

Draft Terms of Reference
For
Hiring of Safeguard Consultant for Environmental & Social Assessment Studies
of Assam Inland Water Transport Project (AIWTP)

1. Project Background

Assam has approximately 1980 Km of navigable waterways of which the most important for transport purposes are the Brahmaputra and Barak Rivers. The Brahmaputra River with a length of 891 Km between the Bangladesh Border and Sadiya, was declared National Waterway no. 2 by the Government of India in 1988, the development of its navigation infrastructure thereafter being the responsibility of the Inland Waterways Authority of India (IWAI). IWAI is currently aiming to maintain a navigable depth of 2.5m from Bangladesh Border to Neamati (629 Km), 2.0 m from Neamati – Dibrugarh (139 Km) and 1.5m from Dibrugarh – Sadiya. However, while IWAI is responsible for the navigation ‘fairway’ it does not own the water resources or have responsibility for operating water transport services. Landside activities such as riparian land-use development are regulated by State or local governments.

The Brahmaputra, running through the heart of the state, provides a vital link 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. These ferry services are provided by the Directorate of Inland Waterway Transport Assam (DIWTA), and by country boat operators – typically small independent and informal private businesses. In addition to the 97 ferry service routes designated by the Directorate of IWT, there are numerous routes licensed by the local (village) and district councils. Other users of the river include the Central Inland Water Corporation Limited (a Government of India Undertaking transporting cargo and operating some terminals on the rivers in the Eastern India & North-Eastern India and on the Indo-Bangladesh protocol routes), Border Security Forces, tourist organizations and private operators. Navigation on the Barak River (152 km) is minimal at present, which is declared as National Waterway 16 under the National Waterways Bill along with another 9 (nine) rivers in Assam.

The DIWTA, established in 1958 and part of the Assam Transport Department, 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. The ferry industry as a whole is characterized by an aging and poorly equipped fleet. Most demand is now met by the informal sector operating traditional country boats without supporting infrastructure. Terminal facilities and navigational aids are insufficient. Most ferry terminals consist of no more than improvised moorings on the bank of the river, which require relocation with changing river conditions, often over substantial distances. In the absence of bank protection, the main ferry terminals in or close to the urban centres (provided with floating, movable steel pontoons and temporary access roads) also typically require frequent relocation as river conditions change across seasons. The cargo sector is small partly because of market circumstances, partly because of connectivity problems and partly because the navigation standards provided do not permit reliable year round use by large modern vessels that can deliver competitive advantage over other transport modes.

The Government of Assam (GoA) wishes to transform the quality of inland water transport services and integrate high quality passenger and vehicle ferry services, and inland water freight transport into Assam's wider transport network system. Towards this end, the World Bank is supporting the GoA, which has established the Assam Inland Water Transport Development Society (AIWTDS) to prepare and implement the Assam Inland Water Transport Project (proposed for World Bank financing). Project preparation, led by AIWTDS, will involve several studies to produce the following:

- **Integrated Strategic Development Plan for Assam's IWT sector.** This will notably include development of, among other tasks:
 - An overall transport strategy for Assam, to guide the government in comprehensive and integrated transport solutions for the state;
 - a vision for the IWT sector development till 2035;
 - a Strategic Investment Plan outlining specific short, medium and long term investments and activities to support that vision (whether from public or private sources);
 - development of an IWT Sustainability Plan including proposed investments to enhance environmental and social sustainability at the sector level;
 - feasibility study of the specific activities within the investment plan proposed for financing under the scope of the Assam Inland Water Transport Project, including environmental and social screening, alternatives analysis and initial assessment of all proposed investments;
 - Full feasibility of 10 pre-identified passenger ferry Ghats / landing points for modernization / infrastructure improvement, as 10 have been outlined in **Table-1**.

Table-1: Pre-identified Priority Passenger Ferry Ghats/Landing Points/Study Area

Sl. No.	Terminal Sites	Name of the Rivers	Tentative Locations		
			Coordinates	Area (m ²) of Floating Jetty	Districts
1.	Guwahati-North Guwahati	Brahmaputra River (NW-2)	26.186904 N, 91.721570 E	2 No. x 150 m ²	Kamrup
2.	Guwahati – Rajaduar		26.206978 N, 91.746654 E	2 No. x 150 m ²	
3.	Nagarbera-Alopathy-Majorchar	Joljoli & Brahmaputra	26.100135 N, 90.979677 E	No floating jetty	
4.	Doukuchi-Bhokradia-Rangeswari-Pijupara	Joljoli River	26.17033 N, 91.570327 E		
5.	Neamati-Kamlabari	Brahmaputra (NW-2)	26.917831 N, 94.161672 E	2 No. x 150 m ²	Jorhat/Majuli
6.	Gandhi Ghat	Barak River (NW-16)	22.752689 N, 88.362267 E	1 No. x 68 m ²	Cachar
7.	Sonabari		24.756321 N, 92.834108 E	No floating jetty	
8.	Beranga		24.838980 N, 92.830288 E		
9.	Choto-Dudhpatil		24.852039 N, 92.773705 E		
10.	Badri		24.808184 N, 92.845631 E		

Source of Data: AIWTDS, Guwahati (Assam).

- ***Institutional Strengthening and Business Planning:***It is for creating a more supportive institutional framework for IWT sector development in Assam. This will include, among other tasks, delineation of roles/responsibilities and organizational plans for sector regulation (including safety and environmental regulations) by an independent IWT regulatory authority, and for operational and commercial functions of the government’s shipping operations and terminal services by two corporations to be established (Assam Inland Water Transport Corporation Limited (AIWTCL) and the Assam Inland Ports Corporation Ltd (AIPCL).
- ***Preparation of Detailed Project Report (DPR) for passenger ferry terminals and customizable design modules for elements of state of the art and conventional passenger ferry terminals:*** The proposed project will include (a) preparation of detailed designs and tender documents for all passenger ferry terminals/ghats/landing points– starting with those from the pre-identified list of 10, which are deemed to be feasible by the ISDP consultant (Please refer to **Table-1** above), followed by potentially 5 additional sites selected by the ISDP consultant for the Assam IWT project (the assumed total number of ghats/landing points to be included is approximately 10); and (b) Prepare design models for both state of the art and conventional passenger and cargo ferry terminal facilities for both urban and rural areas. The scope of design elements is expected to include bank protection works, shore side infrastructure, and multimodal interfaces / connectivity.
- ***Environmental and Social Assessment Studies*** for the proposed project (detailed in this TORs – have been given below).

2. Objective

The objective of this consultancy services are to carry out Environmental Assessment (EA) and Social Assessment (SA) studies for the proposed Assam Inland Water Transport Project, in accordance with applicable World Bank, National and Assam State Government requirements on environmental, social, health and safety management along with impact mitigation measures through QCI/NABET accredited Safeguard Consultant for Category ‘A’ projects in Sector No. 33 (*i.e.* Ports, Harbour, Break Waters and Dredging). The present studies shall encompass in particular the following key components:

2.1. Section-A: Environmental Assessment (EA) Studies

- i.* **Environmental Scoping for the Proposed Studies**, including proposed outlines, to be subjected to initial upstream stakeholder consultations.
- ii.* **Environmental Screening and Analysis of Project Alternatives at Feasibility Stage** for pre-identified 10 ghats/landing points for integration into ISDP consultant’s final feasibility analysis.
- iii.* **An Environmental Management Framework (EMF)** spanning the range of all potential future investments which may be fully designed and taken up under the Project, based on a screening and initial assessment of potential environmental issues and impacts.
- iv.* **Environmental Impact Assessment (EIA)**, including Environmental Management Plan (EMP) and relevant inputs to bid documents / BOQs, for the highest priority

investments for which detailed designs and tender documents will be completed as part of Project preparation (e.g., prior to the World Bank Appraisal Date for the Project), or for which sufficient information is already known to enable full assessment during the Project preparation stage.

- v. **A Cumulative Impact Assessment (CIA) Report** for the overall project.
- vi. Non-technical summaries of each individual document shall also be translated into appropriate local language(s).
- vii. To obtain all applicable mandatory statutory clearances are as follows;
 - *To obtain consent to establish CTE (Committee on Trade and Environment) for establishment of terminals from SPCB (State Pollution Control Board).*
 - *Removal of undesirable trees from the pre-identified ghats/landing points.*
 - *Diversion of forest land if required for any sub-projects.*
 - *Wildlife clearance; if any sub-project location exists in close proximity of the notified protected areas (national parks, wildlife sanctuary etc) under the Wildlife protection Act, 1972.*

2.2. Section-B: Social Assessment (SA) Studies

- i. **Social Scoping for the Proposed Studies**, including proposed outlines, to be subjected to initial stakeholder consultations in the early stages of documentation development.
- ii. **Social Screening and Analysis of Project Alternatives/Preliminary Assessment at Feasibility Stage** for pre-identified 10 ghats/landing points for integration into ISDP consultant's final feasibility analysis.
- iii. **Social Management Framework (SMF), a stand-alone Resettlement Policy Framework (RPF) and Indigenous People Development Framework** to be used to guide the process of addressing adverse impacts which are likely to include land acquisition leading to displacement or partial or full loss of land and other assets of PAPs. Also to address positive impacts that may arise from project investments.
- iv. **Social Impact Assessment (SIA)**, including, Social Management Plan (SMP), Indigenous Peoples Plan (IPP) and Resettlement Action Plan or RAP for the highest priority investments for which detailed designs and tender documents will be completed as part of Project preparation (e.g., prior to the World Bank Appraisal Date for the Project), or for which sufficient information is already known to enable full assessment during the Project preparation period. The SIA shall also include baseline social information of all pre-identified terminals. It is important to note that in case the investment will require private land then the SIA process for land acquisition including the acquisition will be carried out by the Revenue Department in accordance with the Right to Fair Compensation and Transparent Land Acquisition and Rehabilitation and Resettlement (RFCTLAR&R) Act 2013. The scope will not be covered under the consultancy. Rather information about it will be included in the SIA cum RAP/SMP

- v. Labor Influx Risk Assessment, including preparation of labor influx mitigation plan- it should cover labor management, child labor issues, community safety, labor camp, etc. of the pre-identified terminals. The labor influx mitigation plan with the employee code of conduct should be made part of the SMP document.

2.3. Section-C: Overall Executive Summary of EIA & SIA Reports and Disclosure of Public Consultation and Stakeholders Meetings for all Studies

- a. **An overall Executive Summary of EIA & SIA** to also be translated into appropriate local language(s), providing an overview of the overall Project, all EA and SA instruments and approach, and stakeholder consultation and disclosure carried out in preparation of each.
- b. Where feasible, **public consultation and disclosure** activities shall be coordinated across environmental and social studies/activities outlined above.

3. Standards

The Consultant shall, for the purposes of this study, take into account all recognized standards, guidance notes and codes of practice as required in accordance with Indian Law and as recognized internationally.

As part of the above, the Environment and Social Assessment studies will have to assess and verify the applicability of the World Bank Safeguard Policies as well as all relevant laws, regulations and rules of the Government of India, and the specific rules and regulations applicable for the state of Assam, in the context of the proposed project activities.¹ This shall also include relevant guidance notes and recommendations as published by Environmental Committee of Permanent International Association of Navigation Congress (PIANC), a non-profit international organization responsible for dealing with both broad and very specific navigation sustainability and environmental and social risk-related issues; and Developing and providing environmental guidance for sustainable waterborne transport infrastructure.

