NOTICE INVITING BUDGETORY QUOTATION

Sub: Budgetary quotation for Hiring of two nos. Custom Built Amphibious Launches for all weather use at Sagar area for pilot transit/embarkation/disembarkation operations.

Syama Prasad Mookerjee Port, Kolkata (SMPK) intends to hire two nos. Custom Built Amphibious Launches for all weather use at Sagar area for pilot transit/embarkation/disembarkation operations with experienced manning and to carry out all such duties that an amphibious launch can perform, within the limits of Kolkata Port for a period of ten (10) years, including fuel meeting the criteria as detailed in the attached Annexure.

You are requested to submit the budgetary quotation as follows:

1) Daily hire charge per Amphibious Launch (A) = Rs. per day
2) Hourly running charge per Amphibious Launch (B) = Rs. per hour

[Hourly Running Charge shall include only the cost of fuel for running the machineries based on the rate of Diesel/Petrol at Kolkata which is Rs. 84.35/- per litre & Rs.91.35/- per litre respectively as on 01.03.2021.]

3) Assumed running hours per day : 4.0 Hours per launch
4) Daily hire charge and Hourly running charge shall be quoted excluding GST, which would be paid extra at actual.
5) Escalation and de-escalation on the "Hourly Running Charge" as accepted by SMPK will be applicable.
6) No separate mobilization or de-mobilization charges will be paid.

Interested qualified Companies are invited to submit budgetary quotations as per the above format addressing Dy. Harbour Master Port, Marine Department, Shyama Prasad Mookerjee Port, Kolkata, 15, Strand Road, Kolkata – 700 001.

Publication Date	: 01.03.2021 at 1700hrs
Last date of submission of Budgetary Quotation	: 08.03.2021 upto 1500 hrs.
Address for submission of Budgetary Quotation and for any queries	: Dy. Harbour Master Port, Director, Marine Department, Kolkata Port Trust, 15,Strand Road, Kolkata -700 001. Telephone No. 2230-3451, Extn.237/362.

Encl.: Annexure.

Director, Marine Department.

Operational Area

Item
Area of Operation
Weather conditions
Pilot transfer, mooring and rescue operations
24x7 All weather upto and including (2.5~3.0 m swell and 40 knots gusts)

Certificate

Item
CE Recreational Directive
RSV Type 1 for construction and loadline freeboard assignment only
IRS Classification for HSC Notation
IWT License for operation
Pilot Boat certification
RSV Document of DG Shipping
Loadline and Freeboard Assignment

Dimensions

Item	*remarks*
Length overall stem to stern (excluding wheel extension)	11 ~ 12 meters
Extreme Breadth	Minimum 3.5m
Accommodation	To be certified for 12
Depth moulded (keel to top of RIB)	To be specified by makers
Max draft when not making way through water (with 12 persons on board including crew)	To be specified by makers
Min freeboard at max freeboard in conditions above	Not less than 505 mm
Displacement without personnel or effects on board	
Draft and approved GA Plan to submit to owners and Class	
Tonnage certificate	
Max payload of passengers, crew and effects - 1000 kg	
Colour of the boat external structure should be orange/yellow with PILOT markings	

Structural strength

Item	
Material of construction (Aluminum alloy) in compliance with ISO 12217:2015 with stage inspection of IACS Member	
Modulus	Structural strength as per Annex 4 for Type 1 category of RSV, where practicable.
Ambient air temp 0 to 45 deg C	
Water temp 1 to 35 deg C	
Relative Humidity of 90% at 32 deg C	
Water Sailinity of 36000 ppm and density of 1010 to 1025 kg/cu.m	

Watertight Integrity

Item	*Remarks*
Watertight weather deck with freeing ports/scuppers	as per IACS and CE Directives
Doorways and companionways	
Doors leading from cabin should not open inwards, have coaming of at least 300 mm and should not be located on the forward end of the accomodation cabin	
Engine exhaust penetreating hull to have means to prevent back-flooding	
Sea inlet (engine cooling etc) must have efficient means of closure	
Two Bilge pumps with combined capacity of 140 l/min and fitted with strum box	
Bilge alarms and auto-start pumps, if fitted to come with alarms. If these compartments have possibility of collecting pollutants/oil, it should not be auto-start type	
Min freeboard for a 12 m LOA must be not less than 505 mm	
Assignment of feeboard by Class and marking of loadlines, if practicable	
Ventilation arrangements for fuel tanks, battery spaces and engine exhaust ventilation must of approved	
The hypalon RIB requires an elegant fendering protection that works when riding alongside a moving ship without increasing the gap between boat and pilot ladder excessively.	
Hypalon to be sea-water and UV proof material. It must come with 6 or more airtight chambers with independent filling port	

