



GOVERNMENT OF ASSAM

ASSAM INLAND WATER TRANSPORT DEVELOPMENT SOCIETY (AIWTDS)

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SPECIFIC PROCUREMENT NOTICE
REQUEST FOR EXPRESSIONS OF INTEREST (REOI)
(CONSULTING SERVICES – DPR PREPARATION)

Country: INDIA

Name of Project: ASSAM INLAND WATER TRANSPORT PROJECT [AIWTP]

Loan No./Credit No./Grant No.: Loan no 9026-IN

Assignment Title: Preparation of Detailed Project Report (DPR) along with Engineering Design, Drawings, Tender Documents for Construction of Modular Terminal at Ferry Services of NW-2 and NW-16 in Assam.

Reference No. IN-IWT-221779-CS-QCBS

The Government of India *has obtained* financing from the World Bank toward the cost of the AIWT Project and intends to apply part of the proceeds for consulting services.

The AIWTDS intends to develop state of the art Inland Waterway Transport (IWT) Terminal at different locations in the State of Assam. This would be a landmark for the entire AIWT Project. The state-of-the-art terminals shall include Terminal complex with required facilities and amenities provisions for berthing, boarding & de-boarding of passengers/loading & unloading of cargo, bank protection, navigation aids and other auxiliary support systems.

The detailed Terms of Reference (TOR) for the assignment *are attached to this Request for Expressions of Interest.*

The AIWTDS now invites eligible consulting firms/organizations/institutions (the “Consultants”) to indicate their interest in providing the Services and submit their Express of Interest (EoI) document with the information sought in this Request for Expression of Interest notice (REOI). Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services. The short listing criteria are:

- i) The Consultant should have sound financial performance with average annual turnover of INR 6.0 Crore or more for the last 3 years. (2017-2018 & 2018-2019, 2019-2020). This shall be substantiated by submitting Balance Sheet and Profit & Loss Statement/Annual Report.
- ii) The Consultant should be in business for atleast last seven years ending on 31.01.2021. The Consultant should submit the name, address, e-mail, telephone along with a note on the Ownership and organizational structure & core business area of the consulting. Certificate of Incorporation/ Registration certificate, Copies of PAN Card and GST registration may be submitted.
- iii) The Consultant must have at least 7 years proven experience in preparation of Detailed Project Report for construction of marine or riverine infrastructure. A list of details of the assignments may be submitted. (Work order or Completion certificate to be enclosed).
- iv) Experience in At least 1 project in Inland Water Transport sector/Design of ferry terminals/ports/any other marine terminals. (Work order or Completion certificate to be enclosed)
- v) Submission of completion certificate for the same is mandatory. The completion certificate shall bear Client's name and address, value of the work executed by the Consultant, Start and end of the project.
Evidence of the successful completion shall be provided. This shall include the purchase order, scope of work, completion certificate/copy of final bill. The Consultant shall also include client's name and the contact details.

Substantially completed projects whose financial completion is \geq 80% of the contractual value shall also be considered. The bidder shall submit auditor's certificate/client certificate certifying the financial progress of the assignment.

The Consultant must have an in-house technical team and expert staff available to execute the required field study and preparation of DPR as mentioned in the ToR. A short write-up on technical and managerial capability of the firm. A one pager CV for the proposed Key Expert positions can be submitted for the purpose. However, the Key Experts will not be evaluated at the short-listing stage.

A Consultant will be selected in accordance with the Quality and Cost Based Selection [QCBS] method set out in the Procurement Regulations. The attention of interested Consultants is drawn to Section III, paragraphs, 3.14, 3.16, and 3.17 of the World Bank's "Procurement Regulations for IPF Borrowers" July 2016, Revised November 2017 and August 2018 ("Procurement Regulations"), setting forth the World Bank's policy on conflict of interest.

A Firm/Agency or an individual Debarred by the World Bank in accordance with the anticorruption guidelines shall be ineligible for this Assignment in any form or way. A list of debarred firms and individuals is available at the Banks external website:www.worldbank.org/debarr

The Consultant shall note that:

1. AIWTDS reserves the right to reject any or all EoI's or cancel without assigning any reason whatsoever and in such case no bidder / intending bidder shall have any claim arising out of such action.
2. Issuance or downloading of Bidding Documents to any Bidder shall not construe that such Bidder is considered to be qualified.