4. Scope of Work

In accordance with the World Bank Environmental Assessment Policy (OP-4.01) requirements for Category “A” projects, the project EA studies must be done independently from the feasibility/design studies. Therefore, this assignment will be carried out in synchronization with the parallel consulting teams as described above. AIWTDS will facilitate the interaction between the Environmental and Social Consultant (hereafter, “the Consultant”) and the other project preparation and design consultants. The various consulting

¹The World Bank Safeguard Policies include: Environmental Assessment, Natural Habitats, Forests, Pest Management, Safety of Dams, Indigenous Peoples, Cultural Property, Involuntary Resettlement, and Projects on International Waterways. The Consultant will be primarily responsible for ensuring compliance with the environmental policies. Requirements for compliance with the social policies specifically (Involuntary Resettlement and Indigenous Peoples) are taken up in detail in a parallel TOR for a separate Social Impact Assessment (SIA) consulting team.

firms shall be expected to interact and share data, analysis and recommendations as relevant to the other's assignment in a timely manner.

In addition, if World Bank financed, the proposed Project will be subject to the provisions of the Access to Information Policy and other related World Bank requirements concerning the disclosure of environmental and social information. These requirements include disclosing the EA and SA documents in draft and final versions at the World Bank's external website, and with pertinent government agency(ies) within India and Assam. The Consultant shall be expected to provide all required assistance to AIWTDS to meet these disclosure requirements. Key documents should be made available in both English and local language. The details of the Consultant's tasks are outlined below.

Section-A: Environmental Assessment (EA) Studies

To conduct environmental screening and scoping of the proposed project along with preparation of screening, scoping, EMF, EIA&CIA Reports and separate stand-alone EMPs for inclusion in the contractor bid documents.

A1. Environmental Scoping Report for the Proposed Studies

As a first task, the consultant shall develop an Environmental Scoping Report for the Assam Inland Water Transport Project, which identifies the Project's salient environmental and social aspects and potential impacts to be studied in more detail, verifies the scope of the detailed studies to be undertaken, and outlines the detailed work plan to carry out the present study. The consultant shall also carry out public and stakeholder consultation meetings, documentation and incorporate the observations and findings of above meetings in final version of the report.

This process is expected to include the following sub-tasks:

- a. Review of existing Legislations:** Review all national and state environmental, health and safety policies, regulations and guidelines, as well as World Bank safeguard policies and EHS Guidelines, which may apply to the proposed Project, and to ensure the required instruments/studies and their overall scope in order to meet all such requirements. The applicable EHS policies, regulations and guidelines which are expected to be potentially applicable are stated below; however it is the responsibility of the consultant to confirm the applicability of each, as well as any others not mentioned below:

➤ **Legislations formulated by the Govt. of India for 'Environmental Safeguards'**

- *The National Waterway Act, 2016.*
- *The Environment (Protection) Act, 1986 with applicable Rules/Legislation.*
- *The EIA Notification, 14th Sep., 2006 and its latest amendments up to 2017.*
- *The Water (Prevention and Control of Pollution) Act and Rules, 1974 & 1975.*
- *The Air (Prevention and Control of Pollution) Act, Rules and Amendments, 1981, 1982, 1983 & 1987;*
- *The Municipal Solid Waste (Management and Handling) Rules, 2000.*
- *The Hazardous Waste (Management and Handling) Rules, 2008.*
- *The Forest (Conservation) Act, 1980 Forest Conservation Rules, 1981.*

- *The Wildlife (Protection) Act, 1972.*
- *The Wildlife (Protection) Amendment Act, 2006 and Bill, 2013.*
- *The Biodiversity Act, 2002.*
- *The Wildlife Conservation Strategy, 2002.*
- *The Disaster Management Act, 2005.*
- *The Wetlands Rules, 2010.*
- *The Ancient Monuments, Archaeological Sites and Remains Act, 2010*

➤ **World Bank Policies (O.P./B.P. for ‘Environmental Safeguards’)**

- *OP/BP 4.01: Environmental Assessment*
- *OP/BP 4.04: Natural Habitats*
- *OP/BP 4.11: Physical Cultural Resources*
- *OP/BP 4.36: Forestry*

Note: If any other statutory act or legislation enforced by the State or Central Govt. during the period of EIA studies, the consultant shall follow these legislations as per their Scope of Services. In this regard, no additional payment shall be made by the Project Proponent/AIWTDS.

- b. Collect and Review Available Information:** The consultant shall collect the data and review the relevant information to the proposed project. Also generate existing baseline data on environmental and social conditions and shall assess the potential impacts related to the proposed investments, as well as other nearby ongoing or planned projects and activities which could interact with or be affected by the proposed investments.
- c. Carry out an Initial Site Visit:** The consultant shall visit all already identified/proposed investment sites, including formal and informal discussions/meetings with local communities, government entities and other key stakeholders, in order to complete an initial screening of likely environmental and social impacts and sensitivities requiring further study.
- d. Detailed Description of the Proposed Project:** The consultant shall develop a detailed project description covering all activities for purposes of the studies to be undertaken. The Project description would be based on descriptions developed under the feasibility analyses, but should provide an integrated overview of key aspects of relevance from an environmental and social perspective. This shall include not only locations and preliminary details on size and design of potential ferry infrastructure, but also ancillary aspects, last mile and multimodal connectivity, any dredging or other river maintenance requirements for terminal access and ferry routes etc.
- e. Define and Describe the Project’s Area of Influence:** Based upon the area likely to be affected either directly or indirectly by each project component, including ancillaries and linked activities; as well as unplanned induced developments. The Area of Influence should also consider any transboundary implications of the Project activities or linked/associated investments.

- f. **Draft TORs /Outlines of each of the Detailed Studies to be undertaken**, based on the issues identified during scoping process. The format of the report should include both detailed outlines, as well as a summary presentation to use in the first round of formal stakeholder consultations.
- g. **Conduct Scoping-stage Stakeholder Consultation:** The consultant shall also conduct Public Consultation and Stakeholders Meetings at both field and institutional levels to discuss the findings of the Scoping process, major issues of the project and plan of the studies. Consultations shall also include a workshop in Guwahati to present the findings of the Scoping to key stakeholders who directly or indirectly influence the Project development. Scoping stage consultations shall be advertised by public notice in both English and appropriate local language(s). In this regard, prior intimation (at least 15 days) shall be given to the project proponent for proper communication, arrangement and participation of key stakeholders for effective feedback.
- h. **Finalize Scoping Report and Work Plan:**Based on feedback received during the consultations, the Consultant shall revise and finalize the contents of the Scoping Report, including detailed study outlines and a detailed work plan for carrying out all assessments and studies as outlined. The revised Scoping Report and ToR document shall be submitted to AIWTDS along with documentation of the consultations carried out (including copies of public notices and documentation on where they were advertised along with observations), including information on who attended (and their titles / relationship to the proposed project), a summary of issues raised, and how they have been considered.

A2. Environmental Screening and Analysis of Project Alternatives at Feasibility Stage for Pre-Identified 10 Ghats/Landings Points

In parallel to the scoping process outlined above, the consultant shall prepare a feasibility stage screening and alternatives analysis report to provide inputs to the separately commissioned Feasibility Analysis of the proposed ghats/landing points. As required, AIWTDS will facilitate coordination across the two consultancy teams including ISDP & Safeguard (EIA & SIA) Consultants so as to ensure that the Consultants' analysis is appropriately reflected in the Feasibility Study's final ranking and cost-benefit analysis of alternatives. The specific sub-tasks are expected to include:

- a. **Environmental Screening:** Assemble (from secondary sources, initial field review and through stakeholder interviews and discussions) and review information on sensitive environmental features within the state, which could be affected by IWT development, and potential major environmental constraints, impacts or critical issues as well as opportunities (including to enhance low-carbon potential of the sector) with respect to IWT sector development, as well as for all proposed specific investments, based on an initial screening;
- b. **Analysis of Project Alternatives:** Analyze the potential alternative locations/designs of each proposed investment under the feasibility study being prepared in parallel by the ISDP consultant, including the "no project" / no investment alternative for each, from the environmental perspective. Identify and propose potential alternative designs, locations, technologies or approaches to meet the project objectives, and contrast them in terms of their relative potential environmental impacts and benefits. Where possible,

environmental costs vs. benefits of various technical alternatives should be quantified, compared and ranked. Identify major required mitigation measures, and develop initial cost estimates for environmental mitigation and management in a manner to be factored into the economic feasibility and financing assessments for specific proposed investments being carried out in parallel by the ISDP consulting team.

A3: EMF covering the range of potential investments, which may be taken up under the project.

For all potential investment sub-projects, which are not sufficiently defined during project preparation period to include within the full detailed EIA(s), the consultant shall prepare an Environmental Management Framework (EMF) as per World Bank policies. This task is described first, as the initial draft EMF may get underway on the basis of the 10 pre-identified priority ghats/landing points, even while the feasibility assessment for the project is still underway, and prior to final selection of first priority terminals for investment and detailed EIA is made. The EMF shall include, inter alia, the following:

- a. ***Potential Project Investments and their Area of Influence:*** Provide the typology of investment types to be eligible for financing under the proposed project, including specific likely sub-projects, and likely/anticipated associated or ancillary facilities relevant to both construction and operation stages. Describe the steps to define the area of influence (AoI), and determine the preliminary AoI of Project activities covered by the EMF, based on available information. Maps showing locations of probable investment locations, and/or of areas of eligibility or non-eligibility for investment, shall be provided. Provide initial baseline information on the physical, biological and socio-economic environment, and identify Important Environmental Features within the preliminary AoI.
- b. ***Initial Screening and Assessment of Potential Sub-Project Impacts and Issues:*** The consultant shall conduct an initial screening and assessment of the range of potential impacts, and site-specific information from initial screening where locations are already known. Given that all impacts cannot be fully identified at this stage for these future sub-projects, the consultant shall identify potential or likely impacts which may result from various design options, and suggest sub-projects related alternatives. For the potential negative impacts and risks identified, alternative design options shall be considered, and potential strategies/techniques for minimizing, mitigation and/or managing the impacts should be suggested. For the potential positive measures identified, alternative and preferred enhancement measures shall be proposed. The screening and preliminary assessment for each sub-project or sub-project type should cover construction and operation stage activities, and also take into account all ancillary and associated works. Also technologies, equipment, manpower, resource use, traffic, major supplies, etc. (to the extent that they can be defined), as well as the baseline conditions and sensitivities in the area of project influence, need to be considered.
- c. ***Relevant Policies and Legislation:*** Review all latest relevant policies, legislations (Please refer to A1; Sl. No. 1 of preceding section of ToR), EIA procedures/practices of the Government of Assam and Government of India related to the types of sub-projects which may be carried out under the project, and indicate their applicability and implications for the proposed project. Review the relevant World Bank (WB) environmental safeguard policies, Environmental Health and Safety (EHS)

Guidelines, and indicate their applicability and implications for the potential investments. Confirm the potential environmental categorization(s) of the future sub-project investments.

