Project Management Unit Jal Marg Vikas Project (JMVP) **INLAND WATERWAYS AUTHORITY OF INDIA** (Ministry of Ports, Shipping and Waterways, Government of India) Head Office: A-13, Sector-1, Noida – 201301 Phone: 0120-2544004; Fax: 0120-2543976; website: www.iwai.nic.in; email: vc.iwai@nic.in

REoI reference no: IN-IWAI-418376-CS-QCBS

Expression of Interest

- 1. Inland Waterways Authority of India (IWAI) is implementing "Jal Marg Vikas Project (JMVP)" for capacity augmentation of NW-1 (Varanasi-Haldia stretch of the Ganga-Bhagirathi-Hooghly River System) with the technical and financial assistance of the "World 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 at least 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.
- 2. JMVP is a veritable template for the development of a modern eco-system for IWT in in the region that that aims at fairway development and connectivity, enhancing the quantum of floating stock/terminals equipped with modern navigation. Although its geographical scope lies in West Bengal, Jharkhand, Bihar and Uttar Pradesh, it has the potential to create an integrated growth and development model for Bangladesh and North East India on the bedrock of IWT and multimodal connectivity leveraging historical waterway linkages.
- 3. One of the objectives of JMVP is to establish regional connectivity with neighboring countries among India, Nepal, Bhutan, Bangladesh and Myanmar and capitalize the potential of natural waterway connectivity of over 5000 kms, to study the linkages of NW-1 as a vibrant channel for trade and economic development with the neighboring countries, MoPSW has assigned IWAI to implement this waterway led regional connectivity project, the Eastern Waterways Connectivity Transportation Grid (EWaCTG) project (now being called as Regional Waterway Grid or RWG project) which involves the linkage of JMVP with other waterways in India and the neighboring countries.
- 4. Accordingly, IWAI intends to engage consultancy services ("the Services") for Selection of Consultancy Services for "Comprehensive Traffic Study between countries under Regional Waterways Grid (RWG) Project especially between India & Bangladesh including identification of Infra interventions and Feasibility study of Existing Navigation Lock at Jangipur".

- 5. The detailed ToR is enclosed as Annex-I. The broad scope of the study includes:
 - a) Review/revalidate data of all previous studies and compile the findings of those Studies
 - b) Study existing Transport Demand and Freight Transport Patterns
 - c) Identify existing O-D pairs (existing modes of transportation) in the region and find divertible cargo for IWT mode based on Total Logistics Cost Analysis
 - d) Ascertain the future traffic potential of project influence area under RWG
 - e) Identify key Origination-Destination (OD pairs) in the region and the attendant logistics cost under various multi-modal scenarios
 - f) Assessment of commodities that can be transported through the inland waterways and their traffic routes.
 - g) Projection of regional cargo movement through the waterways comprising of EXIM cargoes, inter country transit cargoes and domestic cargoes to NER
 - h) Identification of key interventions required to enhance the waterways-based cargo traffic
 - i) Identify anchor commodities amenable to water transport in the region
 - j) Identify potential business cases for cargo, (including tourism and passenger) transportation between country pairs using an optimal logistics solution with inland waterway as the primary mode. The business cases shall be based on an assessment of the total logistics cost and should be commercially practical, implementable and ready for operationalization in the immediate-short term.
 - k) Feasibility Study of existing Navigational Lock at Jangipur, Murshidabad Distt., West Bengal
- 6. The Vice Chairman & Project Director, Project Management Unit (PMU), JMVP, IWAI, invites eligible consulting firms ("Consultants") to submit their interest to provide Consultancy services for **"Comprehensive Traffic Study between countries under Regional Waterways Grid (RWG) Project especially between India & Bangladesh including identification of Infra interventions and Feasibility study of Existing Navigation Lock at Jangipur".** Consultants interested in providing the Service should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services. Consultants may associate with other firms in the form of a joint venture / Consortium or a sub-consultancy to enhance their qualifications. It should be noted that CVs shall not be evaluated at REoI stage and therefore need not to be submitted with REoI. The short-listing criteria are:

- A) Consultant should be engaged in conducting similar activities for the past 5 years – copy of Certificate of Incorporation to be submitted along with the EoI.
- B) Consultant should have a minimum average annual financial turnover of INR 15 Crores during the last 5 years – CA certified declaration for last 5 years to be submitted along with the EOI.
- C) Consultant should have completed 3 consultancy works of similar nature. Similar consultancy works means studies undertaken during last 5 (five) years in India or abroad or the transport & logistics sectors involving scope of work that includes traffic assessment of freight/cargo (domestic cargo / coastal shipping/ export-import cargo movement), mapping of origin-destination (O-D) pairs, gathering market intelligence through stakeholder consultations, traffic projections, traffic assessment models with scenario/ sensitivity analysis and preferably undertaken value chain assessment, total logistics cost assessment, route & mode choice assessment, feasibility study of waterborne structures – List of Scope of work, date of commencement, date of completion, client's details, along with copies of work order, completion certificate issued by client to be submitted.
- D) Consultant should be having a minimum of 30 employees on their payroll

 declaration to be submitted.
- E) Notarized copy of Power of Attorney of the signatory/ies signing the EoI and/or associating to submit the EoI to be submitted.
- F) In case of EoI submission as an association of consultants, then nature of association whether Joint Venture / Consortium or as Sub-Consultant and name of the lead consultant needs to be mentioned.
- G) Declaration of Consultant / Each member of JV or Consortium regarding not being debarred by any Government entity to be submitted.
- 7. The EoI shall be submitted by the interested consultants through eprocurement portal **by 14.06.2024 at 15:00 hours (IST)** and it shall be opened on the same day at 15:30 Hours (IST) and it shall be clearly marked "Expression of interest for Consultancy services for **"Comprehensive Traffic Study between countries under Regional Waterways Grid (RWG) Project**

especially between India & Bangladesh including identification of Infra interventions and Feasibility study of Existing Navigation Lock at Jangipur".

- 8. The attention of interested Consultants is drawn to paragraph 1.9 of the World Bank's *Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers* dated January, 2011 ("Consultant Guidelines") revised July, 2014, setting forth the World Bank's policy on conflict of interest.
- 9. A firm 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.
- 10. A Consultant will be selected in accordance with the Quality and Cost Based Selection method set out in the Consultant Guidelines.
- 11. Further information can be obtained at the address mentioned above during office hours.

Instructions for submission of Expression of Interest:

- 1. Accomplished Expression of Interest (Application) must be submitted together with a Letter of Intent not later than **15:00 hours (IST) on 14.06.2024** and it shall be opened on the same day at 15:30 Hours (IST). Documents in support of all qualification information shall be submitted with application. Proposal of EOI with qualification information shall be furnished on / before the due date of submission at the address mentioned above.
- 2. The Application shall be basis of drawing up a shortlist of eligible Consultants who will be invited to submit proposal for services required.
- 3. All Applications shall be submitted in English.
- 4. A Consultant shall submit only one proposal. If a Consultant submits or participates in more than one proposal, all such proposals shall be disqualified. This does not, however, preclude a consulting firm to participate

as a sub-consultant, or an individual to participate as a team member, in more than one proposal when circumstances justify and if permitted by the Request for Proposals.

- 5. The Application and all related correspondence and documents should be written in the English language. Supporting documents and printed literature furnished by Applicant with the Application may be in any other language provided that they are accompanied with translations in the English language. Supporting materials, which are not translated into English, may not be considered. For the purpose of interpretation and evaluation of the Application, the English language translation shall prevail.
- 6. IWAI reserves the right to reject any Applications, without assigning any reasons thereof.
- 7. The Applicant shall provide all the information sought under this Qualification Document. PMU, IWAI would evaluate only those Applications that are received within the specified time and complete in all respects. Incomplete and/or conditional Applications shall be liable to rejection.

Guidelines for preparation of Expression of Interest

Following information shall be submitted:

- 1. Complete name of firm(s), date of establishment and type of organization whether individual, proprietorship, partnership, private limited company, public limited company etc.
- 2. Exact and complete corporate/registered/home office address, business address, telephone numbers, fax numbers, E-mail and cable address. For Consultant of foreign registry, indicate if there is any branch office(s) established in India with details in aforesaid manner.
- 3. If present firm(s) is the successor to or outgrowth of one or more predecessor firms, fresh name(s) of former entity (ties) and year(s) of their original establishment with details in aforesaid manner.
- 4. Present a brief narrative description of the firm(s). Kindly avoid submission of company brochures for the purpose description of the firm.