The REoI document is available online on website www.assamtenders.gov.in, www.iwtdirectorate.assam.gov.in. and www.aiwtdsociety.in. Consultant will be required to register on the website www.assamtenders.gov.in for uploading the REoI. The Consultant would be responsible for ensuring that any addenda available on the website is also downloaded and incorporated.

Last date and time for	: 23-03-2021at 1400 hours
Submission of REoI	
Time and date of	: 23-03- 2021at 1600 hours
opening of REoI	

For submission of the REoI, the Consultant is required to have Digital Signature Certificate (DSC) from one of the authorized Certifying Authorities authorized by Government of India for issuing DSC. Aspiring Consultants who have not obtained the user ID and password for participating in e-procurement in this Project, may obtain the same from the website: www.assamtenders.gov.in .

REoI must be submitted online on www.assamtenders.gov.in on or before the deadline. Any modifications to REoI received outside e-procurement system will not be considered. If the office happens to be closed on the date of opening of the REoI as specified, the REoI will be opened on the next working day at the same time. The electronic bidding system would not allow any late submission of bids.

Other details can be seen in the REoI document. The AIWTDS shall not be held liable for any delays due to system failure beyond its control. Even though the system will attempt to notify the participants of any REoI updates, the AIWTDS shall not be liable for any information not

received by the participants. It is the participants' responsibility to verify the website for the latest information related to this REoI.



Mr. Adil Khan, IAS,
State Project Director
Assam Inland Water Transport Development Society
Ulubari, Guwahati-7
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Further information can be obtained at the address above during office hours [1100hrs to 1700hrs].

Terms of Reference

1. INTRODUCTION

A. The Government of Assam (GoA) has taken up a Project titled 'Assam Inland Water Transport Project' to transform the quality of inland water transport services and integrate high quality passenger and vehicle ferry services into Assam's wider transport network through financing from World Bank. A society in the name and style of 'Assam Inland Water Transport Development Society' has been formed by the GoA under Transport Department to implement the Project. The Project will not only help in promoting the use of Inland Water Transport as eco-friendly, economic and convenient mode of transport but will also result in regional & economic development of Assam and nearby states as well as in providing better connectivity and access to the hinterland where the 'infrastructure' is quite rudimentary. A massive ferry disaster took place on 30th April, 2012 of the river passenger ferry 'SB Panch Bhai', which was travelling from Kachari Ghat, Dhubri to Medertari Ghat, reportedly with 213 persons on board including passengers and crew. A total of 41 dead bodies were recovered, 8 persons are reported to be missing after incident. The number of passengers and crew who survived stands at 164, including 35 injured passengers. The Government of Assam vide Notification No. PLA. 247/2012/2 dated 1st May, 2012 constituted a One-Man Enquiry Committee headed by ShriJitesh Khosla, IAS, then "Additional Chief Secretary" to the Government of Assam, to enquire the incident of ferry accident in BuraBuri Channel of Brahmaputra River near Mederatari Ghat at 5:30pm on 30th April, 2012 under Fakiraganj Police Station of Dhubri District. The report concluded that the enforcement envisaged in the statutory framework to ensure river worthiness and safety of vessels plying on the river, was not done for the river in question. As per the Report, reason for this is more likely systematic rather than individual negligence. Indeed, such reasons could be lack of personnel, absence of training, knowledge, equipment, capacity etc. The Report recommended to set-up a River Transport Regulator along with many other suggestive measures to improve the inland water transport considering safety of passengers.

2. BRIEF ABOUT THE PROJECT

A. Brahmaputra from Dhubri to Sadiywas declared as National Waterway no. 2 vide National

Waterway (Sadiya-Dhubri stretch of the Brahmaputra river) Act 1988 (40 of 1988).From Dhubri to Sadiya, the waterway extends for a distance of 891Km. The river Brahmaputra flows downthe centre of Assam Valley.