- d. ***Requirements, Standards and Institutional Responsibilities:*** To complete the assessment process, and manage and monitor all environmental aspects of project implementation: Outline such requirements and responsibilities for further screening, detailed environmental assessment as applicable, stakeholder consultation and disclosure, and management and monitoring for individual investments according to typology (and for specific likely sub-project sites, where known), and for the overall project, including reporting requirements.
- e. ***Generic Environmental, Health and Safety Management Measures/Environmental Codes of Practice (ECoPs):*** Appropriate to the types of works envisioned.
- f. ***Institutional Capacity Assessment and Capacity Building Plan:*** It shall be prepared for timely and effective implementation of environmental management plan (EMP) under proposed project.
- g. ***Environmental Budget:*** The environment budget shall be prepared for all required environmental assessment and management aspects of the proposed project.
- h. Summary of Consultation and Disclosure carried out on the EMF.

A4: Detailed EIA(s) for Identified Priority Investments

The consultant shall carry out EIA study in accordance with World Bank and applicable national as well state government requirements, for all investments which will be fully planned during the World Bank Project preparation phase, and which are expected to get underway in the first year of project implementation. As mentioned above, the EIA process will be closely coordinated with separately commissioned feasibility and design studies to be carried out in parallel, as well as with the Social Assessment studies. Wherever, permissible under national and state laws and regulations, the consultant may include multiple ghats/landing points as separate chapters within a single EIA document. However, if required by national or state laws to submit separate EIA studies for any specific investments, the consultant will be expected to prepare separate documents as required. In addition, separate contractor EMP documents will be required for each proposed bidding package, tailored to the investment(s) included in each package, so that they can be directly annexed to bidding and contract documents.

EIA(s) of the highest priority investments shall be undertaken first, with others to follow, in parallel to the separately contracted DPR consultant's work program and timelines. Wherever, permissible under national and state laws and social regulations, the consultant may include multiple terminals/ghats/landing points as separate chapters within a single EIA document. However, if required by national or state laws to submit separate EIA studies for any specific investments, the consultant will be expected to prepare separate documents if required

The Chapters of EIA Report shall be as per EIA Notification. The major elements shall include (but not limited) to the following:

- a. **Description of Project Activities:** Describe all proposed project interventions including all associated facilities required for construction and operation. This should include physical layout and locations, design features and specifications, capacity, civil works requirements for construction (including major supplies by volume and their sources, labor requirements *etc.*), wastes to be generated, timeline for construction *etc.* If any dredging is to be required, the estimated volume of dredge material (both initial during construction phase and on an annual basis for ongoing maintenance) should be provided, as well as proposed locations for dredged material disposal.
- b. **Definition of Study Area:** Specify the boundaries of the study area for the assessment, based on the anticipated influence area of each proposed investment, as well as the cumulative influence area of all investments taken together, as applicable. The project influence area (PIA) should consider the full lifecycle of investment activities – for example, sub-projects to procure ferries or water taxis should consider the environmental footprint of shipbuilding and maintenance yard facilities; new terminals should consider associated river dredging requirements / activities for access to the terminals and operation of ferry routes *etc.* Provide maps at appropriate scales to demarcate the study areas and illustrate the general setting of project-related investment sites, as well as surrounding areas, which may be directly or indirectly impacted. These maps shall include, for each of the investments, information such as topographic contours, major physical, environmental and land use features in the vicinity such as surface waters, roads, villages/towns/settlements, other major land uses, industrial areas, and terminals, road networks, parks and reserves, forest areas, political boundaries *etc.*
- c. **Administrative and Legal Framework:** Outline the applicable environmental policies, regulations or other requirements that apply to the proposed investments. This includes applicable national, state and local requirements, World Bank safeguard policies and EHS Guidelines, and any applicable international conventions or treaties. Indicate why each listed policy, regulation or other requirement is applicable, and how it will be complied with by the project.
- d. **Description of the Environment (Baseline Assessment):** Characterize the baseline context for the project area, including relevant information on the overall area of influence, as well as site-specific information for each proposed investment site. The baseline assessment should draw from both secondary and primary information sources, and identify any critical aspect which needs special consideration during design and implementation of the proposed investments. The assessment should further more cover both existing conditions as well as a characterization of the trends / ongoing changes to baseline conditions which are likely to affect the project area during the expected period of investment implementation, and which will occur irrespective of the project (for example, climate change effects; anticipated regional development/urbanization and associated land use changes; morphological trends along the routes; changes to river traffic volumes and patterns *etc.*). Level of detail of baseline assessment should reflect the scale of the proposed sub-projects, with more detailed information (including detailed primary data collection) focused on the largest and more complex sub-projects. Relevant aspects may include the following, among other aspects:

I. Physical Environment: In which physical set-up shall be covered but not limited to:

- *Topography conditions and delineation of watersheds and floodplains;*

- *Climate / meteorology (historical and projected);*
- *Surface and ground water hydrology, including annual and seasonal average discharges, as well as recurrence intervals and flood levels for various peak discharges (e.g., 10, 20, and 100-year flood events as well as historic maximum recorded discharge), annual and seasonal low-flow discharges and recurrence intervals including historic minimum discharge, depth of water table etc.;*
- *Water quality and major sources of water pollution;*
- *River morphology, including erosion and sedimentation / sediment deposition patterns, currents and bathymetry.*
- *Characterization of soils/sediments both within the river and on shore.*
- *Geology and seismicity.*
- *Hazard vulnerability; vulnerability of area to flooding (current and with climate change projections), hurricanes or major storm events, and earthquakes.*
- *Ambient air quality and noise levels.*
- *Identification of all project locations within 10 km boundary of nearby protected areas (national parks, wildlife sanctuary, conservation reserve etc.) notified under the Wildlife Protection Act, 1972, area of project influence from the critically polluted sites as per CPCB guidelines or a part of project or whole passing through two states or located in close proximity of international boundary.*
- *If any investment sites require dredging, river training works or other excavation or movement of sediments and there is a potential for contamination to be present in these sediments, samples should be taken in these areas to test for potential contaminants or pollutants (such as PCBs, POPs, hydrocarbons, and heavy metals such as lead, arsenic, cadmium, mercury, etc)².*
- *The consultant may propose in the EMP for the contractor to do additional monitoring at the time of construction (just before undertaking any dredging/sediment movement activities) to confirm the presence of any contaminants and required measures to control their impact. However the findings of EIA shall discuss the potential risks/impacts and list down types of mitigation measures required in case of likely contamination of sediments. In case the dredging work/sediment movement activity directly associated with the project is carried out by another party (such as IWAI) and not the contractor, from World bank's safeguard perspective the consultant shall assess and propose the requirement of any specific management measures of other party (such as IWAI) for all project specific activities.*
- *Only NABL/MoEF&CC approved laboratories shall be engaged by the EIA Consulting Organization for generation of baseline environmental data at this stage (pre-construction phase). While at later stages during construction and operation phases, it shall be carried out by the civil work contractor to assess the project performance from environmental point of view.*
- *Number of final sampling locations to be finalized by the EIA Consulting*

²Refer in particular to the sections on dredging in the World Bank Environmental, Health and Safety (EHS) Guidelines for Ports, Harbors and Terminals (<http://www.ifc.org/wps/wcm/connect/9e558c00488556ebbf4fa6a6515bb18/Final%2B-%2BPorts%252C%2BHarbors%2Band%2BTerminals.pdf?MOD=AJPERES&id=1323152828015>). The list of parameters to be tested, and locations of testing, shall be agreed with AIWTDS and the World Bank in advance. The consultant shall also research and review any additional available secondary source information.

Organization after due consultation with and post approval of the Environmental Expert of the Employer/AIWTDS, after site visit.

- The brief information about environmental attributes along with parameters and monitoring duration has been summarized in **Table-2** as given below but the appointed EIA consultant has also follow the latest amendments/CPCB guidelines in this regard for addition and deletion of any parameter under each environmental attribute.

Table – 2: Environmental Attributes & Parameters for Baseline Data Generation

Sl. No.	Environmental Attributes	Parameters to be Monitored	Monitoring Frequency	Tentative Locations
1.	Ambient Air Quality (AAQ)	PM _{2.5} , PM ₁₀ , CO, SO ₂ , NO ₂ etc.	24 Hourly sampling (Day & Night time) to be done on twice in a week basis.	Proposed ghats/ landing points for development of terminals or nearby human settlement areas to be finalized during joint visits between the EIA consultant & Employer/AIWT DS.
2.	Water Quality	Physical: pH, Temp., DO, Conductivity, Colour (Hazen Units), Turbidity & Salinity, Chemical: TSS, TDS, Alkalinity, Hardness, BOD, COD, NO ₃ , PO ₄ , Cl, SO ₄ , Na, K, Ca, Mg, Mn, Zn, Hg, Pb, Cu, Arsenic, Silica, Oil & grease, Phenolic compounds, Residual Sodium Carbonate. Biological: Total Coliform.	twice (wet and dry seasons) sampling and analysis at this stage	
3.	Noise Levels	Day & Night Time monitoring to be done at each location	24 Hourly sampling (Day & Night time) to be done.	
4.	Soil and riverbed / riverbank sediment analysis (Composite samples shall be prepared based on at least 3 replicates from each location.)	Bulk Density, Colour, Texture, Soil Type, pH, EC, N, P, K. as well as presence of pollutants or heavy metals such as PCBs, POPs, hydrocarbons, and heavy metals such as arsenic, cadmium, mercury, lead, nickel, etc.	twice (wet and dry seasons) sampling and analysis at this stage	
5.	Aquatic & Terrestrial Ecology	Trophic Status, Primary Productivity, Species diversity & densities of Phyto & Zooplanktons, Benthic Organism (Benthos, Macro-benthos), Fish and Macrophytes, Shanon Weiner Diversity Index, IUCN Red List status; national or state/regional protection status.	Twice (wet & dry seasons) at this stage.	

II. Biological Environment, including but not limited to:

- Characterization of both terrestrial and aquatic natural habitats and any critical

natural habitats as defined under World Bank Natural Habitats Policy OP 4.04 (including parks, reserves and sanctuaries, areas proposed for legal protection, or other areas of known biodiversity value);

- *Identification and characterization of salient characteristics of aquatic and terrestrial biota (flora and fauna), including especially for any rare or endangered species (include IUCN Red List status of any listed species, and national or state/regional protection status if any) or other species of conservation significance;*
- *Ecology and habitat requirements of any species of conservation significance or concern (either for ecological or socio-economic reasons), such as breeding/spawning behaviors and seasons, migratory patterns, food sources and foraging/feeding behaviors, predators and prey, sensitivity to pollution or human activities, and identification of specific areas of habitat and/or natural phenomena of importance for their survival, including related seasonal parameters for each;*
- *Baseline data collection on aquatic and terrestrial biodiversity as per **Table-2** covering both wet and dry seasons, to supplement existing secondary source information as required.*

III. Socio-economic Environment, including existing land and water uses [*Note: the Social Assessment studies are separately described below; the EIA(s) shall summarize the key information and findings from those assessment(s) and provide cross-references where appropriate.*]