- 5. List of not more than two (2) principals who may be contacted by this Office.
- 6. Listed principals must be empowered to speak for him or for the firm on policy and contractual matters.
- 7. Indicate financial figures from consultancy business for past 5 (five) financial years.
- 8. Organizational strength of consultant shall be given.
- 9. Application Form: Annexure-II

(Vice Chairman & Project Director)

Terms of Reference (ToR) For Consultancy Services for

"Comprehensive Traffic Study between countries under Regional Waterways Grid (RWG) Project especially between India & Bangladesh including identification of Infra interventions and Feasibility study of Existing Navigation Lock at Jangipur"

- 1 Introduction
- 1.1 Inland Waterways Authority of India (IWAI) is a statutory body under Ministry of Shipping, Government of India. IWAI was set up in 1986 and is primarily responsible for development, maintenance and regulation of Inland Water Transport (IWT) in the country and specifically on the National Waterways (NW).
- 1.2 The Ganga-Bhagirathi-Hooghly river system from Haldia to Allahabad has been declared as National Waterway-1 (NW-1). This waterway is of national significance passing through four states of Uttar Pradesh, Bihar, Jharkhand, West Bengal and potentially serving the major cities of Haldia, Howrah, Kolkata, Katwa, Behrampur, Farakka, Sahibganj, Rajmahal, Bhagalpur, Patna, Ballia, Buxer, Ghazipur, Varanasi and Allahabad, their industrial hinterlands, and several industries located along the Ganga basin.
- 1.3 IWT on NW-1 has the potential to form the most economic, reliable, safe and environmentally friendly form of transport. Where developed for use by modern vessels operating on dependable rights of way, it can reduce investment needs in rail and road infrastructure, promote greater complementarities in the economic strategies the riparian states, enhance intra-regional trade and, through increased economies of scale, significantly reduce transport costs for the benefit of the entire economy and India's global trade competitiveness.
- 1.4 There is already evidence of growing demand for transport on NW-1, especially for dry and liquid bulk cargoes. This includes demand from the thermal power plants, cement companies, fertilizer companies, oil companies, the Food Corporation of India and others for coal, fly-ash, cement and clinker, stone chips, edible oils, petroleum products, food grains and over dimensional cargo.
- 1.5 Connectivity is central to trade, economic growth, and sustainable development of a country and Intra-regional trade is complementary to, as well as a key driver for deeper global integration. Better connectivity and trade integration with neighboring countries enlarges the market for domestic firms, allowing them to exploit economies of scale and become more efficient.
- 1.6 With the rapid economic growth that India's Eastern regions and Bangladesh have witnessed, the quantum of traffic within the region has grown very rapidly and most projections indicate that this momentum is expected to continue. The Government of India's (GoI) Act East policy provides the additional impetus to this trend at it seeks to

develop the entire region from Eastern India, Nepal, Bhutan to Myanmar to Thailand and beyond to ASEAN countries in a trade and development connected manner that is symbiotic and sustainable.

- 1.7 There has been significant investment in transport infrastructure at the national level by the respective countries, however, cross-border and transport infrastructure networks, specifically the water transport network remains underutilized for intra-regional trade.
- 1.8 The Ganga/Padma delta and the lower deltaic regions to the south including Sundarbans and Meghna deltas, along with Brahmaputra, Barak valleys are arguably one of the most densely populated regions in Asia. Land is extremely scarce given pressures of cultivation and there is a perpetual threat of erosion and rise in sea levels due to climate change related issues. Hence, in order to meet the transportation requirements of these regions, the development of infrastructure requiring land poses a significant environmental and social challenge.
- 1.9 In such a scenario, the development of the waterways as a mode of connectivity, specifically with intermodal integration can help boost regional economy by resolving existing infrastructure constraints and improve regional connectivity. For handling the expected large scale regional trade volumes between the countries, transit cargo from land locked countries Bhutan and Nepal and to enhance connectivity to the North-East Region (NER) of India, the waterways network can be leveraged by creating and waterways-based connectivity ecosystem more that is efficient, effective, and agile for handling the regional cargo movement.
- 1.10 To achieve this, the development of a regional waterways network integrated **with road or rail**, the Regional Waterway Grid (RWG) project is proposed, which envisages to enhance economic activity in the region by supporting cross border trade, enhance connectivity for the NER, aid in trade facilitation, boost economic and transport corridors, and overall regional development.
 - 2 Regional Waterway Grid (RWG) Project
 - i) The Regional Waterway Grid (RWG) project (formerly conceptualized as Eastern Waterways Connectivity Transport Grid or EWACTG) is a waterway led regional connectivity project proposed to consolidate and expand the on-going investments in inland waterways in India and Bangladesh into an interconnected waterway grid clutching the Indo-Bangladesh protocol route. This will help better connectivity with the North-Eastern region, within the regional markets and communities in the wider region. The navigable waterways in the BBIN region are indeed mostly in India and Bangladesh, while Nepal and Bhutan are land-locked countries without a direct waterway connection to seaports for maritime trade and will therefore benefit with improve access to sea. An interconnected grid of waterways in the sub-region supplemented with roads and rail to cover the first and the last mile can potentially serve different interests of the countries.

