Subject: National Competitive Bidding for Fabrication, Transportation, Installation, Testing, and Commissioning of Quick Pontoon Opening Mechanism (QPOM) Comprising of Self-Propelled Pontoons in the state of Uttar Pradesh (01- Ballia District) and Bihar (01-Patna District).

Reference: IN-IWAI-341909-GO-RFB

<u>CPP Portal Tender no:</u> 2023\_JMVP\_750094\_1

## Response to Pre-bid Queries dated 03.05.2023

S.	Page No &	Content of RFB requirement	Clarifications sought	Response from IWAI
No	Clause No			
1	Clause no -3.1 & 3.2, Page No 82 & 83.	SECTION VII – SCHEDULE OF REQUIREMENTS	Please specify the Deck Loading capacity envisaged for the Main Barge & Mooring Baorge including details of Specification of Vehicles/Cars that are intended to be carried onboard.	The maximum allowable deck load for wheeled vehicles may be considered as 10 T/Sqm (loaded Matador vans). Clause 3.1 may be read as: "Clause no 3.1- Main Barge, Page No 83: As a passenger ferry, it should be capable of carrying a maximum of 16 loaded matador vans (8 port and 8 starboard) and 100 passengers at any given point of time".
2	Technical Specifications, Clause no 4, Page No 94	A certificate is to be provided by the Classification Society confirming that 'Class Notations have been provided for all functional requirements indicated in the specification'.	Please indicate the Class Notation envisaged for the Main Barge since you have specified dual functions as Self-Propelled Pontoon Barge and Passenger & Car Ferry. Please note owning to particular requirements of LSA & LSS pertaining to Passenger movement as per statutory regulation apart from Class Requirements, the differences in requirement of LSA, LSS are huge considering you have stated 600 Passengers.	The classification of main unit shall be as RO-pax and 100 passengers ferry and Mooring unit as Pontoon.  The same shall be applicable as per IRS (卐 IWL. 卐 1Y. FERRY. Zone 2).  The Class notation shall be confirmed by IRS & all the units (main & mooring) shall conform to IV Rule 2022, as applicable.
3	Technical Specifications, Clause no 5 & 9 Page No 94	The main and auxiliary machinery of the barge should permit a continuous operation of 48 hrs when operating as a ferry. Endurance Not less than 150 nm.	In your Serial No: 5 you have stated requirement of continuous operation of 48 hours and in your Serial No.: 9 you have stated endurance of 150NM. Assuming your economic cruising Speed is 7 Knots. It comes to 22 hours. Please reconcile your requirement.	Ferry operation involves loading, ferrying and unloading. The requirement of 48 hours is inclusive of all these activities and the endurance of 150 NM is to calculate the fuel capacity for operating the Ferry for 150 NM without refueling.

4	Clause no-3.1, Scope of Supply, Page No 83 Clause no-7b of Technical Specifications, Page no 95 Clause no- 21d, Page No- 97	3.1 Design speed at still water in fully loaded condition 8 knots. 7(b). In the ferry mode, the economic speed should be about 7 to 8 knots in still water without shallow water effect and the maximum speed 8.5 knots at 92% MCR of the propulsion units. 21(d). In the ferry mode, the economic speed should be about 7 to 8 knots and the maximum speed 9 knots at 92% MCR of the propulsion units.	In your Serial No: 3.1 you have specified speed requirement of Main Barge at 8 Knots, in Serial No.: 7 you have specified 8.5 Knots and in Serial No.: 21, the speed requirement is specified at 9 Knots, Please reconcile and clarify.	Please refer clause no 3.1, Page no 83, "Design speed at still water in fully loaded condition 8 knots".  The following clauses to be read as:  Clause no 7(b) at Page no 95:  • The economic speed should be about 7 to 8 knots in still water without shallow water effect.  Clause no 21(d), Page no 97:  • The maximum speed as 8.5 knots at 92% MCR of the propulsion units.
5	Clause no 5, Page No 94	The main and auxiliary machinery of the barge should permit a continuous operation of 48 hrs when operating as a ferry.	Should the Main Barge be envisaged for 48 Hours of Operation as per your Serial No.: 5, please indicate overnight accommodation details of Crew and Complement.	Please note that the vessel has only two modes of operation as given:  1. A quick opening system known as Kulfi system.  2. As a cross river ferry during disengaging from pontoon bridges in flood season.  The explanation of 48 hours for cross river ferry is given in point no- 3 above and cognizance is to be taken of the intermittent nature of operation.  Further the passenger ferry (main barge) shall have connectivity with shore, where crew will have accommodation.
6	Clause no 3.1, Page No 82	As a passenger ferry can carry a maximum of 16 loaded matador vans (8 port and 8 starboard) + 600 (300 port + 300 passengers) passengers at a time.	You have indicated Ferry mode Operation with 600 Passengers with no provision of Toilets onboard.	The passenger ferry should conform to IV rule 2022. However, as per the GA drawing attached in the tender documents, provision of toilet has been specified.
7	Technical Specifications	Technical Specifications	No provision of Fresh water and Sea Water storage Tank and Pipelines with Pumps have been indicated anywhere in the Technical Specification.	The passenger ferry should conform to IRS rules.