- e. **Assessment of Potential Impacts and Risks:** Analysis will be based on preliminary screening and assessments from the feasibility study and shall provide more detailed assessments and in depth interpretation. In this analysis, distinguish between significant positive and negative impacts and risks, direct and indirect impacts, cumulative impacts, and immediate and long-term impacts associated with the proposed investments. Analysis should cover all phases of project development, including siting, construction, and operation phases. Identify impacts and risks that are unavoidable or irreversible, as well as those which can be avoided or mitigated. Specify such avoidance and mitigation measures, and reassess residual impact or risk for each. Wherever possible, describe impacts quantitatively, in terms of environmental costs and benefits. Assign economic values when feasible. Characterize the extent and quality of available data, explaining significant information deficiencies and any uncertainties associated with predictions of impact. Compare the impact with the baseline, as well as with projected future baseline conditions in light of development, land use and natural resource trends taking place in the project area independent of the proposed project activities. Special attention should be given to:
- Environmental impacts on and risks to the aquatic environment, including changes to river hydrology and morphology (and any downstream implications including riverbank erosion, sediment deposition, etc), impacts on aquatic biodiversity, and on fisheries;
 - Occupational health and safety risks and issues related to construction activities as well as use of IWT routes and infrastructure supported through the project;
 - Indirect and induced effects and associated environmental risks related to increased traffic of cargo ships, barges and passenger ferries along the IWT routes, at ferry crossing locations, on associated on-shore connecting roads and in settlements;

- Terrestrial impacts, including noise and air quality impacts; impact on land resources, loss or degradation of habitat; erosion of riverbanks or shoreline and associated impacts to on-shore land uses; modifications to natural drainage patterns; or other impacts, especially as associated with last mile connectivity investments and any larger sub-projects involving construction of permanent on-shore facilities, river training works, major embankment works etc.;
 - Impacts on cultural and historical sites or artifacts;
 - Impacts related to associated facilities or activities; for example: impacts of ship building and maintenance facilities associated with upgrading of ferry vessels / water taxis; dredging activities necessary for opening of new terminals or ferry lines; etc.
 - Impacts or risks to local communities, their economic activities and public health [Note: a Social Assessment is being separately commissioned; the EIA shall summarize the key information and findings from that assessment]
 - Cumulative Impact Assessment encompassing all proposed investments taken together and in conjunction with other planned development activities, such as river training or river management / flood protection projects, or terminal development or expansion projects, tourism development, road and bridge development projects, etc. For this analysis, the consultant will identify Valued Environmental Components specifically relevant to the Cumulative Impact Assessment based on inputs from stakeholders, and will assess the potential impacts of multiple development activities on the Valued Environmental Components VECs, over a 10-20 year time horizon.
 - Potential environmental benefits of the project.
- f. *Analysis of Sub-Projects Alternatives:*** The EIA study shall summarize the outcomes of analysis of sub-projects alternatives (proposed ghats/landing points) carried out during the feasibility stage, as well as describing site specific detailed design alternatives (such as: detailed siting/alignment considerations; incorporation of energy efficient or environmentally friendly technologies; etc.).
- g. *Development of an Environmental Management & Monitoring Program (EMMP):***
- To identify key mitigation and enhancement approaches and prepare the impact specific mitigation measures. The EMMP should be organized into sections corresponding with (a) contractor requirements for mitigation, management and monitoring of construction-stage impacts, and (b) mitigation, management and monitoring measures to be managed by AIWTDS or other entities (including for specific sub-projects as well as for any significant identified cumulative and induced effects).
 - To estimate the potential environmental impacts and costs of the mitigation measures and of the institutional and training requirements to implement them. The EMMP should include proposed work programs, budget estimates, schedules, staffing and training requirements, and other necessary support services to implement the mitigating measures, monitoring etc. Include measures for emergency response to accidental events (e.g. entry of raw sewage or solid as well as toxic substance/wastes into rivers, streamsetc).

- To define the roles and responsibilities of officials, staff, consultants and contractors of AIWTDS on environmental management to ensure timely and effective implementation of the EMMP. Review the responsibilities and capability of institutions at local and state levels and recommend steps to strengthen or expand them so that the EMMP may be effectively implemented. If required, recommend capacity enhancement measures for implementation, and describe in details who will (a) implement the environmental mitigation activities (b) carry out environmental monitoring; (c) supervise environmental mitigation and monitoring; (d) design, implement and apply the environmental management information system (EMIS); and (e) prepare monthly / quarterly progress reports on environmental management.
- EMMP will require a grievance redress mechanism to be accessible, transparent, unbiased and cost/time effective for the complainant. The project grievance redress mechanism shall be detailed out under the accompanying social safeguards studies, but shall be summarized and referenced in the EMMP also.
- As part of the EMMP development, the consultant shall also provide necessary specific inputs to the DPRs and bid documents for the proposed infrastructure. This shall include, especially: (a) all necessary parameters as per the EIA study for any physical mitigation measures that need to be reflected in investment designs; (b) a contractor's EMMP to be annexed to the bid documents; and (c) relevant inputs to the Bill of Quantities (BOQ) to accurately reflect environmental mitigation, management and monitoring costs of the project.

h. Public & Stakeholders Consultation and Disclosure: Provide documentation of all consultation activities, and information on disclosure, carried out as part of the EIA (More detailed guidance on consultations and disclosure requirements is provided under Section - C below.)

A5: Cumulative Environmental Impact Assessment (C-EIA) for Overall Project

The Consultant shall complete a high level Cumulative Impact Assessment (CIA) for the overall Project, building / expanding on the analysis of cumulative impacts completed under EIA as described in the task above, and including also all tentatively / preliminarily identified future investments, to the extent that details of tentative locations and activities have been specified in **Table-1**. The level of detail of the C-EIA will be commensurate with the level of specificity of future potential sub-projects beyond those for which DPRs are being prepared in parallel. The consultant will identify Valued Environmental Components specifically relevant to the Cumulative Impact Assessment based on inputs from stakeholders, and will assess the potential impacts of multiple development activities on the VECs, over a 10-20 year time horizon.

A6: Obtain Mandatory Statutory Clearances for Overall Project

The consultant shall also assist the project proponent/AIWTDS to obtain all mandatory statutory clearances, prior to completion of their assignment. The list of some among them are as follows;

- *To obtain consent to establish CTE (Committee on Trade and Environment) for establishment of terminals from SPCB (State Pollution Control Board).*

- *Removal of undesirable trees from the pre-identified ghats/landing points.*
- *Diversion of forest land if required for any sub-projects.*
- *Wildlife clearance; if any sub-project location exists in close proximity of the notified protected areas (national parks, wildlife sanctuary etc) under the Wildlife protection Act, 1972.*
- *In addition of above, the consultant will also provide a list of other non-mandatory clearances or issues related to project implementation.*

Section-B: Social Assessment (SA) Studies

- vi. To conduct social screening and scoping of the proposed project along with preparation of screening, scoping, Social Management Framework (SMF), Indigenous People Development Framework (IPDF), Resettlement Policy Framework (RPF), Social Impact Assessment (SIA), Social Management Plan (SMP)/labor influx mitigation plan, Cultural Heritage Management Plan (CHMP), Indigenous People Development Plan (IPDP) Reports and Resettlement Action Plan (RAP) for inclusion in the contractor bid documents. It is important to note that in case the investment will require private land then the SIA process for land acquisition including the acquisition will be carried out by the Revenue Department in accordance with the Right to Fair Compensation and Transparent Land Acquisition and Rehabilitation and Resettlement (RFCTLAR&R) Act 2013. The scope will not be covered under the consultancy. Rather information about it will be included in the SIA cum RAP/SMP

B1: Social Scoping Report of the Proposed Studies

The Social Scoping Report will identify: (i) adequacy of the alternative analysis for the proposed sites; (ii) the actions needed at this preliminary/scoping stage to ensure with Client and the bidders have adequate information on a) project viability from the social safeguards standpoint, b) potential social risks and impacts and c) feasibility of proposed mitigation measures, including expected associated costs, in order to prepare, and participate in, the bidding process; and (iii) the actions needed to be performed at a later stage and components that need to be integrated in the ToR for SIA compliant with state, national legislation/regulations and the World Bank OPs.

This social scoping process is expected to include the following sub-tasks:

- a. Assess the suitability of the proposed site locations from social perspective; identify key social issues affecting the project and related gaps in information.
- b. Assess the proposed project scope and preliminarily estimate its area of influence and define the social scoping study area accordingly.
- c. Shall conduct at least 1 site visit to all pre-identified ghats/landing points, in order to meet with the client and other stakeholders, assess the suitability of the site, better assess the gaps (e.g., collect data, evaluate site conditions, and site access) and determine the required actions to fill such gaps. Material presented in the social scoping study should reflect observations and lessons learned resulting from the visit(s).

- d.** Shall take into account views and concerns of key stakeholders, including relevant authorities, and representatives of affected communities as identified during site visit and interviewed, where appropriate. Before interacting with any stakeholder, the Consultant shall coordinate with AIWTDS, as they will lead the relations with stakeholders.
- e.** Shall coordinate closely with the design consultant and ISDP consultant to collect certain data, ensure the Social Scoping Study is aligned with the project layout by the ISDP and the design consultants and that the respective phasing of the work fits into each other appropriately.
- f.** Undertake a preliminary assessment of key social risks and impacts related to project construction, operation phases.
- g.** If applicable, identify risk of potential Land Acquisition, Involuntary Resettlement, and/or Livelihood Loss resulting from the Project, and scope the need for a Resettlement Action Plan (RAP). In addition the consultant will provide an estimate of the magnitude of the needed resettlement/livelihood restoration.
- h.** If applicable, identify presence of Indigenous people in the area of influence (AoI) of the project and preliminary assess potential adverse impacts on them as Government of Assam, Government of India regulations under RFCTLAR&R Act 2013 and the WB (OP-4.10), and determine if Free Prior and Informed Consent (FPIC) will be required.
- i.** If applicable, identify presence of items of cultural heritage (tangible and intangible) in the area of influence of the project and preliminary assess potential adverse impacts on them (OP 4.11) and Government of India, Government of Assam regulations and the World Bank (OP4.11).
- j.** For the identified key risks and impacts provide preliminary identification of mitigation measures together with a proposal for social risk allocation and timeline for implementation. When presenting the risk allocation, the Consultant shall also indicate particular institutional arrangements and/or capacity building programs that may be needed to ensure effectiveness of mitigation implementation and/or monitoring. The Consultant shall also provide preliminary estimates of costs associated with social impact assessment and mitigations.
- k.** The consultant will also develop a detailed TOR for engagement of implementation agency or NGO, who shall implement the RAP, R&R issues, labour influx mitigation plan, social management plan, cultural heritage management plan (CHMP) and IPDP *etc* for land acquisition to be compliant with Government of Assam and Government of India regulations and the WB OPs.
- l.** Undertake preliminary mapping of key project stakeholder groups, concentrating on Affected Communities. The Consultant shall provide a list of key groups of stakeholders, their interests and concerns, and how they should be involved at the different stages of the process and by different parties. Where applicable, the Consultant shall (i) review and assess the consultation process undertaken up to the time of the study by the client, and (ii) develop a preliminary suggestion for stakeholder engagement for the upcoming SIA process in compliance with World Bank OPs and coordination for participation of Stakeholders.

