Amendment 1

Sub : Hiring of an Organization for Comprehensive Consultancy Services for preparation of Detailed Project Report (DPR) for IWT Sector Development for enhancement of Socio-economic activities in and around Ganga – Bhagirathi - Hoogly river system (NW-1) RFP No.IN-IWAI-246888-CS-QCBS

Following amendments are issued and shall form an integral part of the RFP

Page No Clause No Ref	Existing	Amended
Page 66, Section 7, Terms Of Reference, Cl 4.3 (ii)	identify existing goods and passenger movement belonging to the PIA by different modes of transport (also taking into account new clusters such as mandis, trading centres, tourist spots etc. coming up in the next five (5) to ten (10) years). For this, primary traffic surveys will be carried out through solicitation of public input and stakeholder opinions from concerned local authorities i.e. Gram Panchayat, sub- division administration, district level etc. The details for goods movement such as goods type / category, quantity, shipment size, seasonality, mode of transport used and origin-destination (O-D) pairs etc., and for passenger movement such as type / category (local commuters / tourists), number, seasonality, mode of transport used and O-D pairs etc. shall also be presented in the Report. Methodology and planning for this traffic survey will	identify existing goods and passenger movement belonging to the PIA by different modes of transport (also taking into account new clusters such as mandis, trading centres, tourist spots etc. coming up in the next five (5) to ten (10) years). For this, primary traffic surveys will be carried out through solicitation of public input and stakeholder opinions from concerned local authorities i.e. Gram Panchayat, sub- division administration, district level etc. in coordination with the agency for grassroot consultation and livelihood support in the project . The details for goods movement such as goods type / category, quantity, shipment size, seasonality, mode of transport used and origin-destination (O-D) pairs etc., and for passenger movement such as type / category (local commuters / tourists), number, seasonality, mode of transport used and O-D pairs etc. shall also be presented in the Report. Methodology and planning for this

	be presented in the Inception Report in sufficient details;	traffic survey will be presented in the Inception Report in sufficient details;
Page 67, Section 7, Terms Of Reference, Cl 4.3 (xi)	provide traffic demand projection for IWT mode; (a) with the available infrastructure; and (b) after implementation of the Project(s), policies and measures suggested in the DPR. The demand projections shall be provided for a thirty (30) year horizon period keeping FY 2021-22 as the base year. This projection shall also be given for time periods of 5, 10, 15, 20, 25 and 30 years counted from the base year and also for pessimistic, most likely and optimistic scenarios with necessary justification and details. The above traffic projection shall also be broken into main commodities, O-D pairs and incoming/ terminating & outgoing/ originating quantities.	provide traffic demand projection for IWT mode; (a) with the available infrastructure; and (b) after implementation of the Project(s), policies and measures suggested in the DPR. The demand projections shall be provided for a thirty (30) year horizon period keeping FY 2021-22 as the base year. This projection shall also be given for time periods of 5, 10, 15, 20, 25 and 30 years counted from the base year and also for pessimistic, most likely and optimistic scenarios with necessary justification and details. The above traffic projection shall also be broken into main commodities, O-D pairs and incoming/ terminating & outgoing/ originating quantities. In this regard the available traffic data with IWAI may be shared on demand for analysis and projection etc.
Page 67-68, Section 7, Terms Of Reference, Cl 4.4-(iii) (a)	Sub-projects for development and maintenance of fairway i.e. jetty approach channel from the main navigational channel with optimum width and LAD for at least 330 days in a year, preferably 45m bottom width ≬ 1.5m to 2.0m LAD for the O-D pairs. [Note: These dimensions of fairway are only indicative. Based on the hydro-morphological studies, channel identification &routing, siltation study etc., the Consultant will suggest optimum dimensions of the fairway with necessary justification]	Sub-projects for development and maintenance of fairway i.e. jetty approach channel from the main navigational channel with optimum width and LAD for at least 330 days in a year, preferably 45m and 30m (at shoals) bottom width ≬ 1.5m to 2.0m LAD for the O-D pairs. <i>[Note: These dimensions of fairway are only indicative. Based on the hydro-morphological studies, channel identification &routing, siltation study etc., the Consultant will suggest optimum dimensions of the fairway with necessary justification]</i>