It receives a number of tributaries like Subansiri,JiaBharali, Dihing, BurhiDihing, Disang, Dhansiri and Kopili. The Directorate of Inland Water Transport, Assam was established in 1958 under Transport Department and is responsible for developing, maintaining and regulating IWT services in the state. It also operates and maintains many of the passenger transport services, ferry terminals and navigation aids on both Brahmaputra and Barak Rivers. Headquartered in Guwahati, it has three divisional offices in Guwahati, Dibrugarh and Silchar; five sub-divisional offices in Guwahati, Goalpara, Jorhat, Dibrugarh and Hailakandi; and three commercial offices at Guwahati, Goalpara and Dibrugarh.AIWTDS desires to engage a Technical Consultant (the “Consultant”) for preparation of Detailed Project Report (DPR) for construction of modular terminals at Umananda, Uzan Bazar, Kuruwa, Guijan, Beranga, Ghagor, KachariGhat(Dhubri), Goalpara, Bahari, on river Brahmaputra (National Waterways – 2) and river Barak (National Waterways- 6) for both urban and rural ferry services which are the single most important transport mode for many sections of the population, especially rural households in Assam. The construction cost for each terminal is planned between INR 10 Crore to 12 CroreIt is also essential to note that the same separate consulting firm (EIA firm) will conduct detailed Social Impact Assessment (SIA), site-specific SMPs, Resettlement Action Plans (RAPs), as well as a stand-alone Resettlement Policy Framework (RPF) for all investment activities. The SIA will run concurrently with the design study but willindependently evaluate their social aspects including land acquisition and resettlement.

The detailed SIA is expected to inform the final design of the ferry services, including alignments details of the Ghats and other facilities. A Resettlement Action Plan (s) (RAPs), will be carried out at project design stage, after the SIA found to involve land/asset acquisition.

3. OBJECTIVES OFCONSULTANCY

The objective of this consultancy is to prepare a DPR to explore the potential of Umananda, Uzan Bazar, Kuruwa, , Guijan, Beranga, Ghagor, KachariGhat(Dhubri), Goalpara, Bahari, stretch on River Brahmaputra (National Waterways– 2)and River Barak (National Waterways-6) for year round navigation and recommending thereafter the specific interventions / sub-projects for development of AIWTDS Infrastructure to achieve waterway capable of reliable, safe & cost effective ferry services by developing infrastructure facilities. The number of

location may increase or decrease or change depending on AIWTDS requirement.

DPR will include Technical (together with Preliminary Engineering, Design work & Detailed cost estimate), Economic & Financial Analysis.

The Consultant shall also do an assessment of the existing ferry transport & passenger movements along the river corridor and across the river (at ferry points), identify and analyse important O-D pairs and identification of all infrastructure, institutional, regulatory and environmental & safety challenges hindering IWT operations pertains to 9 pre-selected existing ferry ghats/terminals identified initially at Umananda, Uzan Bazar, Kuruwa, Guijan, Beranga, Ghagor, KachariGhat(Dhubri), Goalpara, Bahari for Assam IWT project.

District and IWT Division wise location of proposed Terminals

S.No	Name of Ferry Services	Coordinate points
1	Umananda	26.196492/91.744908
2	Uzan Bazar	26.793308/91.751326
3	Kuruwa	26°14'10.48"/91°49'3.58"
4	Guijan	27°34'41.38"/95°19'33.87"
5	Beranga	24.808333/92.822226
6	Ghagor	27°12'30.45"/94°10'46.33
7	KachariGhat(Dhubri)	26.012486/89.9987533
8	Goalpara	26°11'8.75"/90°37'54.92", 26.861196/94.241972
9	Bahari,	26°14'50.84"/91°7'52.29"

The Consultant is required to provide a team of suitably-qualified experts with domain experience as per the requirement of the ToR.

4. DETAILED SCOPE OF WORK

Unless explicitly restricted in the Contract, the Scope of Work under the Contract shall include but shall not be limited to following:

A. COLLECTION AND REVIEW OF THE AVAILABLE DATA & REPORTS:

- (i) The Consultant will assess and review of all relevant earlier reports. This will enable him/her to have a brief primary idea of the geomorphological and other conditions affecting development works. The detailing / conclusions of these reports are for reference only and the consultant shall obtain his/her own independent data to arrive at any suggestions / conclusion for developmental components.
- (ii) The Consultant will undertake all necessary detailed Topographical /Hydrographical survey

and Geo-technical/Geological investigation at/between proposed ferry locations and analyze the data for the purpose of design of proposed structures as per standard/prevaling guidelines.