- m. Review Project's relevant social laws, regulations and policies of Government of Assam and Government of India relating to land acquisition, resettlement, ethnic minorities, Indigenous People, social protection.
- n. Undertake a gap analysis of the social legislative framework (government of India and government of Assam) versus the WB OPs, as related to this particular project. Some key relevant legislations in this regard are as follow:

➤ **Legislations formulated by the Govt. of India for 'Social Safeguards' but not limited to the following**

- *RFCTLAR&R Act, 2013.*
- *Legal Provision Related to Sexual Harassment of Women at Workplace (Prevention, Prohibition, and Redress) Act, 2013*
- *All laws applicable to construction Industry such as:*
 - *Minimum Wage Act, 1948,*
 - *Contract labour Act, 1970*
 - *Interstate Migrant Act.*
 - *Child Labour (Prohibition and Regulation) Act 1996 along with rules, 1998*
 - *The person with disabilities (Equal Opportunities, Protection of Rights and Full participation) Act, 1995 and Rules 1996*
 - *The Scheduled Castes and the scheduled Tribes (Prevention of Atrocities) Rule, 1989 and Rule 1995.*
 - *Others such as Panchayat Extension to Scheduled Area Act*

➤ **World Bank Policies (O.P./B.P. for 'Social Safeguards')**

- *OP/BP 4.10 :Indigenous Peoples*
- *OP/BP 4.11 :Physical Cultural Resources*
- *OP/BP 4.12:Involuntary Resettlement*

Note: If any other statutory act or legislation enforced by the State or Central Govt. during the period of EIA & SIA studies, the consultant shall follow these legislations as per their Scope of Services. In this regard, no additional payment shall be made by the Project Proponent/AIWTDS.

B2: Feasibility stage Social Screening and Preliminary Assessment of pre-identified 10 terminals

The Consultant is required to prepare a feasibility stage social screening that need to be in parallel to the scoping process outlined above. The consultant will provide inputs to the separately commissioned Feasibility Analysis of terminal/ghats. As required, AIWTDS will facilitate coordination across the two consultancy teams including ISDP & Safeguard (EIA & SIA) Consultants so as to ensure that the Consultants' analysis is appropriately reflected in the Feasibility Study's final ranking and cost-benefit analysis of alternatives.

The key tasks will include: (a) Identify potential social risks and their significance- and alternative analysis based on site visits; (b) Determine the Project's risk category (Low, Moderate, Substantial, High); (c) identify major required mitigation measures, and develop

initial cost estimates for social mitigation and management; (d) Determine the level of social assessment and management required to address potential risks and impacts.

B3: Social Management Framework (SMF) & a Stand-alone Resettlement Policy Framework (RPF)

A framework approach will be adopted, as the specific alignments with detailed technical design for pre-identified sites are not expected to be finalized at the time of project appraisal. The Consultant shall prepare a Social Management Framework (SMF) and a stand-alone Resettlement Policy Framework (RPF) as per World Bank policies. This task is described first, as the initial draft SMF may get underway on the basis of the 10 pre-identified priority ghats/landing points, even while the feasibility assessment for the project is still underway, and prior to final selection of first priority terminals for investment and detailed SIA is made.

The SMF and RPF shall include, inter alia, the following:

- a. Description of Potential Project Investments and their Area of Influence:** Provide the typology of investment types to be eligible for financing under the proposed project, including specific likely sub-projects where known, and likely/anticipated associated or ancillary facilities relevant to both construction and operation stages. Describe the steps to define the area of influence (AoI), and determine the preliminary AoI of Project activities covered by the SMF and a stand-alone RPF, based on available information. Maps showing locations of probable investment locations, and/or of areas of eligibility or non-eligibility for investment, shall be provided. Provide initial social baseline information on the physical, socio-economic, and identify Important Social Features within the preliminary area of influence (AoI).
- b. Initial Screening and Assessment of Potential Sub-project Impacts and Issues:** Provide an initial screening/assessment of the range of potential impacts, and site-specific information from initial screening where locations are already known. Given that all impacts cannot be fully identified at this stage for these future sub-projects, the consultant shall identify potential or likely impacts which may result from various design options, and suggest alternatives. For the potential negative impacts and risks identified, alternative design options shall be considered, and potential strategies/techniques for minimizing, mitigation and/or managing the impacts should be suggested. For the potential positive measures identified, alternative and preferred enhancement measures shall be proposed. The screening and preliminary assessment for each sub-project or sub-project type should cover construction and operation stage activities, and also take into account all ancillary and associated works. Also technologies, equipment, manpower, resource use, traffic, major supplies *etc.* (to the extent that they can be defined), as well as the baseline conditions and sensitivities in the area of influence, need to be considered.
- c. Relevant Policies and Social Legislations:** Review current relevant policies, social legislations, SIA procedures/practices of the Government of Assam and Government of India related to the types of sub-projects which may be carried out under the project, and indicate their applicability and implications for the proposed project. Review the relevant World Bank (WB) social safeguard policies and indicate their applicability and implications for the potential investments. Confirm the potential social categorization(s) of the future sub-project investments.

- d. **Requirements, Standards and Institutional Responsibilities to complete the Assessment Process, Manage and Monitor of all Social Aspects of project implementation:** Outline such requirements and responsibilities for further screening, detailed social assessment as applicable, stakeholders consultation and disclosure, and management and monitoring for individual investments according to typology (and for specific likely subproject sites, where known), and for the overall project, including reporting requirements, grievance management and citizen engagement.
- e. Gender: Include the findings from the on-going gender and trade study and the action plan
- f. **Institutional Capacity Assessment & Capacity Building Plan for Social Management.** It shall be prepared for timely and effective implementation of SMP, labor influx mitigation plan (LIMP), resettlement action plan (RAP), Indigenous People Development Plan (IPDP) and cultural heritage management plan (CHMP) of the proposed project.
- g. **Social Budget for all required Social assessment and Management Aspects.** The social budget shall be prepared for all required social assessment and management aspects of the proposed project.
- h. **Summary of Public/Stakeholders Consultations and Disclosure on SMF and RPF.** Summary of public/stakeholder consultation on SMF, RPF, draft TORs for all safeguards studies and draft SIA should be prepared.
- i. Spell out the World Bank's policy on Involuntary Resettlement (OP 4.12) and assess how this applies in the specific case of this project. Attention should be paid to and documented on the gaps between the Bank's Policy and Policy on Involuntary Resettlement (if applicable), noting that where the differences are significant whichever policy is considered to be of a comparatively higher standard shall apply.
- j. **Estimated Population, Displacement and Categories of Project Affected Persons (PAPs):** This requires a record of the number of estimated people likely to be affected or displaced by the project activities as noted in the project component description above. The different categories of affected persons may include those who may be losing legal title of land and those without legal title but who use the land for economic activities or for residential purposes. There may be those who may be losing temporary access to property or business sites. These are only examples of those who are likely to be affected through displacement. The RPF shall identify the right categories based on the impacts noted or expected.
- k. Conduct an initial social and economic survey at the various proposed sub-project locations for the project activities required under the different components and sub-components that trigger the Involuntary Resettlement (IR) Policy. The survey shall cover issues on the social structure, economic activities, social characterization of potential affected persons, and the numbers likely to be involved, the different social institutions, social capital and mechanism for social cohesion. The RPF shall also explore and describe existing conflict resolution mechanisms. This information will serve as critical

baseline data for a future Social Impact Assessment (SIA) & Resettlement Action Plan (RAP). The RPF shall include method for valuing affected assets, and organizational arrangement and procedures for delivery of entitlements and methods for consultation with and participation of project affected persons (PAPs), including Grievance Redressal Mechanism (GRM) and monitoring arrangements with implementation schedule.

1. The consultant shall organise public/stakeholder consultation and engage local key stakeholders and involve them in the revision of the draft findings of the RPF.

B4: Detailed SIA for Identified Priority Investments

The consultant shall carry out detailed SIA, in accordance with World Bank and applicable national requirements, for all investments which will be fully planned during the World Bank Project preparation phase, and which are expected to get underway in the first year of project implementation. As mentioned above, the SIA process will be closely coordinated with separately commissioned feasibility and design studies to be carried out in parallel, as well as with the Environmental Assessment studies. Wherever, permissible under national and state laws and social regulations, the consultant may include multiple terminals/ghats/landing points as separate chapters within a single SIA document. However, if required by national or state laws to submit separate SIA studies for any specific investments, the consultant will be expected to prepare separate documents if required.

The SIA will include description and assessment of the likely risks/ impacts and benefits of the project on the communities, their health, cultural heritage, cultural values, social and economic wellbeing, livelihoods, resettlement, issues related to indigenous people (IP), and their interactions with the environment, including labor influx risks. The SIA should also describe the public consultations process followed, including a summary of key issues/concerns raised and how they were addressed. The Impact Assessment (IA) is based on the information collected in the social baseline assessment. The key tasks will include:

- a. ***Social Baseline Information:*** The consultant will collect the baseline social information of all pre-identified locations. The baseline social findings will inform the RAP process.
- b. ***Social-Economic-Cultural Impacts:*** The SIA shall assess potential positive and negative impacts on socio-economic and cultural resources including: socio-economic conditions; increased individual incomes; direct employment at the project; indirect employment generated by project activities; other economic activities stimulated in the community as a result of the project; employment opportunities for local residents; displacement or disruption of people's for livelihoods.
- c. ***Land Acquisition and Involuntary Resettlement:*** The land acquisition and resettlement process should be in line with those required under the government of Assam and Government of India laws and regulations, and the World Bank (O.P.-4.12). The consultant should identify the communities/households that would need to be affected due to the project investments. It also needs to address options of the design of the project to minimize resettlement, as well as compensation methods, land rights, consultations that have taken place with communities about the resettlement process, the status of the current resettlement process, and the responsibilities of the company in the resettlement

process. There needs to be a grievance mechanism for communities for concerns and complaints about the resettlement process in place.

- d. ***The SIA and SMP Reports:*** The consultant should also describe the public/stakeholders consultations process followed, including a summary of key issues/concerns raised and how they were addressed. It is necessary to ensure consultations with Project Affected Persons (PAPs), civil society/NGOs and other stakeholders at least twice: (a) shortly after social screening and before the Terms of Reference (ToR) for the SA are finalized; and (b) once a draft SIA report is prepared.
- e. ***Indigenous People (IP):*** Adverse impacts on indigenous people (IP) need to be avoided as far as possible. This section will describe how the project might impact on indigenous people (IP) and their land and cultural resources. The section should include information about consultations with and information disclosure to the indigenous people. A separate indigenous people's development plan (IPDP) or a component in the broader community development plan focused on indigenous people (IP) should be developed.
- f. ***Cultural Heritage:*** The consultant should identify the physical and non-physical cultural heritage in the project-affected area having archaeological, paleontological, historical, cultural, artistic and religious values. It shall include cultural knowledge and traditional lifestyles. Proof of consultations with the government and communities about the cultural heritage should be included. The section also should describe the meaning and use of the cultural heritage, and conditions for removal.
- g. ***Gender Related Issues:*** The consultant will identify relevant gaps between women and men, boys and girls in the analysis particularly; aim to address these gaps through specific actions supported by the proposed project, and link them to indicators in the results framework. It is intended to prompt discussion at the project design stage on opportunities to narrow gaps between males and females in human endowments, more and better jobs, ownership and control of assets, and voice and agency. The consultant must identify operations that are critical to closing key gender gaps to address gender inequalities and achieve tangible outcomes and include in gender action plan (GAP).
- h. ***Citizen Engagement Plan (CEP):*** Assess use citizen engagement to improve results in operations. Suggest measures to include citizen engagement in design of operations and implementation mechanism of citizen engagement in operations and include a citizen engagement plan (CEP). Also, indicators for Results Framework.
- i. ***Other Relevant Potential Social Impacts:*** The consultant shall also prepare a list of other social impacts that do not cover under the above categories. This includes: increased community income, increased local prices of goods and services, immigration into the area, labor influx risk assessment & human trafficking risk assessment, assessment of labor impacts of institutional restructuring, pressure on existing public services due to immigration *etc.*

The consultant shall prepare Social Management Plan (SMP), Indigenous People Development Plan (IPDP), Resettlement Action Plan (RAP)& Cultural Heritage Management Plan (CHMP) where needed for all pre-identified sub-project locations (ghats/landing points).