8	Clause no 18, 19, Page No	Ramp: A sturdy ramp on each side is provided for vehicles and pedestrians to cross over. When used as a passenger ferry, the ramp has to be suitably designed as to the lengths and strengths to accommodate the shore incline of the landing zone.  Winches: Four our electrical winches of 5 ton capacity each to be provided for lifting and lowering of the ramps.	Refer to your requirement of Ramp in Serial No.: 18, please furnish details of heaving and lowering mechanism. Since you have specified requirement of 04 Number Winches in your Serial No.: 19, we seek the details. In our understanding two Winches should be sufficient to operate the Winches of the Main Barge with application of single line wire Pulley Mechanism. Further as indicated in your GA the Ramp between Mooring Barge & PIPA seems to be connected to Main Barge onboard Winch. Please clarify that isn't the actual case. Main Barge winch has to be independent of the Mooring Barge and PIPA Ramp to have unrestricted movement of Barge.	As per requirement, IRS vetted electrical driven Ramp winch for suitable Ramp operation of main barge shall be provided by the Supplier.
9	Clause no 22, Page No 98	Steering Gear: Steering gear of the azimuthal propulsor units should be Electro Hydraulic.	In your Serial No.: 22 (Steering Gear) you have stated azimuthal Propulsion units to be Electro -Hydraulic, Kindly clarify.	The make/ manufacturer shall be selected by the Supplier in compliance with the vetted designs of IRS.
10	Clause no 19, Page No 97	Winches: Four our electrical winches of 5 ton capacity each to be provided for lifting and lowering of the ramps.	In your Serial No.: 19 you have stated winches to be powered electrically. However, Control Room Lighting and Deck Lighting have been envisaged with Solar Source. Please indicate clear requirement of Auxiliary Generator and Harbour Generators with indicative Capacity & Rating. Please note here Class requirements for alternate Source of Main Engine Starting for Passenger Ferry Requirements.	Based on the detailed design vetted by IRS, the Supplier shall assess the requirement & provide the required capacity generator/ battery at the location indicated on the barge as per class requirement.  The barges shall be illuminated with appropriate capacity with solar lighting arrangement.
11	Clause no 30, Page No 99 Clause no 3.1, Page No 83	Clause No 30, Page No 99: Adequate firefighting, Life-saving appliances, and Light and sound signals as per class rules are to be provided.	As per your Serial No.: 30 please indicate list of LSA, LSS for 600 Passengers as stated in your requirement, also intended storage	Both the clauses may be read as: "Clause no 3.1- Main Barge, Page No 83: As a passenger ferry, it should be capable of carrying a maximum of 16 loaded matador vans (8 port and 8