Page 68, Section 7, Terms Of Reference, Cl 4.4-(iii) (b)	For this purpose, the analysis shall include, but not be limited to dredging, river conversancy works (channelization, bandalling and other flow directive works), channel stabilization works (bank protection and other erosion control works) or any other possible ways;	For this purpose, the analysis shall include, but not be limited to dredging, river conversancy works (channelization, bandalling and other flow directive works), channel stabilization works or any other possible ways;
Page 68-69, Section 7, Terms Of Reference, Cl 4.4-(iii) (g)	The Consultant, if asked to do so by the EIC, shall carry out mathematical modelling studies through a reputed expert agency to verify design parameters. As a minimum, this shall include a numerical model to produce detailed pictures of flow in the river system under current & future flow conditions and also the required flow/ discharge to maintain LAD throughout the year with or without interventions in a specific stretch of the river which experience frequent shoaling or where the proposed jetty is extending into the river obstructing flow of the river. Detailed proposal for such mathematical modelling shall be submitted by the Consultant along with methodology and cost with justification to enable the Client to reimburse the cost of mathematical modelling to the Consultant. In this regard, the necessary hydrographic data shall be provided by the Client.	The Consultant, if asked to do so by the EIC, shall carry out 1-D mathematical modelling studies through a reputed expert agency to verify design parameters. As a minimum, this shall include a 1-D numerical model to produce detailed pictures of flow in the river system. Detailed proposal for such mathematical modelling shall be submitted by the Consultant along with methodology and cost with justification to enable the Client to reimburse the cost of 1- D mathematical modelling to the Consultant. In this regard, the necessary hydrographic data shall be provided by the Client.

Page 69, Section 7, Terms Of Reference, Cl 4.4-(iv) (e)	The DPR shall include preliminary design & drawings, BoQ and technical specifications for the works/ processes proposed to improve the navigation aids (including its integration with DGPS & RIS stations) for the identified O-D pairs on NW-1 including 24 hours day & night navigation facilities such as buoys with lights, lights on masts on banks, DGPS stations , buoy laying vessels, rescue vessels etc. along with their dimensions/ drawings and numbers with justification, Vessel Traffic Management System (VTMS), RIS, channel marking methods and semi-permanent & permanent river training works at critical locations etc.;	The DPR shall include preliminary design & drawings, BoQ and technical specifications for the works/ processes proposed to improve the navigation aids (including its integration with RIS stations) for the identified O-D pairs on NW-1 including 24 hours day & night navigation facilities such as buoys with lights, lights on masts on banks, buoy laying vessels, rescue vessels etc. along with their dimensions/ drawings and numbers with justification, Vessel Traffic Management System (VTMS), RIS, channel marking methods and semi-permanent & permanent river training works at critical locations etc.;
Page 69-70, Section 7, Terms Of Reference, Cl 4.4-(iv) (f)	The Consultant shall also suggest internationally accepted and feasible navigation aids maintenance mechanism for such types of alluvial rivers for smooth and safe movement of waterway traffic. Further, the Consultant shall indicate if vertical channel marks on latest electronic route chart can be developed and provided to the operators as a replacement of physical channel marks. In this regard, the Consultant shall submit its cost, technical specifications including its integration with RIS, DGPS & Electronic Navigation Charts (ENC) etc.; and	The Consultant shall also suggest internationally accepted and feasible navigation aids maintenance mechanism for such types of alluvial rivers for smooth and safe movement of waterway traffic. Further, the Consultant shall indicate if virtual channel marks on latest electronic route chart can be developed and provided to the operators as a replacement of physical channel marks. IWAI may share the electronic route charts /LAD reports being collected on fortnightly basis in the navigational channel, on written request. In this regard, the Consultant shall submit its cost, technical specifications including its integration with RIS, & Electronic Navigation Charts (ENC) etc.

Page 70, Section 7, Terms Of Reference, Cl 4.4-(iv) (g)	The Consultant shall also identify any software features and main operating systems for RIS, identification of communication requirement of voice and data firming detailed specifications for revamping/upgradation of existing communication network, details of networking equipment/IT equipment along with operating system, application software, data base, cyber security protection including firewall/antivirus which is compatible with current system as well as having potential for future growth.	Deleted
Page 71, Section 7, Terms Of Reference, Cl 4.4-(v) (d)	 suggest with proper justification, sites/ location of new Ro-Ro / Ro-Pax terminals (over and above the ten (10) locations finalized by the Client) in consultation with the State Government including (but not limited to) all the necessary facilities listed out in (a) & (b) above. Notes: (1)The site(s) for new jetties proposed to be developed shall be selected considering socio-economic development of the community / stakeholders along NW-1, capacity &type of principal commodities to be handled, connectivity to other modes of transport, availability of depth along the jetty throughout the year especially during lean season, stable river channel with sufficient draft, adequate turning 	 suggest with proper justification, sites/ location of new Ro-Ro / Ro-Pax terminals (over and above the ten (10) locations finalized by the Client) in consultation with the State Government including (but not limited to) all the necessary facilities listed out in (a) & (b) above. Notes: (3)The site(s) for new jetties proposed to be developed shall be selected considering socio-economic development of the community / stakeholders along NW-1, capacity &type of principal commodities to be handled, connectivity to other modes of transport, availability of depth along the jetty throughout the year especially during lean season, stable river channel with sufficient draft, adequate turning radius for vessels, favourable hydraulic conditions for berthing and navigational safety, exhaustive consultation with