B5: Labor Influx Risk Assessment for Identified Priority Investments

The consultant will conduct labor influx risk assessment of pre-identified sub-project locations (ghats/landing points). This shall include key social risks related to labor influx include, risk of social conflicts, increased risk of communicable diseases like HIV/AIDS, conditions of labor, camp-related issues, gender-based violence and misconduct, illicit behavior (sexual harassment) and crime affecting the local population and child labor issues *etc.* This study shall also assessment human trafficking issues and the risk assessment of labor impacts of institutional restructuring. The consultant shall prepare labor influx mitigation plan and the employee code of conduct, which will be part of the Social Management Plan (SMP).

The feasibility stage SIA, SMP, RAP, IPDP, labor influx mitigation plan will be subject to consultations in the project area with potential affected persons, prior to Bank appraisal.

Section-C: Overall Executive Summary of EIA & SIA Reports and Disclosure of Public Consultation and Stakeholders Meetings for all Studies

C1: Executive Summary of EA & SA

The consultant shall develop an Executive Summary to provide an overview of the entire Project, typologies of investments and summary descriptions of all known/fully identified investment sub-projects and summary of all safeguard instruments of the project including EIA-EMMP, EMF& CIA along with social safeguard instruments (SIA, SMP, RAP, IPDP, labor influx *etc.*) including a summary of stakeholder consultation and disclosure carried out in preparation of each sub-project location. The goal of the Executive Summary is to provide an overview of the environmental and social studies carried out in preparation of the Project, in a non-technical style and format which is accessible and understandable to the general public and project stakeholders. The Summary document shall also be translated into relevant local language(s), and both English and local language versions shall be consulted upon and publicly disclosed. Which shall be separately prepared based on environment and social assessment of the project.

C2: Public Consultations and Disclosure.

The consultant will assist the AIWTDS in coordinating and executing public consultations and engagement with stakeholders for all phases/elements of the EA & SA process as separately described above. The studies will require consultations with groups likely to be affected by the proposed project including communities, traders, private ferry operators, NGOs, government at different levels and others on the project objectives, activities, and its environmental and social aspects including potential impacts, risks, and effective mitigation measures, as well as project benefits. **A minimum of two rounds of consultations are expected: one at the screening/scoping stage and other on preparation of draft documents.**

Consultations and discussions with stakeholders will begin during the scoping stage, will continue during the baseline data assessment, as well as when drafts of each required instrument are available. Consultations should include a mixture of formal workshop events targeting local and state-level stakeholders, smaller community meetings and focus group discussions, and individual interviews/meetings as deemed necessary to ensure all stakeholders are given the opportunity for meaningful consultations on the Project and its environmental and social impacts and aspects. Prior invitations and public announcement of

consultation workshops or meetings shall be carried out. The consultation announcements should include local news papers as well as other methods appropriate to reaching the target audience, such as information flyers, miking, text messages to cell phones *etc.* Prior to carrying out consultations on the full draft studies, the consultant will support the AIWTDS in ensuring that the drafts are made available in a public place accessible to affected groups and local NGOs being consulted. The relevant materials will be provided to affected groups in a timely manner prior to consultation and in a form and language that is understandable and accessible to the groups being consulted.

The separately contracted consulting teams completing feasibility analyses and developing DPRs for specific investments shall need to coordinate and participate in the corresponding consultation activities, to provide relevant technical information on the proposed activities, and to hear stakeholder feedback so that it may be reflected in design decisions. Where such teams are contracted separately, the client shall facilitate such coordination in the planning and execution of consultation events.

The consultant should properly maintain a record of all public consultations including formal events as well as focus group discussions, surveys, one-on-one interviews and other methods. Where possible, both written and pictorial/video proof should be provided. All consultations records should indicate: consultation method used to seek the views of affected stakeholders; the date and location of each consultation event; a list of the attendees and their affiliation(s) and contact information; a summary of the information provided and discussed; a summary of feedback provided by participants, and AIWTDS response to the feedback indicating how it will be taken into account.

Each draft study will be finalized after incorporating all comments and observations from the consultations, project proponent/AIWTDS and World Bank.

5. Consulting Team Composition and Key Qualifications

- The Consulting Organization should have QCI/NABET accreditation as per EIA Notification, 2009 for Ports and Harbours Break waters and dredging (Category-“A” Projects).
- The Consulting Organization have to submit all QCI/NABET accreditation details for firm’s eligibility and accreditation details of proposed domain key Experts by them including minutes of meeting held with QCI/NABET for their accreditation along with their bid(s) for accurate weightage during evaluation process.
- The QCI/NABET approved accreditations of the Key Experts will be treated as preferred qualification for the assignments.
- The Consulting Organization shall not make any alternative proposal for any Key Personnel and only one CV for each position is to be furnished. If any CV is submitted for any 2 assignments, CV shall be summarily rejected by the project proponent/AIWTDS.
- The CV of proposed domain key Experts should be duly sign by the concerned expert proposed for assignment that should be also duly verified by the authorized person of the consulting organization.

- The CVs shall contain an undertaking from the respective key personnel about his/her availability for the duration specified in the RFP.
- Professionals proposed for assignment should have good working knowledge of English Language and local language.
- Key Personnel would be available for the period indicated in TOR and also for discussions and deliberations with client including in presentations to be made to Committee of stakeholders. The presence of key personnel of all disciplines is mandatory for all meetings and submission of deliverables as per milestones.
- In order to carry out the present assignment, it is suggested to engage the services of following domain key experts or professionals on intermittent basis. However, these are initial/indicative estimates only of the expertise and required inputs, covering key experts only. The consultant is expected to undertake their own assessment of all required staffing inputs, and ensure adequate provision of both professionals and support staff to complete the assignment as outlined in these TOR.

Table-3: Details of the Domain Key Experts (FAEs) for Consultancy Services

No.	Professionals	Qualification along with Working Experience	Input Period
A. In-house Key Experts as per QCI/NABET Scheme			
1.	EIA Coordinator cum Team Leader <i>for environment</i>	Must be a QCI/NABET Accredited EIA Coordinator for Ports & Harbour, Break Waters and Dredging for Category “A” and Masters in Environmental Engineering/Masters in Environmental Sciences/Masters in Environment Management with at least 10 years’ experience of drafting & reviewing EIA-EMP & EMF reports and mitigation measures, including one or more in the Inland Water Transport (WT) sector, and including at least one World Bank funded project. Should also have experience on mandatory Statutory clearances, public hearing and stakeholder consultation processes, etc.	6 months on full timebasis, of which at least 50% should be spent in Assam
2.	Ecology and Biodiversity Expert (Terrestrial & Aquatic)	Must be a QCI/NABET Accredited Category “A” Expert and Ph. D. in Ecology/ or Masters in Environmental Science / Masters in Zoology/Masters in Botany/Masters in Environment Management, preferably with a focus on river ecology, with at least 5 years’ experience of providing required inputs in preparation of EIA & EMP reports, including one or more EIA study related to river terminals and/or waterway transport.	6 months on intermittent basis, of which atleast 50% shall be spent in Assam

No.	Professionals	Qualification along with Working Experience	Input Period
3.	Team Leader – Lead Social Development Specialist	Must be a QCI/NABET Accredited Category “A” Expert. and Post graduate degree in relevant discipline e.g. Sociology/Anthropology /Social Work/Economics with at least 10 years’ experience of conducting socio-economic survey, SIA-SMP & SMF preparation and must have done Social Impact Assessment on at least two (2) projects of similar nature and complexity within the last 5 years. Working experience in Assam is an added advantage.	6 months on intermittent basis, of which atleast 50% shall be spent in Assam
B. In-house or Empaneled Functional Area Experts (FAEs) as per QCI/NABET Scheme			
4.	Environmental Engineer	Masters or above in Civil or Environmental Engineering with at least 5 years of experience on environmental, health and safety (EHS) management and environmentally friendly design aspects of ports, terminals, vessels and other water transport related infrastructure.	4 months on intermittent basis
5.	Water Quality Expert	Must be a QCI/NABET Accredited Category “A or B” Expert and Environmental Engineering / Masters in Environmental Science / Masters in Environment Management with at least 5 years experience of providing required inputs in preparation of EIA-EMP reports etc.	3 months on intermittent basis
6.	Air Quality & Pollution Expert	Must be a QCI/NABET Accredited for Category “A or B” Expert or Masters in Environmental Engineering/Masters in Environmental Sciences / Masters in Environment Management with at least 5 years’ experience of providing required inputs in preparation of EIA-EMP reports.	2 months on intermittent basis
7.	Noise Quality & Vibration Expert	Must be a QCI/NABET Accredited Category “A or B” Expert, or Environmental Engineering/Masters in Environmental Sciences / Masters in Environment Management with at least 5 years’ experience of sampling, testing, analyzing & monitoring the noise and vibration.	2 months on intermittent basis
8.	Soil Expert	Must be a QCI/NABET Accredited Category “A or B” Expert or Masters in Geology, geochemistry, chemistry or related field with at least 5 years’ experience of providing inputs related to soil and sediment contamination	2 months on intermittent basis

No.	Professionals	Qualification along with Working Experience	Input Period
		analysis, mitigation and management (particularly for dredging or riverbank excavation activities) in preparation of EIA-EMP reports.	
9.	Land Use (LU) Expert	Must be a QCI/NABET Accredited for Category “A or B” Expert with M. Tech. in Civil Engineering / Physical Planning/Architecture/Town Planning/Env. Planning/Env. Engineering or Master’s degree in Geo Informatics or Remote Sensing or Geographic Information System/Env. Management./Geo-engineering/Geography/Geophysics/ Geology/Applied Geology or Other than those stated above or a Bachelor’s degree in technical subjects followed by specialized training in GIS/Remote Sensing/ Cartography (not less than 2 months duration) from an Univ./recognized institutions like NRSA, ISRO, IIRS & IIFM.	3months on intermittent basis
10.	Solid Waste Management Expert	Must be a QCI/NABET Accredited Category “A or B” Expert. or Environmental Engineering/Masters in Environmental Science/Masters in Environment Management with at least 5 years experience of providing required inputs in preparation of EIA & EMP reports.	2 months on intermittent basis
11.	Risk Assessment & Hazard (RH) Management Expert, including Occupational Health and Safety(OHS)/labor influx risk assessment	Must be a QCI/NABET Accredited Category “A or “B” Expert with M. Tech. in Chemical/Mechanical/Fire Engineering/Chemical Tech. or Master’s degree in Toxicology/Chemical Tech./ Industrial Safety/Chemistry or Post Graduate Diploma (at least 1 year or above) in Industrial Safety from a University/recognized Inst. after graduation in engineering/technical subjects or post-graduation in a science subject with at least 5 years’ experience of providing required inputs related to risk assessment, hazard management, and OHS management in preparation of EIA-EMP reports.	3 months on intermittent basis