		Clause no 3.1- Main Barge, Page No 83: As a passenger ferry can carry a maximum of 16 loaded matador vans (8 port and 8 starboard) + 600 (300 port + 300 passengers) passengers at a time.	space for the same particularly the inflatable life rafts on Deck.	starboard) and 100 passengers at any given point in time".  "Clause No 30, Page No 99: Adequate fire-fighting, Life-saving appliances, and Light and sound signals as per class rules are to be provided as per IV/IRS Rule 2022".
12	Clause no 31a, Page No 99 GA Drawings, Page No 101	Anchor and Chain Cable & Fittings. Anchor and anchoring arrangement for the main barge are to be as per Classification Society Rules for the passenger ferry mode. No anchors needed for pontoon mode. GA Drawings	As per your Serial No.: 31(a), please indicate Number of Windlass, their indicative position on GA, Number and Indicative Mass of Anchors as has been envisaged for the Main Barge during the Ferry Mode and to be installed onboard.	The number & suitable position of electrically driven Windlass as per class including the weight & number of anchors shall be provided by the Supplier.
13	ITB 32.1(b), Page No 45 to 46.	The bidder should have experience of supply & commissioning of one (01) similar item in the last 5 years. "Supply and commissioning of similar items" means Fabrication, Transportation, Testing and Commissioning of self-propelled/ non propelled barges/ vessels /moored barges duly certified by any classification society or registering authorities under Inland Vessel Act or any other relevant act / regulation"	Refer your Qualification Criteria ITB 32.1(b) we understand it is to be read as "Supply and commissioning of similar items" means Fabrication, Transportation, Testing and Commissioning of self-propelled/ non propelled barges/ vessels /moored barges duly certified by any classification society and registering authorities under Inland Vessel Act or any other relevant act / regulation". However no monetary Value of such similar item has been specified as is the general practice.	The same may be read as:  The bidder should have experience of supply & commissioning of one (01) similar item in the last 5 years "Supply and commissioning of similar items" means Fabrication, Transportation, Testing and Commissioning of self-propelled/ non propelled barges/ vessels /moored barges duly certified by any classification society and registered by any registering authorities under Inland Vessel Act or any other relevant act / regulation".
14	GCC 16.1, Page No 133 & 134	Mobilization payment: 10% of the total contract amount to be paid within thirty (30) days of signing of Contract and upon submission of claim / against a simple receipt and a bank guarantee for the equivalent amount valid until the completion of the contract, in the form, provided in the bidding documents or another form acceptable to the Purchaser. The mandatory documents such as work methodology, work schedule, QAP and insurance document are also	Refer your Payment Terms GCC 16.1 (I, II, III & IV) Please note should you add I, II, III & IV, the total Percentage of Payment comes to 61.25% of the Contract Price only please reconcile the above. We propose Serial No.: II (a, b, c & d) to be 25% each and that of Serial III (f, g) to be 50% each. Further note Serial No.: III g & IV has no difference physically the same may be merged and computed accordingly.	The payment schedule has been clarified & may be read as follows:  I. Mobilization payment: 10% of the total contract amount to be paid within thirty (30) days of signing of Contract and upon submission of claim / against a simple receipt and a bank guarantee for the equivalent amount valid until the completion of the contract, in the form, provided in the bidding documents or another form acceptable to the Purchaser. The mandatory documents such as work methodology, work schedule, QAP and insurance document are also required to be submitted by the Supplier with the claim.

with the claim.	
II. Payment schedule of 65%	of the total
contract amount as per the	
below milestones:	
Sr Milestones / Key 1	Payment
	Schedule
	(to be
	paid on
	prorata
	basis as
1 1 1 1 1	per
	the Price
	Schedule-
	Supply)
	10%
Keel Laying with	
certification of	
EIC.	0/
	20%
50% of Hull	
fabrication at the	
Supplier's yard	
after certification	
by EIC & any	
classification society as per	
Vessel act.	
· · · · · · · · · · · · · · · · · · ·	20%
100% of Hull	2070
fabrication at the	
Supplier's yard	
after certification	
by EIC & any	
classification	
society as per	
Inland	

required to be submitted by the Supplier

II. Payment schedule for fabrication work at Supplier's yard is as per the below milestones:

Sr	Milestones / Key	Percentag
No	Deliverables	e
		on
		contract
		Amount
a	Completion of Keel Laying	10%
	with	
	certification of EIC.	
b	Completion of 50% of Hull	20%
	fabrication at the Supplier's	
	yard	
	after certification by EIC &	
	any	
	classification society as per	
	Inland	
	Vessel act.	
c	Completion of 100% of Hull	20%
	fabrication at the Supplier's	
	yard	
	after certification by EIC &	
	any	
	classification society as per	
	Inland	
,	Vessel act.	. 0/
d	Successful launching.	15%
	Testing and	
	Trail run of the complete	
	units at	
	Supplier's yard (as per Price	
	Schedule) after certification	
	of EIC	
	& any classification society.	

		Vessel act.		Sr	Milestones / Key	Percentage
	D	Successful	15%	N	Deliverables	on contract
		launching.		0		Amount
		Testing and		e	Successful transportation	10%
		Trail run of the			from	
		complete units at			Supplier's yard to the	
		Supplier's yard			respective	
		(as per Price			site (as per Price Schedule)	
		Schedule) after			and	
		certification of			satisfactory installation of	
		EIC			the	
		& any			same with certification by	
		classification			EIC &	
		society.			any classification society	
	III. Pay	ment schedule of 20	% of the total		including submission of	
		t amount as per the			SOP/	
		nilestones:			Manual for Operation of the	
	Sr	Milestones / Key	Payment		unit	
	No	Deliverables	Schedule		and training of purchaser's	
	- 1 0		(to be		personnel in Train the	
			paid on		Trainer	
			prorata		Mode.	
			basis as	f	Testing, commissioning, and	10%
			per		trial	
			the Price		of the complete units at the	
			Schedule-		respective site (as per Price	
			Services)		Schedule) along with the	
	f	Successful	10%		certification, any	
	-	transportation	1070		classification	
		from			society & EIC including	
		Supplier's yard to			registration of the units in	
		the respective			the	
		site (as per Price			name of the purchaser.	
		Schedule) and			1	
		satisfactory		IV. O	n Final acceptance: 5% of the	contract amount
		installation of the			be paid within	
		same with			(30) days after the date of	the Acceptance
		certification by			icate issued by	
		EIC &			n the proforma given in Section	VII.
 <u>_</u>	I.				- I Prototilla di on in Dection	·

