval Architect	1	CertificationCourseInHydrography SurveyMinimum QualificationGraduationinMarineEngineering/NavalArchitecturePreferred QualificationPostGraduation(Master's Degree / PGD)in relevant field	Minimum experience of seven (7) years out of which minimum five (5) years of experience in construction / designing of inland vessels / coastal vessels
11.	Environment Expert		<i>Minimum Qualification</i> Graduate in Environmental	Minimum experience of ten (10) years out of which minimum seven (7)

S. No.	Key Personnel	Numbers	Educational Qualification	Relevant Experience
			Engineering / Master's in Environmental Science <i>Preferred Qualification</i> Post Graduation(Master's Degree / PGD)in relevant field	years of experience in environment impact assessment involving transportation infrastructure projects
12.	Social Expert	1	<i>Minimum Qualification</i> Graduate in Sociology <i>Preferred Qualification</i> Post Graduation (Master's Degree / PGD)in relevant field	Minimum experience of seven (7) years out of which minimum five (5) years of experience in Indian Subcontinent environment, with particular reference to resettlement and other social impacts of transportation infrastructure projects
13.	Survey Engineer	1	Minimum QualificationB. Tech / B.E. in CivilEngineeringPreferred QualificationPostGraduation(Master's Degree /PGD)in relevant field	Minimum experience of five (5) years out of which minimum three (3) years of experience in survey works / topography surveys

Annex A

S#	Location	Latitude	Longitude	District		
West	West Bengal					
Exist	ing	_				
1.	Haldia	22°2'20.08"N	88°6'34.40"E	PurbaMedinipur		
2.	Botaniacal Garden	22°33'8.89"N	22°18'2.17"E	Howrah		
3.	BTPS Bandel	22°59'39.71"N	88°24'19.83"E	Hooghly		
4.	Tribeni	22°59'33.55"N	88°24'18.06"E	Hooghly		
5.	Shantipur	23°12'39.80"N	88°25'13.97"E	Nadia		
6.	Swaroopganj	23'24'51.36"N	88°23'14.59"E	Nadia		
7.	Katwa	23'38'56.71"N	88°8'19.73"E	PurbaBardhaman		
8.	Hazarduari	24'10'57.41"N	88°16'5.11"E	Murshidabad		
9.	D/s Farakka	24°48'40.71"N	87°54'21.23"E	Murshidabad		
10.	U/s Farakka	24°49'9.78"N	87°54'20.30''E	Murshidabad		
Prop	osed					
11.	Manikchak	25°3'48.93"N	87°52'51.17"E	Malda		
12.	Berhampore	24°6'12.45"N	88°14'43.39"E	Murshidabad		
13.	Narkelbari	23°50'17.61"N	88°12'55.61"E	Murshidabad		
14.	Maganpara	23°50'10.17"N	88°13'55.65"E	Murshidabad		
15.	Palasi	23°47'18.50"N	88°14'3.92"E	Nadia		
16.	Ramnagar	23°47'22.66"N	88°13'58.40"E	PurbaMedinipur		
17.	Ballavpara	23°39'8.73"N	88°8'18.83"E	Nadia		
18.	Matlari	23°37'31.50"N	88°11'3.05"E	Nadia		

S#	Location	Latitude	Longitude	District
19.	Dainhat	23°37'20.78''N	88°10'58.25"E	PurbaBardhaman
20.	Nabadweep	23°23'14.35"N	88°21'54.99"E	Nadia
21.	Kalna	23°12'43.28"N	88°24'23.90"E	PurbaBardhaman
22.	PrincepGhat	22°33'21.66"N	88°19'50.01"E	Kolkata
23.	Diomond Harbour	22°11'3.22"N	88°11'22.90"E	South 24 Parganas
Jhark	khand			
Existi	ing			
24.	Manglaghat (Rajmahal)	25°4'16.54"N	87°47'7.58"E	Sahibganj
25.	Samdaghat (Sahibganj)	25°15'0.35"N	87°47'57.73"E	Sahibganj
Propo	osed			
26.	Singhidalan (Rajmahal)	25°3'23.21"N	87°50'1.01"E	Sahibganj
Bihar	•			
Existi	ing			
27.	Bateshwarsthan	25°19'45.54"N	87°15'36.43"E	Bhagalpur
28.	Barari (Bhagalpur)	25°15'47.20''N	87°2'13.97"E	Bhagalpur
29.	Munger	25°22'35.77"N	86°27'45.01"E	Munger
30.	Simariya	25°22'44.76"N	86°0'8.06"E	Begusarai
31.	Buxar	25°35'18.47"N	83°59'21.37"E	Buxar
Propo	osed			
32.	Manihari	25°20'5.30"N	87°37'2.14"E	Katihar
33.	Karagola	25°28'14.18"N	87°23'20.78"E	Katihar
34.	kahalgaon	25°16'4.95"N	87°13'42.47"E	Bhagalpur