No.	Professionals	Qualification along with Working Experience	Input Period
12.	Hydrology, River Morphology and Climate Change Expert	Must be a QCI/NABET Accredited Category “A or “B” Expert in Hydrology, Ground Water & Water Conservation (HG) with M. Tech. in Civil/Mining/Mechanical/Hydraulic Engg. or Master’s in Geology/Applied geology/Geophysics/Hydrology/Surface Hydrology/Hydrogeology/Water Res. Management. Must also have at least 5 years’ experience of providing required inputs in preparation of EIA-EMP reports	3 months on intermittent basis
13.	River Morphology and Climate Change	Minimum qualification should be M.Sc. / M. Tech or any other relevant degree/diploma in Atmospheric Science/ Meteorology / Hydrology with 5 years experience in meteorological and /or hydrological forecasting, in the interpretation and translation of forecasts, and in providing advice and guidance to disaster managers and decision makers. Out of above 3 at least 5 years’ experience of providing required inputs on hydrological and morphological analysis in preparation of EIA-EMP reports, including: (a) at least one project modeling the effects of extreme meteorological events and climate change on hydrological flows and assessing related potential effects on waterway terminal or other riverside infrastructure; and (b) at least one project involving analysis of the downstream morphological and erosion effects of embankments, breakwaters, or other hard infrastructure along a river bank.	2 Months on intermittent basis
14	Community Participation/Gender/indigenous people Specialist	The Gender Specialist should possess a graduate degree in Gender, Human Rights, or a related field with more than 10 years of relevant work experience in large-scale infrastructure projects. She should possess excellent communication/interpersonal skills and experience in consulting conservative and post-conflict societies. Experience and a track record in complex World Bank safeguard policies work; entailing legacy, corporate risk, and highly complex projects is highly desirable.	6 monthson intermittent basis

No.	Professionals	Qualification along with Working Experience	Input Period
15	Senior Land Governance Expert	Must be Master Degree in Land Management /Natural Resource Management/Soil and Water Conservation or equivalent and desirable qualification is doctorate degree in the relevant field. Minimum 7 years' experience in land management of diverse landscapes Candidates with diverse practical and research experience in the field will have an advantage. Experience of working with government agencies and of working in land management, land acquisition, compensation disbursement/soil and water conservation will be preferred. Strong background in land management and application of GIS in land management is an advantage.	4 Months on intermittent basis
16	Senior Labor Welfare Expert	Must be Master Degree in relevant discipline e.g.Sociology/Anthropology/Social Work/Economics/ MSW with at least 7 years' experience of conducting socio-economic survey, SIA-SMP & SMF preparation and must have done Social Impact Assessments of various projects. Adequate knowledge of labour law, labour insurance policy and labour influx for infrastructure projects and working experience in Assam is an added advantage.	4 Months on intermittent basis
17	Senior Livelihood Expert	Must be Master Degree in relevant discipline e.g. Sociology/Anthropology/Social Work/Economics/ MSW with at least 7 years' experience of conducting socio-economic survey, SIA-SMP & SMF preparation and must have done Social Impact Assessment on at least two (2) projects of similar nature and complexity within the last 5 years. Experience of livelihood projects of north-east regions/World Bank Project and working experience in Assam is an added advantage.	4 Months on intermittent basis
18	Statistician	Master Degree in Statistics or Mathematics with more than 05 years of experience in data compilation, monitoring and evaluation of land resources, evaluation of cost estimation of various assets like land fruiting trees, common property resources (CPRs) etc.	4 Months on intermittent basis

No.	Professionals	Qualification along with Working Experience	Input Period
19	IT& IEC Expert	Master Degree in Information Technology or Mass Communication with more than 05 years of experience in MIS, mobile application to track preparation and developing/creating/disseminating IEC activities / campaigns etc.	5 Months on intermittent basis

6. Deliverables, Time Schedule and Payment Terms & Conditions

- The period of ‘Consultancy Services’ shall be **9 months** from the date of Letter of Acceptance (LoA) with AIWTDS, Guwahati (Assam).
- The Consultant shall submit separate Volume-wise Reports, application forms, online and other offline details or proposals in timely manner for obtaining mandatory statutory clearance along with incorporation of the comments and observations sought by the employer/AIWTDS and concerned statutory authorities.
- The ‘Terms & Conditions’ of payment along with desired deliverables within stipulated time for **Section-A: Environmental Assessment (EA)** and **Section-B: Social Assessment (EA) Studies** have been summarized in **Tables-4&5** and Time Schedule of all Deliverables along with payment ‘Terms & Conditions’ is given in **Table-6** as given below:

Table-4: Details of Deliverable and Brief Description of the Studies covered under Section-A: Environmental Assessment (EA) Study

Sl. No.	Deliverables	Brief Description of the Studies to be covered
1.	Inception Report (IR)	Approach & methodology including formulation of screening checklist/questionnaire, work plan, time schedule, public & stakeholders consultation plan for completion of all sub-project assignments.
2.	Feasibility stage environmental screening and Scoping Report	Screening and scoping report, including findings of initial screening of 10 investment sites for integration into ISDP consultants’ parallel feasibility assessments. Report shall also include proposed definition of project study area, proposed outlines for each EA study as outlined in this TOR, along with records of all scoping stage public consultations (e.g., presentations, flyers and handouts used, as well as records of each event including summary of comments received and responses.)
	Feasibility stage Alternatives Analysis Report of pre-identified 10 terminals	Carried out in parallel to the feasibility assessment process of the ISDP consultants, for integration into the full feasibility assessments.
3.	Draft Environmental Management Framework (EMF)	EMF shall be prepared as per ToR after review of all environmental legislations stipulated by the Govt. of India, Govt. of Assam and World Bank Safeguards Policies. Submitted draft shall also include proposed materials for

Sl. No.	Deliverables	Brief Description of the Studies to be covered
		public consultations on the draft (e.g., presentations, flyers and handouts for distribution, draft newspaper announcements, agendas, etc.)
	Draft Environmental Impact Assessment(s) (EIA-EMMP(s)) for estimated 2-3 priority terminals	EIA(s) shall cover all information as per ToR and shall be formulated based on EIA Notification, 2006 and its latest amendments. Completion of draft EIA-EMMP(s) for an estimated 2-3 priority passenger ferry ghats/landing points and associated infrastructure for first-year investment under the proposed Project, along with materials for public consultations on the draft(s) (e.g. presentations, flyers and handouts for distribution, draft newspaper announcements, agendas etc.)
	Draft Cumulative Impact Assessment (CIA)	CIA shall cover cumulative environmental impacts of all pre-identified sub-project locations. The completion of draft Cumulative Impact Assessment (CIA) and draft EIA & SIA's Executive Summary for the project, along with materials for public consultations on the drafts.
	Draft Applications and Communication for all Obtaining Mandatory Clearances for each Sub-projects.	To obtain all applicable mandatory statutory clearances, as follows; <ul style="list-style-type: none"> • To obtain consent to establish CTE for establishment of terminals from SPCB. • Removal of undesirable trees from the pre-identified ghats/landing points. • Diversion of forest land if required for any sub-projects. • Wildlife clearance; if any sub-project location exists in close proximity of the notified protected areas (national parks, wildlife sanctuary etc) under the Wildlife protection Act, 1972.
4.	Final Environmental Management Framework (EMF) Final Environmental Impact Assessment(s)(EIA-EMMP(s)) for 2-3 priority terminals Final Cumulative Impact Assessment (CIA) Final Applications and Communication for all Obtaining Mandatory Clearances for priority 2-3 terminals	Finalization of EIA(s) for priority investments, EMF, CIA,&Comprehensive Executive Summary, and submission of final applications for obtaining mandatory statutory clearances. Final versions shall incorporate all feedback received from AIWTDS, the World Bank, and stakeholders during the consultation process, and shall annex all records of consultation (including records from initial scoping stage consultations).
5.	Additional draft EIA-EMMP(s) for remaining estimated 7-8 passenger ferry ghats/landing points, including draft applications and communication for obtaining Mandatory Clearances	Completion of additional draft EIA(s) and EMMP(s) for remaining estimated 7-8 passenger ferry Ghats / landing points and associated infrastructure to be designed under parallel DPR consultancy, along with materials for public consultations on the draft(s) (e.g., presentations, flyers and handouts for distribution, draft newspaper announcements, agendas, etc.).

Sl. No.	Deliverables	Brief Description of the Studies to be covered
6.	Final additional Environmental Impact Assessment(s) (EIA-EMMP(s)) for remaining estimated 7-8 passenger ferry ghats/landing points, including final applications and communication for obtaining Mandatory Clearances	Finalization of additional EIA(s) and EMMP(s) for remaining estimated 7-8 passenger ferry Ghats / landing points and associated infrastructure to be designed under parallel DPR consultancy, incorporating feedback received from AIWTDS, the World Bank, and stakeholders during the consultation process, and annexing all records of consultation.
7.	Follow up as required to ensure Final Acceptance of all Relevant Clearances for the Project	Follow up support to AIWTDS to ensure all applicable mandatory clearances are obtained for all project investments.

Note: For each study, the consultant will submit the Draft and Final Reports for review but payment shall be released on submission and approval of each.

Table -5: Details of Deliverable and Brief Description of the Studies covered under Section-B: Social Assessment (SA) Study

Sl. No.	Deliverables	Brief Description of the Studies to be covered
1.	Inception Report (IR)	Approach & methodology including formulation of screening checklist/questionnaire, work plan, time schedule, public & stakeholders consultation plan for completion of all sub-project assignments.
2.	Social Scoping, Screening and Analysis of Sub-Projects Alternative Report at Feasibility Stage	Scoping report, including findings of initial screening of 10 investment sites, proposed definition of project study area, proposed outlines for each study, along with draft materials for scoping stage public consultations (e.g., presentations, flyers and handouts for distribution, draft newspaper announcements, agendas etc.)
3.	Draft Social Management Framework (SMF) & Resettlement Policy Framework	SMF shall be prepared as per ToR after review of all social legislations stipulated by the Govt. of India, Govt. of Assam and World Bank Safeguards Policies. Preparation of draft Social Management Framework and a stand-alone Resettlement Policy Framework (RPF) for the overall project, along with materials for public consultations on the draft (e.g., presentations, flyers and handouts for distribution, draft newspaper announcements, agendas, etc.)
	Draft Social Impact Assessment (SIA-SMP, IPDP, RAP, CHMP, labor influx mitigation plan)	Completion of draft SIA-SMP, IPDP, RAP, labor influx mitigation plan, human trafficking plan and assessment of labor impacts of institutional restructuring for an estimated 2-3 priority passenger ferry ghats/landing points and associated infrastructure for first-year investment under the proposed Project, along with materials for public consultations on the drafts (e.g. presentations, flyers and handouts for distribution, draft newspaper announcements, agendas etc.)

Sl. No.	Deliverables	Brief Description of the Studies to be covered
4.	Final Social Management Framework (SMF) & Resettlement Policy Framework	Finalization of SIA for priority investments, SMF, RPF, IPDP, RAP and other EIA & SIA Executive Summary along with incorporating feedback received from AIWTDS, the World Bank, and stakeholders during the consultation process, and annexing all records of consultation (including records from initial scoping stage consultations).
	Final Social Impact Assessment (SIA-SMP, IPDP, RAP, CHMP, labor influx mitigation plan)	
5	Additional draft SIA, SMP, IPDP, RAP & CHMP for remaining estimated 7-8 passenger ferry ghats/landing points, including draft applications and communication for obtaining Mandatory Clearances	Completion of additional draft SIA(s) and social safeguards studies for remaining estimated 7-8 passenger ferry Ghats / landing points and associated infrastructure to be designed under parallel DPR consultancy, along with materials for public consultations on the draft(s) (e.g., presentations, flyers and handouts for distribution, draft newspaper announcements, agendas, etc.).
6	Final additional Social Impact Assessment(s) (SIA-SMP, IPDP, RAP & CHMP (s)) for remaining estimated 7-8 passenger ferry ghats/landing points, including final applications and communication for obtaining Mandatory Clearances	Finalization of additional SIA(s) and EMMP(s) for remaining estimated 7-8 passenger ferry Ghats / landing points and associated infrastructure to be designed under parallel DPR consultancy, incorporating feedback received from AIWTDS, the World Bank, and stakeholders during the consultation process, and annexing all records of consultation.