- ii) that involves development of intermodal logistical linkages amongst the regional countries the Indian subcontinent, namely India, Bangladesh, Nepal, Bhutan, and Myanmar- via waterways while enhancing connectivity to the NER, India. It also involves proposal for improvement of regulatory and policy measures for enhancing bilateral and transit trade via seamless movement of goods (and passengers) across borders, both bilateral and transit.
- iii) The broad objective of the RWG project is to enhance economic activity in the region by facilitating trade and commerce via efficient movement of goods and passengers by augmenting waterways, putting in place intermodal connectivity in a manner that is socially, environmentally, and economically sustainable.



2.1 Expected outcomes of RWG Project

The expected outcomes that RWG seeks to achieve is to connect the region seamlessly via IWT network and coastal shipping via intermodal coordination, bringing down logistics cost and ensuring logistics infrastructural development that is in sync with ESG goals thereby promoting growth and employment generation with sustainability.

- i) Boost Economy:
 - Foster trade between countries
 - Raise national income
 - o Generate employment

- Encourage Private Sector Participation
- $\circ \quad \text{Streamline ease of doing business}$
- ii) Promote Sustainability:
 - Promote Greener mode of transport
 - \circ $\;$ Sustainable proposition for cargo transportation in the region
- iii) Efficient Transportation:
 - Promote Multimodality

3 The Assignment and its Objectives

- 3.1 Keeping in view the overall scope and objectives of RWG, IWAI intents to appoint a consultant for undertaking a Comprehensive Traffic and Feasibility Study for the development of the Regional Waterways Grid (RWG) Project with the following objectives:
 - i) Review/revalidate data of all previous studies and compile the findings of those Studies
 - ii) Study existing Transport Demand and Freight Transport Patterns
 - iii) Identify existing O-D pairs (existing modes of transportation) in the region and find divertible cargo for IWT mode based on Total Logistics Cost Analysis
 - iv) Ascertain the future traffic potential of project influence area under RWG
 - v) Identify key Origination-Destination (OD pairs) in the region and the attendant logistics cost under various multi-modal scenarios
 - vi) Assessment of commodities that can be transported through the inland waterways and their traffic routes.
 - vii) Projection of regional cargo movement through the waterways comprising of EXIM cargoes, inter country transit cargoes and domestic cargoes to NER
 - viii) Identification of key interventions including on-shore infrastructure with handling equipment, Fairway development including aids to navigation, multimodal/intermodal connectivity among others required to enhance the waterways-based cargo traffic
 - ix) Identify anchor commodities amenable to water transport in the region
 - Identify potential business cases for cargo, (including tourism and passenger) transportation between country pairs using an optimal logistics solution with inland waterway as the primary mode. The business cases shall be based on an assessment of the total logistics cost and should be commercially practical, implementable and ready for operationalization in the immediate-short term.
 - xi) Feasibility Study of existing Navigational Lock at Jangipur, Murshidabad Distt., West Bengal

4 Scope of Work

4.1 With reference to the above background and objectives of the assignment, the overall scope of work comprises of a detailed traffic study for entire RWG region including India, Nepal, Bangladesh, Bhutan & Mayanmar with identification of the project influence area for intra and inter country traffic for the inland waterway transport, existing traffic and projections for RWG, traffic that can be anchored or diverted to inland waterways, including identification of key infrastructure, policy and regulatory initiatives, if any, that can enhance the potential of waterways based traffic in the RWG, based on primary surveys and stakeholder interactions. The outputs of the detailed traffic study shall form critical inputs to the proposed techno-economic feasibility studies planned to be undertaken in subsequent phases under the RWG Project.