- (iii) The hydrographical survey data collection will include identification and detailing of all such features which may affect river navigation including but not limited to survey and data collection / data acquisition of tidal , topographic, bathymetric, flow and discharge conditions, water level variations, soil (suspended sediment, bed and bank) conditions, geological, geomorphologic and all other conditions. The consultant shall also consider data collection for variation in sediment transport (size and quantity) sources of sediments, locate degrading, aggrading, and stable reaches and correlate these results with historical data and / or previous study reports to qualitatively analyze the effects of anticipated project features. This information shall be used to determine what may or may not work when designing navigation improvements and evaluation of dredging requirement (if any). It shall include a determination of those reaches that are stable in depth and width and thus provide the basis for all subsequent works to be taken up.
- (iv) Collect and Study / Analyse Feasibility report for proposed ferry terminals at National Waterway - Brahmaputra River and Barak River prepared by a ISDP firm appointed by AIWTDS for development of ferry transport and navigation of passengers of the proposed locations
- (v) Collect and Study / Analyse the water level, depth, velocity, discharge, bed slope, cross sections, bed & bank materials, hydrographic & topographic data etc. during both the monsoon and non-monsoon periods from the data available with Central Water Commission (CWC) / concerned State Departments / Survey of India / other concerned Agencies including taking representative field measurements at the site to fill in the gaps, ifrequired;
- (vi) For any “fixed” infrastructure proposed to be constructed at any of the terminal locations, if applicable (such as spurs, breakwaters, revetments, embankments etc.), carry out hydrological and morphological modeling by using all the data set collected by the consultant of the potential effects both at the terminal site as well as downstream of terminal construction, in particular with respect to erosion and accretion patterns. The modeling should also consider potential climate change scenarios which may affect future high and low flow rates and also frequency and intensity of extreme events.
- (vii) Proposed locations along with all details for land/asset acquisition and livelihood impacts, including ownership and estimated cost of land. This will include all details and permissions to be collected from the State Revenue Departments with adequate background papers indicating Government and private/communal land. This will

also include land for Main Structures & Ancillary works as well as for road connectivity.

- (viii) Preparation of detailed layout plan to include facilities for both conventional and state of the art model including provisions for berthing, boarding & de-boarding of passengers/loading, with required facilities i.e. waiting area, shop, washroom, ticket counter, approach road to terminal connecting nearby main road, water supply, electricity supply, firefighting including lighting, requirement of power, water supply, emergency and standby power supply, provision of solar power, communication system.
- (ix) Study the existing appurtenant regions on both sides of these rivers for their economic activities, adequacy (or lack of it) in respect of connectivity of hinterland with other transport modes i.e. rail and road;
- (x) Provide Front end Engineering and design, drawings, technical specifications, bill of quantities (BOQ) and cost estimates for all structures (including ancillary works, road connectivity etc.) involved in development/ modernization of the proposed locations for executing the work. AIWTDS should be consulted adequately during the process of designing of the structures and the designs & drawings are to be vetted by the Proof Consultant prior to finalization. Where possible, resource and energy efficiency considerations should be reflected in the designs.
- (xi) Proof checking of design through IITs/ independent agencies (Proof Consultant) of repute approved by AIWTDS before submission to AIWTDS. The proof checking authority shall endorse on the drawings itself and the basic assumptions adopted in the design process. Preparation of realistic construction schedule for the proposed locations indicating the sequence of activities duly considering the river characteristics in different seasons and priority of works. The phasing of expenditure is also to be worked out.

Note: The relevant data available with AIWTDS will be provided by AIWTDS to the successful Bidder. Any other document relevant for this DPR that is not available with AIWTDS will be arranged by the Consultant and the cost thereof will also be borne by them Consultant.