Note: Based on first prioritized 2-3 ghats/landing points, the consultant will submit the Draft Report for review but payment shall be released on submission and approval of all Draft Reports.

Table-6: Time Schedule and Payment Terms & Conditions

Sl. No.	Description of Deliverables	No. of Copies		Time Schedule (time from contract signing)	Payment of Quoted Price
		Hard	Soft		
1.	Inception Report (IR)	3	1CD	2 weeks	10%
2.	Volume-I: Environmental Screening and Scoping Report; Environmental Analysis of Sub-Projects Alternatives Report at Feasibility Stage	3	1CD	2 Months	10%
	Volume-II: Social Scoping, Screening and Analysis of Sub-Projects Alternative Report	3	1CD		
3.	Volume-I: Draft Environmental Management Framework (EMF)	3	1CD	5 Months	15%
	Volume-II: Draft Environmental Impact Assessment(s) (EIA-EMMP(s)) for estimated 2-3 priority investments	3	1CD		
	Volume-III: Draft Cumulative Impact Assessment (CIA)	3	1CD		
	Volume-IV: Draft Social	3	1CD		

Sl. No.	Description of Deliverables	No. of Copies		Time Schedule (time from contract signing)	Payment of Quoted Price
		Hard	Soft		
	Management Framework (SMF), Indigenous People Development Framework (IPDF)& Resettlement Policy Framework				
	Volume-V: Draft Social Impact Assessment (SIA-SMP, IPDP, RAP, CHMP & labor influx mitigation plan)	3	1CD		
	Volume-VI: Draft Applications and Communication for all Obtaining Mandatory Clearances	3	1CD		
4.	Volume-I: Final Environmental Management Framework (EMF)	5	1CD	6.5Months	20%
	Volume-II: Final Environmental Impact Assessment (EIA-EMMP)	5	1CD		
	Volume-III: Final Cumulative Impact Assessment (CIA)	5	1CD		
	Volume-IV: Final Social Management Framework (SMF) Indigenous People Development Framework (IPDF)& Resettlement Policy Framework	5	1CD		
	Volume - V: Final Social Impact Assessment (SIA-SMP, IPDP, RAP, CHMP, labor influx risk assessment with mitigation plan)	5	1CD		
	Volume - VI: Final Applications and Communication for all Obtaining Mandatory Clearances	5	1CD		
5	Volume-I: Draft EIA-EMMP(s) for remaining estimated 7-8 passenger ferry ghats/landing points	3	1CD	7.5 months	15%
	Volume-II: Draft Social Impact Assessment (SIA-SMP, IPDP, RAP, cultural heritage manage plan and labor influx assessment with mitigation plan) for remaining estimated 7-8 passenger ferry ghats/landing points				
	Volume-III: Draft applications and communication for obtaining all Mandatory Clearances, as applicable	3	1CD		
6.	Volume-I: Final EIA-EMMP(s) for remaining estimated 7-8 passenger ferry ghats/landing points	5	1CD	Up to 9 months	20%

Sl. No.	Description of Deliverables	No. of Copies		Time Schedule (time from contract signing)	Payment of Quoted Price
		Hard	Soft		
	Volume-II: Final Social Impact Assessment (SIA-SMP, IPDP, RAP, CHMP, labor influx assessment with mitigation plan) for remaining estimated 7-8 passenger ferry ghats/landing points				
	Volume-III: Final applications and communication for obtaining all Mandatory Clearances, as applicable	5	1CD		
7.	Submission of Status cum Follow-up Fortnightly Reports on Statutory Clearances	3	-	Upto 9 Months	10%
	Final Acceptance of All Reports and Relevant Clearances for the Project	Original copy of each.			

Note:

- (i) The time of above deliverables shall be considered from the date of the LOA.
- (ii) If additional copies are required at any stage by the project proponent/AIWTDS and World Bank, the consultants will furnish the same without any extra cost.
- (iii) GST will be treated as per existing GST rules.
- (iv) After submission of reports, the same shall be accepted within 15 working days if everything in report is ok. Otherwise, the AIWTDS shall intimate about the deficiency for rectifications/modification of the report and resubmission of next version.

7. Mode of Payment

The payment towards each milestone as specified above to be done only after acceptance and approval of reports by AIWTDS and World Bank. The payment shall be made by AIWTDS only on approval of reports/deliverables submitted by the consultant. The complete invoices in all respects is to be raised by the Consulting Organization to 'The State Project Director, AIWTDS, Guwahati (Assam), who shall process the same after due verification and the payment shall be made through RTGS/NEFT within 30(Thirty) Days from the date of receipt of the invoice at AIWTDS, Head Office at Guwahati (Assam).

8. Technical Assistance

The consultant shall provide all requisite technical assistance to AIWTDS for obtaining the necessary clearances from the respective Statutory Bodies and for meetings with the concerned officials in the state of Assam and in Delhi (if required). The consultant shall also arrange the material for presentation to the Authorities/Statutory Bodies on behalf of the employer (whenever required for the project).

9. Site Organization

The consulting organization shall depute well-qualified officers and team members having adequate experience in execution of similar works as indicated. If the progress of work is found unsatisfactory during the execution of the contract, the consultant firm shall promptly mobilize additional personnel / resources for ensuring satisfactory progress and timely completion of the

proposed studies and necessary clearances under the contract without extra cost and time to AIWTDS.

10. Obligations and Responsibility / Inputs by AIWTDS

- a) AIWTDS shall assist to the consulting organization by way of providing official permissions to approach respective Government Departments and Authorities to obtain all mandatory clearances and permissions and collection of secondary data. However, it shall be on the part of consultant to get all these permissions. AIWTDS shall only pay fee for obtaining necessary clearances while, the consultant has to pay all charges for collection of secondary data, site visits, documentation of reports and presentation materials *etc.*
- b) AIWTDS shall furnish updated Feasibility Reports / Detailed Project Reports of the proposed projects to the successful consultant (if available) at the time of work execution, only for taking reference but all reports (EIA-EMP, EMF & SIA-SMP, SMF *etc.*) to be carried out as per latest MoEF&CC guidelines, World Bank operational policies and standards, and based on actual data.
- c) AIWTDS shall provide only the available details / data/ reports. The remaining data /gap in data including verifying the accuracy of available data, shall be responsibility of the Consultant. If no such data is available with AIWTDS, it shall be responsibility of consultant to collect requisite data. Non availability of the required inputs from AIWTDS, shall not be an excuse for improper preparation of reports /delay in preparation as per terms and conditions stipulated in ToR.
- d) Fee to be paid for Statutory Authorities for obtaining relevant clearances *etc.* will be borne by the employer/AIWTDS.
- e) Public and Stakeholder consultation meetings shall be scheduled in advance. Participation of AIWTDS representative would be mandatory at the time of such events and selection of sites for baseline data generation. The consultant shall inform for the same to the AIWTDS at least two weeks in advance.

11. Guidelines for Documentation, Presentation, Submissions & Communication

- a) The consultant should ensure that all the reports, drawings, maps, documents, presentation material *etc.* are computerized, properly indexed and properly page numbered.
- b) All documents should be editable or reproducible formats and should be clear, legible to read and neat in presentation.
- c) If additional copies beyond the proposed numbers of copies are required by employer or statutory bodies for review and clearances, the consultant shall provide extra copies of the reports, maps *etc.* with no additional cost to the project proponent/AIWTDS.
- d) The consultant shall carry out the EIA & SIA studies as per the latest rules, regulations, norms, amendments & guidelines *etc.* whenever issued by the statutory bodies during currency of the contract shall be within the scope of services.
- e) The consultant shall provide the certification letter of the NABL/MoEF&CC approved Laboratory to the project proponent (AIWTDS) at inception stage, which shall be approved by

AIWTDS for hiring under consultant scope for generation of environmental baseline data. The baseline environmental data should be included in the draft and final EIA-EMP Reports.

- f) The period, date and time of environmental baseline data generation should be clearly indicated in the report along with data sheet as Appendix with stamp of the firm/laboratory. All the concerned experts (AQ, WQ, NV, EB, Soil Experts etc.) shall recheck and verify the data accordingly.
- g) Authenticated English translation of all required material such as 'Executive Summary' etc. shall be provided in regional language(s).
- h) Only submission of application or proposals for required NoCs/Permission/Consents does not mean the grant of NoC for that particular assignment.
- i) The consultant shall be responsible for the correctness of the technical contents and data in the reports and shall submit addendum and revised reports, if called for to meet the requirements of the Statutory and Non-Statutory Bodies for obtaining project related NoCs/clearances/permissions/consents within the quoted prices.
- j) The services like presentation, attending meetings, stakeholder consultation, and liasoning with relevant Statutory and Non-Statutory Bodies etc. shall be within the scope of services for obtaining the NoC/clearances/permissions/consents etc.
- k) Except for the modifications and deviations that are specifically agreed by AIWTDS, the consultant shall strictly perform the work and successfully complete the same in all respects as per the Terms and Conditions (ToR).
- l) The consulting organization shall depute the EIA coordinator cum Team Leader for all type of communication, correspondence for reply of queries sought by the AIWTDS and other statutory authorities. Authorized person cannot be changed during the duration of the Contract.
- m) The consultant shall arrange, secure and maintain insurance as may be necessary and for all such amount to protect his interest and the interest of the owner, against all risks for the subject assignments. The responsibility to maintain adequate insurance coverage on comprehensive all risks basis at all times during the period of contracts shall be that of the selected bidder alone. The selected Consultant's failure in this regard shall not relieve him of any of his contractual responsibilities and obligations. The insurance cover to be taken by the consultant shall be in joint name of the owner and the consultant. The consultant shall, however, be authorized to deal directly with the insurance company and shall be responsible with regard to maintenance of all insurance cover. Any loss or damage to the equipments, during handling, transporting, testing shall be to the account of the consultant. The consultant shall be responsible for preferring all claims and make goods for the damage or loss by way of repairs and/or replacement of the portion of the works damaged or lost.

12. Obligations of EIA/SIA Consulting Team

- a) The Consulting Team shall make their own arrangements for all kinds of accommodation during site visits, transportation, personal equipments such as computer or lap top mobile charges and stationery etc.

- b) It is expected that EIA Coordinator cum Team Leader along with other functional area experts / professionals, have to spend or input to be given in this assignment, located in the state of Assam.
- c) All reports, minutes of meetings etc. shall be drafted by the Consultant. Circulation thereof shall be done by the AIWTDS.

13. The Management of the Study

The primary point of contact for the consultant shall be the State Project Director, AIWTDS, who will represent the project officer within the AIWTDS. He/She will form part of a steering committee to be established within AIWTDS, comprising representation from relevant Ministries, other relevant local agencies, and suitable public and private stakeholders. The consultant will be expected to present the content of the reports to the steering committee (if required).