S#	Location	Latitude	Longitude	District
35.	Tintanga	25°17'51.06"N	87°11'23.76"E	Bhagalpur
36.	Sultanganj	25°15'17.91"N	86°44'24.35"E	Bhagalpur
37.	Aguani (Shahabad)	25°17'46.21"N	86°46'56.18"E	Khagaria
38.	Hathidah	25°22'18.02"N	85°59'40.67"E	Patna
39.	Barh	25°30'1.89"N	85°43'14.61"E	Patna
40.	Athmal Gola (Bakhtiyarpur)	25°28'57.13"N	85°37'43.76"E	Patna
41.	Hasanpur	25°35'3.44"N	85°31'28.95"E	Samastipur
42.	Kachi Dargah/ Fatuha	25°32'48.88"N	85°16'48.32	Patna
43.	Kalughat(Saran)	25°44'22.46"N	85°7'11.78"E	Saran
44.	Digha/Danapur	25°39'7.39"N	85°5'2.96"E	Patna
45.	Doriganj	25°43'41.81"N	84°50'2.47"E	Saran
46.	Revelganj/JaiprakashNagar	25°44'25.88"N	84°37'50.20"E	Saran
47.	Maujampur (Ara)	25°41'38.24"N	84°35'43.22"E	Bhojpur
Uttar	Pradesh			
Existi	ing			
48.	Rajghat (Varanasi)	25°29'29.04"N	83°2'8.37"E	Varanasi
49.	AssiGhat (Varanasi)	25°17'14.40"N	83°0'27.94"E	Varanasi
50.	Ramnagar (Varanasi)	25°15'16.32"N	83°1'46.74"E	Varanasi
Prop	osed			
51.	Bharauli (Ballia)	25°35'37.11"N	83°59'3.28"E	Ballia
52.	Majhoua (Ballia)	25°46'32.21"N	84°22'58.22"E	Ballia

S#	Location	Latitude	Longitude	District
53.	Kanspur (Ballia)	25°43'49.78"N	84°9'56.13"E	Ballia
54.	Sarai Kota (Ballia)	25°33'58.99"N	83°56'43.46"E	Ballia
55.	Dungurpur	25°37'22.68"N	83°40'8.06"E	Ghazipur
56.	Ghazipur	25°35'20.48''N	83°36'23.33"E	Ghazipur
57.	Zamania	25°25'8.26"N	83°33'8.57"E	Ghazipur
58.	Chochakpur	25°29'15.40"N	83°24'47.37"E	Ghazipur
59.	Saidpur	25°32'0.88"N	83°13'15.38"E	Ghazipur
60.	Kaithy	25°29'8.21"N	83°9'10.59"E	Varanasi
61.	BaluaGhat	25°25'20.52"N	83°11'4.27"E	Varanasi
62.	Samneghat (Varanasi)	25°16'21.47"N	83°1'21.28"E	Varanasi

PART II

Section 8. Conditions of Contract and Contract Forms

CONTRACT FOR CONSULTING SERVICES

CONTRACT No. [insert]

THIS CONTRACT ("Contract") is entered into this [insert starting date of assignment], by and between Inland Waterways Authority of India ("the Client") having its principal place of business at A-13, sector-1, Noida – 201 301 (UP), and [insert Consultant's name] ("the Consultant") having its principal office located at [insert Consultant's address¹].

WHEREAS, the Client has received financing from the World Bank which is being used for this contract and the Client wishes to have the Consultant perform the services hereinafter referred to, and

WHEREAS, the Consultant is willing to perform these services,

NOW THEREFORE THE PARTIES hereby agree as follows:

- 1. Services (i) The Consultant shall perform the services specified in Annex A, "Terms of Reference and Scope of Services," which is made an integral part of this Contract ("the Services").
 - (ii) The Consultant shall provide the personnel listed in Annex B, "Consultant's Personnel," to perform the Services.
 - (iii) The Consultant shall submit to the Client the reports in the form and within the time periods specified in Annex C, "Consultant's Reporting Obligations."
- 2. Term The Consultant shall perform the Services during the period commencing *[insert starting date]* and continuing through *[insert completion date]*, or any other period as may be subsequently agreed by the parties in writing.
- **3. Payment** A. <u>Ceiling</u>

For Services rendered pursuant to Annex A, the Client shall pay the Consultant an amount not to exceed *[insert amount]*. This amount has been established based on the understanding that it includes all of the Consultant's costs and profits as well as any tax obligation that may be imposed on the Consultant.