any classification society including submission of SOP/ Manual for Operation of the unit and training of purchaser's personnel in Train the Trainer Mode.	All the percentages mentioned in the tables above (serial number II & III) shall be calculated on the total contract amount.
g Testing, commissioning, and trial of the complete units at the respective site (as per Price Schedule) along with the certification, any classification society & EIC including registration of the units in the name of the purchaser.  IV. On Final acceptance: 5% of the contract amount shall be paid within thirty (30) days after the date of the Acceptance Certificate issued by EIC in the proforma given in Section VII.	

	15	Clause no 2, Objective, Page No 81	The design has been carried out by Department of Naval Architecture and Ocean Technology, Indian Institute of Technology Kharagpur.	It was stated during the Pre-Bid Meeting that IWAI shall provide the basic design approved by Class, which shall be binding on the Tenderer for Construction of the Barges. Under such circumstances liability of Performance Parameters including Speed and Operational Requirements must be on the designer/Design Supplier. Alternatively, Shipyard must have option to make their Own Design to ensure performance and operation of Barges.	IRS appraised detailed drawings prepared by CICMT, Indian Institute of Technology Kharagpur shall be provided with the bid document for reference.  The bidders to adhere the technical specifications mentioned in the tender documents.
H	16	FIRST AND SECOND MOORED BARGE (02 units), Page No 83	FIRST AND SECOND MOORED BARGE (02 units): Fixed to the location with four spuds and two anchors, these two barges provide the fixed platform to swing the main barge against. These are connected with the floating pipa units with sturdy ramps for access by the vehicular and pedestrian traffic.	Please specify in detail the heaving and lowering mechanism that is envisaged and is to be provided for the spuds of the Mooring Barges if any.	For the heaving & lowering of studs, suitable arrangement like 2 HPU on each barge with hydraulic ramp cylinder working in tandem with pully, shall be provided.
= = = = = = = = = = = = = = = = = = = =	17	3.1 MAIN BARGE, Page No 82		Please indicate the total Electrical Load envisaged for the Main Barge in view of complete operation of Barge and all its equipment as per Class requirement and subsequently the proposed Main & Harbour Generator Capacity.	The details are as follows: The electrical requirement shall be worked out on the basis of 2 nos Azimuth propulsion system powered with 150 HP each and other electrical fittings on the barges by the shipyards as per class.
	18	3.1 MAIN BARGE, Page No 83	6 raised solar lights with posts for illumination of the deck area.	Please check and confirm that the Six Number Raised Light Posts for illumination of the deck area as indicate in GA and stated in Technical Specification Serial 3.1 shall have no obstruction in Navigation of Main Barge under the Bridges on Waterways as such. We propose these may be replaced with lights mounted and suited at site.	Please refer clause no 3.1 in Page no 83, the tender documents, 6 raised solar lights with posts for illumination of the deck area shall be provided & the same to be fitted onboard having minimum illumination of 15 lux.  Further modifications (if any) proposed by Supplier shall have to be vetted by IRS.  The air draft clearances shall be considered as per site & water level.

19	BDS, ITB 41.1,	ITB 41.1: The maximum percentage by	Refer ITB 41.1, the percentage as	The clause no BDS ITB 41.1, Page No 43 may be read
	Page No 43	which quantities may be increased is:	proposed by which the quantity may be	as follows:
		15%	increased is 15% (Fifteen Percent) which	ITB 41.1: The maximum percentage by which
		The maximum percentage by which	is not even a complete set of one Barge,	quantities may be increased is: Nil
		quantities may be decreased is: 15%	Kindly clarify the same.	The maximum percentage by which quantities may be
				decreased is: Nil
20	Page No 4, Bid	Last date and time for submission of	We would request you to allow at least a	Appropriate bid submission date as per procurement
	submission	bids: 22.05.2023 at 1500 Hrs	fortnight's time after you have published	guidelines shall be notified.
	date & time		the clarifications for us to prepare and	
			submit the bid.	