4.2 Review and Assessment of existing reports and identification of gaps

- i) Undertake a detailed review of earlier studies, models and reports prepared with regards to inland waterways transportation in the region under RWG, development plan for the waterways, identification of gaps, key assumptions, identification of various stakeholders for primary and secondary interactions etc.
- ii) Determine the project influence area (PIA) for the assignment considering most optimal utilization of the waterways for transportation
- iii) The output of this stage shall be an Inception Report that will include key finding of the previous studies and reports, identification of gaps, list of stakeholder consultations, plan to undertake these consultations and support, if any required from IWAI.
- 4.3 Comprehensive Traffic Study

Undertake assessment of existing cargo movements through all modes of transport for the PIA including EXIM cargoes with the regional countries and transit cargos including assessment / identification the following:

- i) Existing commodities, their trade flow and existing volumes
- ii) Commodity wise logistics pattern from origin to destination, seasonality and other characteristics of supply chain / freight flows
- iii) Also identify anchor commodities / freight more amenable (such as high volumelow value bulk cargo, or freight that's generated and consumed closer to waterways minimizing first and last mile, or which is suitable to the existing vessel fleet in the region and so on) for water transport
- iv) O-D pair of movement of each cargo along with list of prospective stakeholders
- v) Freight flow routes that could comprise of multiple commodities and O-D pairs across modes
- vi) Factors influencing route and mode choice

- vii) Constraints and challenges restricting use of waterways as a mode of transport including infrastructural, policy and regulatory issues
- viii) Key factors affecting cross border transportation of cargo
- ix) Various rules, regulations, polices that impact freight movement in the PIA Identify existing government policies and subsidies available to road & rail modes and possible application of the same / similar policies & subsidies to IWT transport
- x) Current freight costs and rates (on a ton/km basis) for different modes for the key commodities and freight routes;
- xi) Market intelligence through primary surveys and interactions with stakeholders in India and other countries including India, Nepal, Bangladesh, Bhutan & Mayanmar that include but not limited to industry players / cargo owners for EXIM and transit in the PIA, logistics service providers/ asset owners, Industry bodies/ associations/ sea-ports, vessel owners/ operators, land port authorities, customs and other regulatory authorities
- 4.4 Traffic Forecasting

Assessment of various growth factors, development potential, challenges and constraints, cargo divertible to waterways based on logistics advantages and provide traffic projections for upto 2047 based on scenario analysis including the following:

- i) Identify and assess key drivers of growth for cargo, provide projections for cargo traffic.
- ii) Identify cargo, which can be attracted to IWT mode in the project area based on Origin-Destination (O-D) matrix based on total logistics costs and other advantages including but not limited to
 - analyze and compare total logistics cost for freight flow in the project influence area across modes and potential routes, for top seven commodities and O-D pairs.
 - Analyze current freight flows in view of how top seven of these could possibly be more efficient (time or cost) with waterway integration. The traffic demand study may preferable involve a detailed 4 step modeling.
- iii) Assess the existing and future economic and transportation infrastructure developments in the influence area which have been proposed over the next 5 to 10 years and cargo logistics in the PIA and can have an impact on traffic potential of inland waterways.
- Study the various inter country / regional programs and treaties such as BBIN,
 SASEC, BIMSTEC, PIWTT etc. and assess their impact on cargo logistics in PIA
- v) Assess and propose key interventions in infrastructure, policy or regulation that can further enhance the utilization of waterways in PIA

- vi) Provide projections of estimated volume of cargo likely to be handled for up to year 2047. These shall be in terms of year wise cargo projection for all important commodities groups. Provide detailed rationale and assumptions for the traffic projections. The projections shall consider historic growth as well as a correlation with macro-economic factors such as GDP to arrive at the likely traffic in the PIA
- vii) Based on the traffic projections including the volume of divertible traffic, the consultant shall ascertain the total impact on GHG emissions as a result of transportation of cargo on waterways traffic as compared to other modes in volume and monetary terms (such as carbon credits etc.). The consultant shall consider suitable and reasonable assumptions, established emission factors and adopt a standard methodology for this purpose

4.5 Roadmap

Based on the traffic projections, identify and prioritize the key infrastructure, regulatory and policy interventions with timelines in terms of near, mid and long-term time period