¹ Avoid use of "P.O. Box" address

B. <u>Schedule of Payments</u>

The schedule of payments is specified below²:

	Activity	Payment
S.		
No.		
1.	After approval of Inception Report	10%
2.	After approval of Draft Traffic Assessment Report	15%
3.	After approval of Final Traffic Assessment Report	15%
4.	Water Infrastructure Analysis & Planning Report	
a.	After acceptance of Report for Uttar Pradesh	5%
b.	After acceptance of Report for Bihar	5%
с.	After acceptance of Report for Jharkhand	5%
d.	After acceptance of Report for West Bengal	5%
5.	Draft DPR including Stakeholder Consultant	
a.	After acceptance of Report for Uttar Pradesh	7%
b.	After acceptance of Report for Bihar	7%
с.	After acceptance of Report for Jharkhand	4%
d.	After acceptance of Report for West Bengal	7%
6.	After approval of Final DPR	
a.	After acceptance of Report for Uttar Pradesh	4%
b.	After acceptance of Report for Bihar	4%
с.	After acceptance of Report for Jharkhand	3%
d.	After acceptance of Report for West Bengal	4%

C. <u>Payment Conditions</u>

Payment shall be made in **INR** no later than 30 days following submission by the Consultant of invoices in duplicate to the Coordinator designated in paragraph 4.

Payments shall be made to Consultant's bank account [insert banking details. If payment by bank wire is not possible, prior Bank approval to apply cash payments option shall be obtained]

4. Project A. <u>Coordinator</u>.

Administration

The Client designates Mr./Ms. *[insert name and job title]* as Client's Coordinator; the Coordinator will be responsible for the coordination of activities under this Contract, for acceptance and approval of the reports and of other deliverables by the Client and for receiving and approving invoices for the payment.

² Fill in based on required outputs as described in Annex A (Terms of Reference) and Annex C (Reporting Requirements). Avoid front-loaded payments. Advance payments in contracts with firms require a bank guarantee for the same amount.

B. <u>Reports</u>.

The reports listed in Annex C, "Consultant's Reporting Obligations," shall be submitted in the course of the assignment, and will constitute the basis for the payments to be made under paragraph 3.

- 5. Performance Standards
 The Consultant undertakes to perform the Services with the highest standards of professional and ethical competence and integrity. The Consultant shall promptly replace any employees assigned under this Contract that the Client considers unsatisfactory.
- 6. Inspections and Auditing The Consultant shall permit, and shall cause its Sub-Consultants to permit, the Bank and/or persons or auditors appointed by the Bank to inspect and/or audit its accounts and records and other documents relating to the submission of the Proposal to provide the Services and performance of the Contract. Any failure to comply with this obligation may constitute a prohibited practice subject to contract termination and/or the imposition of sanctions by the Bank (including without limitation s determination of ineligibility) in accordance with prevailing Bank's sanctions procedures.
- 7. Confidentiality The Consultants shall not, during the term of this Contract and within two years after its expiration, disclose any proprietary or confidential information relating to the Services, this Contract or the Client's business or operations without the prior written consent of the Client.
- **8. Ownership Material** of Any studies reports or other material, graphic, software or otherwise, prepared by the Consultant for the Client under the Contract shall belong to and remain the property of the Client. The Consultant may retain a copy of such documents and software³.
- 9. Consultant Not to be Engaged in Certain Activities
 The Consultant agrees that, during the term of this Contract and after its termination, the Consultants and any entity affiliated with the Consultant, shall be disqualified from providing goods, works or services (other than consulting services that would not give rise to a conflict of interest) resulting from or closely related to the Consulting Services for the preparation or implementation of the Project
- **10. Insurance** The Consultant will be responsible for taking out any appropriate insurance coverage.
- **11. Assignment** The Consultant shall not assign this Contract or sub-contract any portion of it without the Client's prior written consent.

³ Restrictions about the future use of these documents and software, if any, shall be specified at the end of paragraph 8.

- **12. Law Governing**
Contract and
LanguageThe Contract shall be governed by the laws of Government of India and
the language of the Contract shall be⁴ English.
- 13. Dispute
Resolution⁵Any dispute arising out of the Contract, which cannot be amicably settled
between the parties, shall be referred to adjudication/arbitration in
accordance with the laws of the Client's country.
- **14. Termination** The Client may terminate this Contract with at least ten (10) working

days prior written notice to the Consultant after the occurrence of any

of the events specified in paragraphs (a) through (d) of this Clause:

- (a) If the Consultant does not remedy a failure in the performance of its obligations under the Contract within seven (7) working days after being notified, or within any further period as the Client may have subsequently approved in writing;
- (b) If the Consultant becomes insolvent or bankrupt;
- (c) If the Consultant, in the judgment of the Client or the Bank, has engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices (as defined in the prevailing Bank's sanctions procedures) in competing for or in performing the Contract.
- (d) If the Client, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.

FOR THE CLIENT

FOR THE CONSULTANT

Signed by _____

Signed by _____

Title: _____

Title:

⁴ The law selected by the Client is usually the law of its country. However, the Bank does not object if the Client and the Consultant agree on another law. The language shall be English, French, or Spanish, unless the Contract is entered into with a domestic firm, in which case it can be the local language.

⁵ In case of a Contract entered into with a foreign Consultant, the following provision may be substituted for paragraph 13: "Any dispute, controversy or claim arising out of or relating to this Contract or the breach, termination or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules as at present in force."

LIST OF ANNEXES

- Annex B: Consultant's Personnel and corresponding unit rates
- Annex C: Consultant's Reporting Obligations