B. UNDERTAKE PHYSICAL CONDITION SURVEY (RECONNAISSANCE SURVEY) AT SITE, STUDY, MAP AND ANALYSE THE FOLLOWING:

Comment [A1]: To be reviewed from bid doc

Comment [A2]: To be reviewed from bid doc

- (i) Physical Reconnaissance survey of the proposed locations of river covered by the study and collect information on the waterway characteristics. Such fresh information gathered shall be presented in comparison with the data available through earlier hydrographic survey duly presenting any major changes observed during the intervening period;
- (ii) Survey to undertake assessment of existing passengers movements along the river corridor & across the river.
- (iii) Survey to assess the environmental impacts due to development works.

C. TRAFFIC ASSESSMENT

- (i) The Consultant shall undertake assessment of existing passengers movements along the river corridor and across the river (at ferry points) giving details of Class, genders, livelihood pattern and number of passengers using the waterway with vehicle and without vehicle.
- (ii) The Consultant shall identify important O-D pairs and give projections of estimated passenger transport volumes for time periods of 5, 10 & 15 years for such O-D pairs keeping view of future road bridge on River Brahmaputra. The data shall be compiled from secondary sources (state level statistics, inquiries with industries, enquiries at ghats, enquiries with transporters etc.) and information to substantiate such enquiries shall be included in the DPR.
- (iii) Based on the potential of passengers, the Consultant shall their type, layout, area of land required and connectivity with bus stand, railway stations, road and other facilities required thereon. Ownership details of the land on which these passengers terminals are proposed shall also be collected and presented in the report.

D. SUGGEST & DEVELOP VIABLE OPTIONS

- a) Based on the findings in Clauses 4.1 and 4.2 above, the Consultant shall suggest & recommend in the DPR, the proposed volume of passengers.
- b) The Consultant shall suggest & develop viable outline options as River Resistive Works bandalling, bank protection and other erosion control works.

E. PRELIMINARY ENGINEERING DESIGNS FOR PROVIDING AND/OR IMPROVING FACILITIES

- a) The Consultant shall undertake as part of the DPR study and provide therein, technical analysis together with preliminary designs and detailed cost estimate based on which development works can be undertaken under Engineering Procurement Construction (EPC) mode or Bill of Quantity (BOQ) mode by AIWTDS.
- b) The preliminary engineering study shall recommend appropriate designs and constructions standards which are safe, economical, relevant to traffic projections, local site conditions, environmental requirements, social needs and have considerable design life and economic rate of return.
- c) The preliminary engineering designs of the DPR Study shall cover but not limited to the following:
 - (i) Provide preliminary designs, detailed cost estimates (including estimated cost of annual recurring / maintenance works with sufficient basis / justification), layouts, basic drawings and specifications for the entire proposed infrastructure, , and other allied facilities with proper justification that the suggested solution is the optimum one. Every cost estimate made shall be duly supported by the justifications for the rates adopted/basis of rates like APWD/CPWD latest/updated schedule of rates/market rates/ lowest budgetary offers received etc.

F. COST ESTIMATES

The detailed cost estimates shall be based on the Schedule of Rates (SoR) of the Government of Assam and / or DSR applicable for Assam in various proposed terminals locations duly compliance of cost index. Market Rates can be adopted for those items for which SoR is not available. Transportation of men & material to the construction site taking into account the tough site conditions will be suitably considered in the rates / cost of various components. The basis / supporting documents for various rates used for preparing the cost estimate shall be given in the DPR.

G. ECONOMIC & FINANCIAL ANALYSIS

The Consultant shall work out cost benefit analysis, Social Cost Benefit Analysis, Financial Internal Rate of Return (FIRR) and Economic Internal Rate of Return (EIRR), Techno-Economic Feasibility Report (TEFR) of the project based on current Indian/International norms including SWOT analysis, as well as consideration of environmental and social costs and benefits, with detailed back up calculations, basis, assumption, justification etc. along with their source of information.

H. ORGANIZATIONAL STRUCTURE

The Consultant shall study and recommend necessary organizational structure and manpower required for execution of the project and its maintenance thereafter.

I. TIME SCHEDULE FOR PROJECT EXECUTION

The Consultant shall prepare detailed time schedule for execution of the whole project including time requirement of the various components of the project from inception till commissioning. Suggestion shall also be given for executing the project in different phases with split up of the works and the costs thereto.