	 radius for vessels, favourable hydraulic conditions for berthing and navigational safety, exhaustive consultation with community at local level / panchayat level on identification of jetty locations etc.; and (2) Ownership details of the land for all the alternative new sites shall be collected from State Revenue Departments and presented in the report. This will include all the details with adequate supporting documents for indicating Government or Private land, revenue/ cadastral maps, plot numbers/ khasra/khata numbers, areas of each plot, details of district/ town/ tehsil/ village etc., circle rates, details of on-going litigation/ legal case for the plots, if any, etc. duly authenticated from the concerned authority of State Government. Further, this will include land not only required for the main jetty but also the land required for road connectivity as well as rail connectivity (if feasible). 	community at local level / panchayat level on identification of jetty locations etc in coordination with the Client's agency for Grass-root level / livelihood support.; and (4) Ownership details of the land for all the alternative new sites shall be collected from State Revenue Departments and presented in the report. This will include all the details with adequate supporting documents for indicating Government or Private land, revenue/ cadastral maps, plot numbers/ khasra/ khata numbers, areas of each plot, details of district/ town/ tehsil/ village etc., circle rates, details of on-going litigation/ legal case for the plots, if any, etc. duly authenticated from the concerned authority of State Government. Further, this will include land not only required for the main jetty but also the land required for road connectivity as well as rail connectivity (if feasible).
Section 7, Terms Of Reference, Cl 4.3 (ii)4.4-(v) (f)	New Clause added	Consultant shall be supported with Grass -root level community consultation agency engaged for local level consultation & livelihood support and client may provide LWL & HFL data (as available) at the jetty locations on written request of the Consultant.
Page 73, Section 7, Terms Of	Hydrographic Surveys	Hydrographic Surveys

Reference, Cl 4.4-(ix)	 (a) The Client is conducting regular longitudinal thalweg surveys in the entire stretch of NW-1 every fortnight and issues river notices to disseminate navigational information to the users and other stakeholders of the waterway. The Client also carries out detailed pre & post hydrographic surveys at bandals and dredging sites as and when required. Further, the Client also carries out hydrographic surveys in front of various jetties from time to time. Soft or hard copies (as available) of all these hydrographic survey details shall be provided by the Client to the Consultant on demand on written request with justification, free of cost, provided the EIC is convinced that these are indeed required for carrying out any part of the scope of work of this Contract; and (b) Any additional hydrographic survey required for preparation of this DPR with regard to morphological study, channel identification & routing, siltation pattern study etc. shall be conducted the Consultant duly engaging professional survey agency subject to the requirement (if at all it is necessary), and at the discretion of EIC. 	 (a) The hydrographic survey required for preparation of this DPR with regard to morphological study, channel identification & routing, siltation pattern study etc. shall be conducted the Consultant duly engaging professional survey agency subject to the requirement (if at all it is necessary), and at the discretion of EIC. [Note: The Client is conducting regular longitudinal thalweg surveys in the entire stretch of NW-1 every fortnight and issues river notices to disseminate navigational information to the users and other stakeholders of the waterway. The Client also carries out detailed pre & post hydrographic surveys at bandals and dredging sites as and when required. Further, the Client also carries out hydrographic survey in front of various jetties from time to time. Soft or hard copies (as available) of all these hydrographic survey details shall be provided by the Client to the Consultant on written request with justification, free of cost, provided the EIC is convinced that these are indeed required for carrying out any part of the scope of work of this Contract.]
Page 75, Section 7, Terms Of	(including future expansion), land development	detailed jetty master plan/ detailed layout plan, land development plan, preliminary designs & drawings, BoQ and technical specifications, internal roads, along with all allied