- i) Identify the key interventions in infrastructure, policy or regulation for enhancing the utilization of waterways in PIA. The proposals should include relevant complementary infrastructure such as terminals and local infrastructure for multimodal logistics
- ii) Prioritize the above interventions based on estimated time and impact that these will have on the waterway-based traffic in the near, mid and longer term
- iii) Prepare a roadmap for the next steps comprising of the studies and various other initiatives to be undertaken for successful and effective implementation of RWG
- iv) Suggest possible investment in the IWT sector to support ongoing activities along inland waterways in India and Bangladesh
- v) Suggest possible area of investment to generate visibility for RWG region including but not limited to operationalization of specific routes on IBP, possible extension of ports, river ports / berths dedicated to integration inland and coastal shipping, among others.
- vi) Suggest institutional reforms at regional level for sustainability of investments / operations
- vii) Identify potential measures to improve and retain existing cargo movement on inland waterways in the region
- viii) Suggest potential measures to generate movement of cargo on waterways in the region including identifying business cases where movement of cargo by waterways is feasible and having advantages of cost or time (or both) through high-volume long-haul movement / Ro-Ro movement / Shorter scheduled services etc.
- 4.6 Feasibility study of existing Navigational Lock at Jangipur, Murshidabad Distt., West Bengal

- i. Study historical changes in the course of the Padma river, Bhagirati river, Navigational channel & Spill channel.
- ii. Analysis of discharge and water level data of Feeder canal and Padma river from the consideration of navigation.
- iii. Mathematical modelling for the flow simulation in the existing spill channel and navigation channel for different flow conditions and water levels to examine their suitability for navigation.
- iv. Estimation of dredging requirement in the spill channel and navigation channel to make them navigable.
- v. Feasibility study on revival of the existing barrage and lock on the basis of available width and depth of flow in the feeder canal and Padma river considering the vessel sizes envisaged for feasible transportation of cargo.
- vi. A tentative cost estimate of the project including dredging, protection works, E&M work, Retrofitting works, revival of the lock and barrage, etc.

5 Deliverable and Timelines:

S.	Delimerable	Duration (From the date of		
No.	Deliverable	Contract Signing)		
i)	Inception Report	2 weeks		
ii)	Report on Review and Assessment of existing reports and identification of gaps	4 weeks		
iii)	As is Market Assessment Report and report on identification of Infra interventions required for RWG project	12 weeks		
iv)	Draft Traffic Report with Projections, total impact on GHG emissions as a result of transportation of cargo on waterways traffic and Roadmap	20 weeks		
v)	Final Traffic Report including final recommendation regarding required Infra interventions for RWG project, investment analysis, institutional reforms, measures to improve and retain existing cargo and business cases for new cargo	22 weeks		
vi)	Draft ToR for detailed engineering study including Infra interventions required for RWG project	24 weeks		
vii)	Feasibility study report of existing Navigational Lock at Jangipur, Murshidabad Distt., West Bengal	26 weeks		

- 5.1 **Total estimated man-months for the assignment: 65 man-months.** The team members deployed may be required to undertake site visits or stakeholder meeting for primary research, the expenses for which to be included in the lump sum cost.
- 5.1.1 Necessary support in the form of official letters/ e-mails may be requested from IWAI to set-up business meetings and collect information from the various stakeholders.

6 Qualification Requirements of Consultants / Experts

S. No.	Position of Expert	Education Qualification	Professional Experience		
1	Team Leader (1 no.)	Graduation in engineering in any discipline AND Master's Degree/ Post Graduate Diploma/ MBA or equivalent in relevant field	 Minimum 20 years of work experience out of which minimum 12 years of experience in the Ports/ IWT/ Railways/ Road /Logistics sectors covering scope items such as traffic, market assessment, projections, total logistics cost analysis, feasibility studies and policy/ regulatory review Preferred: International Experience in transport & logistics sectors including assignments specifically in neighboring countries of India 		
2	Deputy Team Leader (1 no.)	Graduation in engineering in any discipline AND Master's Degree/ Post Graduate Diploma/ MBA or equivalent in relevant field	• Minimum 15 years of work experience out of which minimum 8 years of experience in the Ports/ IWT/ Railways/ Road / Transportation sectors covering scope items such as traffic as-is assessment, market assessment, traffic projections, demand - supply assessment, feasibility studies and policy/ regulatory review		
3	Traffic Expert (3 nos.)	Master's Degree/ Post Graduate Diploma/ MBA or equivalent in relevant field	 Minimum 15 years of work experience out of which minimum 8 years of experience in traffic & logistics studies in the transport & logistics sectors covering scope items such as travel demand assessment and modelling, market assessment, traffic projections, total logistics cost analysis, etc. Preferred: Experience in traffic & logistics studies in the Ports/ IWT sectors 		
4	IWT Expert (1 no.)	Graduation in engineering in any discipline AND	• Minimum 20 years of work experience out of which minimum 12 years of experience in transportation & logistics projects involving riverine and / or maritime transport including IWT/ Ports / Railway/ Road sector		