J. MISCELLANEOUS

- (i) After submission of draft DPR, the Consultant shall conduct stakeholder meetings along with AIWTDS and shall arrange for public hearing / consultations in coordination with AIWTDS. The Consultant shall seek views of stakeholders, incorporate views of stakeholders and make suitable modifications in discussions with AIWTDS in the draft DPR.

K Preparation of Bid Document

- (i) Preparation of bid documents in adherence to the World Bank's procurement Regulations for IPF borrower July 2016 revised November 2017 and November 2018: Goods, works and non-consulting services for execution of all the works and provide all necessary technical details etc.

which will be needed to float and accept the tender on EPC (Engineering Procurement Construction) / BOQ (as found appropriate in consultation with AIWTDS and merits of the case) contract basis.

Accordingly, the detailed designs and cost estimates of every component and sub-component of the DPR will have all such details, authenticity and back up documents which are required for preparing and processing proposals as per prevailing norms and practice. The Consultant shall also assist AIWTDS with tendering of works, attending Pre-Bid meeting, preparing Pre Bid Query response, issuing Corrigendum, evaluation of Bid documents, preparation of post bid queries, evaluation of responses & finalization of Bid evaluation response. Suggest suitable method of implementing the project including phasing, time frame and source of funds for implementation of each project group, specifically as to whether the project group components can be implemented under EPC mode and if yes, give all necessary details for implementing the individual project groups on EPC mode including evaluation of EPC bids, checking of selected EPC contractor's design and drawings etc.

Bid document, including allied components, related to the complete scope of work mentioned in this section are to be grouped such that each project group is also logical. The final decision on contractual modality for each individual project group shall be in consultation with AIWTDS & World Bank.

Full integration of Environment Management Plan including proposed mitigation and enhancement measures (to be prepared under the parallel EA consultancy) into the designs, cost estimates and bidding documents

Full integration of Social Management Plan, Indigenous Peoples Development Plan, Resettlement Action Plan, Labor Influx Mitigation Plan, including proposed measures to be prepared under the parallel Social Assessment consultancy into the design and bidding documents.

5. **TIME SCHEDULE AND KEY DELIVERABLES**

The total duration for preparation of the Detailed Project Report shall be **9 months** from the date of issuance of LOA. Since, time is the essence of the contract, the Consultant shall ensure that the stipulated milestones are adhered to. The

Consultant shall submit the following reports within the time schedule as summarized below:

Activities	Time period from Contract Signoff (in Months)
Inception Report (3 copies)	Within 1 month of issuance of LOA
Interim Report/Survey Report & Workshop with Stakeholders.	Within 3 months of issuance of LOA
Draft Project Report (5 copies), draft tender document and presentation of draft report for development work of first set of 3 locations.	Within 4 months of issuance of LOA
Final Detailed Project Report (10 copies) and tender documents after incorporating comments of AIWTDS on draft DPR and draft tender documents for development work of first set of 3 locations & Workshop with Stakeholders.	Within 4.5 months of issuance of LOA
Draft Project Report (5 copies), draft tender document and presentation of draft report for development work of second set of 3 locations.	Within 5.5 months of issuance of LOA
Final Detailed Project Report (10 copies) and tender documents after incorporating comments of AIWTDS on draft DPR and draft tender documents for development work of second set of 3 locations & Workshop with Stakeholders Draft Project Report (5 copies).	Within 6.5 months of issuance of LOA
Draft tender document and presentation of draft report for remaining development Third set of 3 locations.	Within 7.5 months of issuance of LOA
Final Detailed Project Report (10 copies) and tender documents after incorporating comments of AIWTDS on draft DPR and draft tender documents for Third set of 3 locations & Workshop with Stakeholders.	Within 9 months of issuance of LOA

Notes:

- a. The Consultant will have to conduct presentations at the head office of AIWTDS as & when required by the Employer /EIC.
- 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 TeamLeader.
- c. During the presentations and meetings, the Employer may ask for presence of all the Key Personnel to be present personally for necessary discussions and clarifications with respect to inputs.