Reference, Cl 4.6-(v) (a)	technical specifications for all structures like berthing jetty, internal roads, covered & open storage along with all allied structures / buildings / facilities like parking of vehicles, waiting room, toilets, refreshment / pantry provision, security office, bunkering of fuel, utilities including water supply, drainage, water treatment plant, fire-fighting, horticulture as well as external roads connectivity with nearest National / State Highway & electrical facilities including compound lighting, requirement of power and transformer / generator, etc., all complete to handle all goods and passengers;	structures / buildings / facilities like parking of vehicles, waiting room, toilets, refreshment / pantry provision, security office, , utilities including water supply, drainage as well as external roads connectivity with nearest National / State Highway & electrical facilities including compound lighting, etc., all complete ;
Page 75, Section 7, Terms Of Reference, Cl 4.6-(v) (c)	detailed layout plan along with preliminary design & drawings, BoQ and technical specifications for the shore protection works required to prevent any erosion;	Clause Deleted
Page 75, Section 7, Terms Of Reference, 4.6-(vi) (a)	The Consultant shall submit detailed design basis reports of all components of the Project(s) after their review and vetting by an IIT/ NIT. The fee for such proof checking shall be borne by the Consultant itself; and	0
Page 76, Section 7, Terms Of Reference, Cl 4.7-(iii)	analyse and assess disturbances to riverbed and river banks (mainly erosion & disturbance to the habitats). In the analyses, riverbed samples need to be collected for at least 1m below the maximum depth of dredging;	analyse and assess disturbances to riverbed and river banks (mainly erosion & disturbance to the habitats).

Page 76-77, Section 7, Terms Of Reference, Cl 4.8	The Consultant shall carry out social screening and SIA consequent to proposed projects/ sub-projects in the DPR. This SIA shall also include consultations with affected communities & people. The SIA chapter shall inter-alia contain the magnitude and other details of land acquisition, resettlement issues, impacts on gender & livelihoods and the mitigation of impacts thereof. The SIA Report shall also include the baseline socio-economic characteristics of the Project Affected Families (PAFs) & Project Affected Person (PAPs), the R&R policy provisions & entitlements, outcome of the consultations held with the communities, implementation and monitoring mechanisms. It shall also contain the budget for implementing the R&R and other provisions related to SIA. The Consultant shall follow the social safeguard policies of the Bank regarding carrying out the SIA and preparation of SIA report thereof.	The Consultant shall carry out social screening and SIA consequent to proposed projects/ sub-projects in the DPR. This SIA shall also include consultations with affected communities & people. In this regard, the client's consultant for grass-root level community consultation may be coordinated for getting inputs in respect of affected community & people. The SIA chapter shall inter- alia contain the magnitude and other details of land acquisition, resettlement issues, impacts on gender & livelihoods and the mitigation of impacts thereof. The SIA Report shall also include the baseline socio-economic characteristics of the Project Affected Families (PAFs) & Project Affected Person (PAPs), the R&R policy provisions & entitlements, outcome of the consultations held with the communities, implementation and monitoring mechanisms. It shall also contain the budget for implementing the R&R and other provisions related to SIA. The Consultant shall follow the social safeguard policies of the Bank regarding carrying out the SIA and preparation of SIA report thereof.
Page 77, Section 7, Terms Of Reference, Cl 4.9	 The Consultant shall have proper co-ordination & consultation with the NGOs/ Social Agencies engaged for community outreach at field level with regard to project interventions and devise the infrastructure in complete satisfaction of the local communities. Accordingly, the Consultant shall assess the following: (i) potential economic development and increase in employment opportunities in the region/ hinterland of NW-1 due to development of IWT 	The Consultant shall have proper co-ordination & consultation with the NGOs/ Social Agencies/ Grass-root level agency engaged for community outreach at field level with regard to project interventions and devise the infrastructure in complete satisfaction of the local communities. Accordingly, the Consultant shall assess the following: (iii) potential economic development and increase in employment opportunities in the region/ hinterland of NW-1 due to development of IWT sector. The economic

	 sector. The economic potential of the region along NW-1 shall be assessed. Economic Performance Index (EPI) of the districts along NW-1 shall be assessed and provided along with effect of IWT growth on EPI; and (ii) potential social effect including consideration of health, demographic, employment and generated wealth on account of the potential traffic; 	 potential of the region along NW-1 shall be assessed. Economic Performance Index (EPI) of the districts along NW-1 shall be assessed and provided along with effect of IWT growth on EPI; and (iv) potential social effect including consideration of health, demographic, employment and generated wealth on account of the potential traffic;
Page 78-79, Section 7, Terms Of Reference, Cl 4.16	At the time of submission of Draft DPR , the Consultant shall also submit list all the possible stakeholders for approval of the Client. Subsequently, the Consultant shall assist the Client in conducting a stakeholders meeting at Patna/ Kolkata / Varanasi or any other place chosen by the Client. In this stakeholders meeting, the Consultant shall make detailed presentation on the DPR, seek views of local stakeholders, and incorporate those in the DPR by making suitable modifications in consultation with the Client. The cost for arranging the venue and other allied activities for making the presentation shall be borne by the Client however, the Consultant shall provide all the necessary assistance in conducting the stakeholders meeting.	At the time of submission of Draft DPR , the Consultant shall also submit list of all the possible stakeholders

All other terms and conditions remains unaltered.