A. Key Experts / Consultants:

S. No.	Position of Expert	Education Qualification	Professional Experience	
		Master's Degree/ Post Graduate Diploma/ MBA or equivalent in relevant field	 with scope involving assessment of infrastructure, operational assessment, feasibility studies, assessment of physical constraints in cargo movement, stakeholder interactions, etc. Preferred: International experience in transportation & logistics projects specific to IWT sector 	
5	Hydrologist (1 no.)	B.E. / B. Tech (Civil), M. Tech (Civil) with Specialization in Hydrology or equivalent	Minimum 15 years of experience out of which 5 years of experience in Inland Waterways or equivalent	
6	Navigation Expert (1 no.)	Master Unlimited / Master Mariner	• Min. 20 years of work experience out of which 5 years of experience in Inland Waterways or equivalent	
7	Structural Engineer (1 no.)	B.E. / B. Tech (Civil), M. Tech (Civil) with Specialization in structures or equivalent	• Minimum 20 years of experience out of which 5 years of experience in marine / river structures	
8	Logistics Expert (1 no.)	Master's Degree / Post Graduate Diploma (PGD)/ MBA or equivalent	 Minimum 20 years of work experience out of which minimum 12 years of experience in assignments involving supply chain logistics, commodity flow assessment, logistics cost assessment, route and mode selection, feasibility assessment in IWT / Ports / Multi Modal/ Railway/ Roads Sector Preferred: International Experience in 	
			transport & logistics sectors including assignments specifically in neighboring countries of India	

B. Subject Matter Experts:

S.	Position of	Education	Professional Experience
No.	Expert	Qualification	
1	Multimodal Expert (1 no.)	Master's Degree/ Post Graduate Diploma/ MBA/ Master's in Economics or equivalent in relevant field	• Minimum 20 years of work experience out of which minimum 12 years of experience in the multi-modal projects in India or overseas covering scope such multimodal supply chain logistics, assessing modal share, optimization, traffic assessment, value chain analysis, techno-economic feasibility studies, assessment of infrastructure linkages, etc.

S. No.	Position of Expert	Education Qualification	Professional Experience		
			• Preferred: International Experience in transport & logistics sectors including assignments specifically in neighboring countries of India		
2	Decarbonisation Expert (1 no.)	Master's Degree/ Post Graduate Diploma/ MBA/ or equivalent in relevant field	• Minimum 20 years of work experience out of which minimum 12 years of experience in projects involving scope such as sustainability practices and reporting, emissions / GHG assessment, energy transition, carbon economy, understanding of related reporting standards etc.		
3	Transport and Logistics Policy Expert (1 no.)	Master's Degree/ Post Graduate Diploma/ MBA/ or equivalent in relevant field	• Minimum 15 years of work experience out of which minimum 8 years of experience in understanding, review and advisory services on policies/ regulations in transport & logistics sectors		
4	Trade & Commerce Expert (1 no.)	Master's Degree/ Post Graduate Diploma/ MBA/ or equivalent in relevant field	• Minimum 15 years of work experience out of which minimum 8 years of experience in assignments involving trade facilitation, review & assessment of trade agreements/ policies, capacity building, industrial infrastructure, industrial corridors, SEZ in India and internationally		
			• Preferred: International Experience in transport & logistics sectors including assignments specifically in neighboring countries of India		
5	Corridor Logistics Expert (1 no.)	Master's Degree/ Post Graduate Diploma/ MBA/ or equivalent in relevant field	 Minimum 15 years of work experience out of which minimum 8 years of experience in assignments involving regional corridors covering scope such as industrial scenario analysis, global value chain analysis, support in formulation of medium/ long-term strategies, impact analysis in terms of output/ investment/ other opportunities, identification of synergies, evaluation of macroeconomic performance indicators, etc. Preferred: International Experience in transport & logistics sectors including assignments analysis of backgroup. 		