6. MANPOWER REQUIREMENT AND QUALIFICATION

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

A. Manpower requirement

S. No.	Resource	Nos.	Man months involvement during contract period
1.	Team Leader (Strategic Planning and Design)	1	9
2.	Structural Engineer(Port and Harbour Engineering)	1	4
3.	Architect	1	3
4.	Hydrographic Surveyor	1	4
5.	Geotechnical Engineer	1	5
6.	Traffic Expert	1	3
7.	Environment Expert	1	3
8.	Sociologists	1	3
9.	Procurement Specialist	1	4

B. Eligibility criteria

S. No.	Resource	Minimum Eligibility / Qualification
1.	Team Leader (Strategic Planning and Design)	B. Tech / BE – Civil Engineering, Preferred Qualification – Masters in Structural design / Ports / Harbour / Dock Engineering. Minimum 20 Years of total experience out of which at

S. No.	Resource	Minimum Eligibility / Qualification
		least 15 years relevant experience in concept & detailed design, preparing Detailed Project Report / Feasibility Report for various Waterway / Port / IWT and allied infrastructure projects.
2.	Structural Engineer(Port and Harbour Engineering)	B. Tech / BE in Civil Engineering, Preferred Qualification – M. Tech in Structural Engineering. Minimum 12 years of total experience out of which 10 years of relevant experience in Port / IWT structure related designs.
3.	Architect	Masters in Architect. Minimum 10 years of total experience out of which 8 years of relevant experience in related field as per the assignment. He / She should have experience of Port and Harbour /Passengers Terminals design.
4.	Hydrographic Surveyor	ITI in Survey / Diploma in Civil Engineering, Preferred Qualification – Higher qualification in Hydrography & surveying. Minimum 12 years total experience out of which 10 years relevant experience in conducting hydrographic surveys, investigations & measurements, bathymetric surveys / topographic survey in a variety of geographical locations
5.	Geotechnical Engineer	Graduate in Civil Engineering, Preferred Qualification – M. Tech, Geotechnical Engineering Minimum 12 years total experience out of which 10 years relevant experience in related field. He / She should have experience of soil investigation, reclamation work, soil improvement and foundation design.

6.	Traffic Expert	Graduate in Engineering / Economics, Preferred Qualification - Master's degree in Transport Economics or Engineering or Logistics. Minimum 10 years of total experience out of which 8 years of relevant experience in transport, logistic projects and operations, involving river and or maritime transport
S. No.	Resource	Minimum Eligibility / Qualification
7.	Environment Expert	Graduate in Civil Engineering / Environmental Engineering / Masters in Environmental Science, Preferred Qualification – Post Graduation in Environmental Engineering Minimum 8 years of total experience out of which 6 years of relevant experience in environment impact assessment for transport, logistic projects and operations, involving river and or maritime transport
8.	Sociologists	Graduate in Sociology, Preferred Qualification – Masters in Sociology. Minimum 10 years of total experience out of which 8 years of relevant experience in the Indian Subcontinent environment, with particular reference to resettlement and other social impacts of large transportation infrastructure projects.
9.	Procurement Specialist	B.E Civil/ Mechanical Minimum 15 years of total experience out of which 13 years of relevant experience in the Indian Subcontinent environment, with particular reference procurement of Goods, Proven working experience as a Procurement Manager, Procurement Officer or Head of Procurement, Knowledge of sourcing and procurement techniques ,Talent in negotiations and networking And Good knowledge of supplier

7. PAYMENTTERMS

The total Contract Price payable under the Contract shall be stipulated in the LOA and thereupon shall become part of this Contract and be paid in accordance with the terms hereon. The price quoted will squarely and totally include all the charges to be paid to the contractor by the Employer.

All the payments shall be made in Indian Rupees (INR) only and shall be subject to applicable Indian Laws for the purpose of taxation, if any.

The payment shall be only made against submission and acceptance of reports by the Employer. The Payment Schedule linked to the specified Key Deliverable is given below:

Sl. No.	Reports to be delivered (Key Deliverable)	Payment
1.	After approval of Inception Report of all locations.	15%
2.	After approval of Draft Detailed Project Report and Stakeholder Conference, the draft tender will be divided based upon the DPR submitted for each modular terminal.	20%
3.	After approval of Draft Final Detailed Project Report, the percentage will be divided based upon the DPR submitted for each modular terminal.	40%
3.	Final Design Documents including detailed design, BOQ, cost estimates and technical specifications & Workshop with Stakeholders for all 9 terminal	25%