Annexure - II

	[DC	DCUMENT					
Referen		TTTLE	Date				
То			Date				
Vice Ch	airman & Project Director						
Iol Mor	g Vilzas Project						
Jai Marg vikas Project Inland Waterways Authority of India							
Inland Waterways Authority of India (Ministry of Ports Shipping and Waterways							
Govt of	'India)	vays,					
$\Delta = 13$	Sector = 1 Noida -201301 (U.P.)						
Subject Grid (RW interven	:- "Comprehensive Traffic Study /G) Project especially between Ind tions and Feasibility study of Ex	y between countries under dia & Bangladesh including isting Navigation Lock at J	Regiona identific angipur"	l Waterways ation of Infra			
IWAI Re	eference: -						
Dear Si	r,						
We are your re SL.NO	our Expression of Interest pleased to enclose our creden quirements listed at Para 3 (a Description of Documents	tials for the subject cited through d). Documents required to	1 assign ı Yes	ment as per			
		be furnished	/ No				
1	Name of the Organization	Copy of Certificate					
	Date of Establishment	of Incorporation.					
	Date of Commencement of	1					
	Business						
	Type of Organization – Legal	1					
	Status						
	Nature of Business	1					
	PAN No	1					
	GST No						
	Exact & Complete Address						
	Telephone / Fax numbers.]					
	E-mail and cable address.]					
	Present a brief profile -	Kindly avoid					
	narrative description of the	submission of company					
	firm(s).	brochures for the					
	Organizational strength of	purpose description of					
	Kou porgono - 2 principala	the firm					
	with						
	contact details to be						
	Contacted by IWAI.						
1.1	EOI Submitted as Sole	If submitted as Joint					
	Applicant or Joint Venture /	Venture / Consortium,					
	Consortium	details of Joint Venture					
	Details of Joint Venture	/ Consortium Partner					
	Partner	similar to 1 above					

2	For Consultant of Foreign	If yes, details similar	
	registry , indicate if there is	to 1 above	
	any branch office(s)		
	established in India with		
	details in aforesaid manner		
		Detaile	
3	Qualification Requirements	Details of	
		relevant	
		Engagement,	
3 a	Consultant should 2022-23	CA cortified	
	average appual 2021-22	CA certified	
	financial turnover	aeciaration for last 5	
	of INR 15 Crores 2019-20	years.	
	during the last 5 2018-19		
	years – CA certified	-	
	declaration for last		
	5 years to be		
	submitted along		
	with the EOF.		
3 b	Consultant should have	Kindlu Provide	
0.0	completed 3 consultancy	following details	
	works of similar nature	toward completed	
	Similar consultancy works	works	
	means studies undertaken	 Client's details 	
	during last 5 (five) years in	 Scope of work 	
	India or abroad or the	Date of	
	transport & logistics sectors	commencement	
	involving scope of work that	,	
	includes traffic assessment of	• Date of completion,	
	freight/cargo (domestic cargo	 Synopsis of the 	
	/ coastal shipping/ export-	Projects (relevant	
	import cargo movement)	certificates of	
	mapping of origin-destination	Commencement &	
	$(\Omega_{-}D)$ pairs, gathering market	completions issued by	
	intelligence through	client should be	
	stalzeholder consultations	enclosed)	
	traffia projectiona traffia		
	and projections, traine		
	assessment mouris with		
	scenario, sensitivity analysis		
	unu preferably undertaken		
	lagistica cost		
	logistics cost assessment,		
	noule & mode choice		
	assessment. – List of Scope of		
	work, date of commencement,		
	date of completion, client's		
	details, along with copies of		

	work order, completion certificate issued by client to be submitted.		
3c	Consultant should be having a minimum of 30 employees on their payroll – declaration to be submitted.	Declaration to be made by company HR	

Hope you will find the same in line with your requirements.

Signature & Name of the Consultant Date & Seal

<u>Certificate</u>

This is to confirm & certify that the information furnished with this Expression of Interest (EOI) are true & Correct and are not debarred by the World Bank.

Signature & Name of the Consultant Date & Seal

Enclosure :-As listed here under:-