Stability

Item		*Remarks*
Approved Stability Information Booklet	As per ISO 12217 and Certified by IACS Member	
Inclining experiment, GZ curves in compliance with min. criteria	As per ISO 12217 and Certified by IACS Member	
Stability tests	As per ISO 12217 and Certified by IACS Member	These tests must be coducted on the fully constructed model with the cabin, equipment and passenger weight to actual scale. Additionally, a simulated test of stability must be conducted to determine adequately positive righting moment in a Nor'ester condition with gusts upto 35 knots and confused sea-state broadside on.
Damage tests		
Buoyancy test	As per ISO 12217 and Certified by IACS Member	RIB collar does not contribute to buoyancy of the craft. It constitutes reserve buoyancy. So the boyancy / swamp test or calculations must be done with all RIB chambers deflated.
RIB		

Navigation & Comms

Item	*Remarks*
NAVIGATION SYSTEMS	
Steering system/Propulsion control	While the twin outboard engine provides for propulsion redundancy, emergency means of steering must be provided and clearly marked. Emergency Bypass for Hydraulic Steering to be provided.
Windshield and cleaning / wiper arrangement	
Visual range of conning station	The boat driver must have all round view with at least 270 degrees from the seated position. He must also be able to see at least a boatlength ahead while planing at high speeds
Compass (Gyro + mangnetic)	Approved boat gyro compass and a magnetic compass at the conning station. Magnetic compass adjusted and at a safe distance from electronic equipment to prevent deviations.
Azimuth circle	At least magnetic compass must be fitted on a binnacle to enable azimuth circle to be fitted and bearings observed
Electronic Chart with GPS, radar and AIS overlay features. One ENC display is adequate. Take me home paper chart in case of ENC failure	Must be compatible with hydrographic data of port including ATONs, depth updates. Must input tidal data realtime and mark no-go zones in clear colour. Means to update chart corrections electronically. Tidal stream atlas, tide tables may be exempt if available electronically. List of Lights & Radio signals, international code of signals and nautical publications are exempted.
DGPS Receiver	

AIS	
Echosounder	
Consol of nav & engine alarms, parameters	Alarms such as shallow ground, low ukc, collision warning(for speeds over 15 knots), fuel tank level, abnormalities of engines or battery, bilge level. Engine rpm, mileage (litres or grams per n.mile), electrical insulation. In addition to requirements of manufacturers, CE, RSV and Pilot Code. Simple, ergonomic dashboards preferred
All consols and internal lighting capable of displaying night mode and with dimming arrangement for ensuring night-vision for driver.	
Accelerometer to measure the 6 degrees of motion and transmit	
Data collection & transmission device	Able to digitally collect realtime data of GPS track & vector, compass feed, outboard & inboard engine start/stop, rpms, alarms; fuel flowmeter data, accelerometer, on-board camera data (on demand).
Navigational lights & shapes for Pilot boat. Whistle, signaling light included.	Functionally in compliance with International Regulations for Prevention of Collisions.
Flag stands to hoist Pilot flag, Port and National flags	
Radar Reflector	
Searchlight	
Battery powered, hand held anemometer with digital display	For checking wind speeds prior launch/recovery.

COMMUNICATION SYSTEMS	
2 sets of VHF sets with fixed antennae and DSC/alarm arragements and all marine channels available as per GMDSS Area A1	Capable of ship-shore distress alerting and MSI information. Vessel and equipment to be registered with MMSI. Radio installation with respect to transmitting power, source of power, antenna height to be complied with
Mobile Phone & charger for emergency communications with boat Master	
Search And Rescue Transponder (SART)	

Machinery & Electrical

Item	*Remarks*
MACHINERY	
Two independent outboard petrol engines of adequate capacity to deliver 25 knots service speed and 35 knots top speed and endurance of 200 n.miles	The throttle control for the outboards may be fitted with an additional fine throttle control to enable minor adjustments to keep the boat at the same speed at the ship during Pilot transfer in all weather conditions.
One inboard petrol engine with at least 30 minutes continuous running capability to drive wheel hydraulics and provide all wheel drive in amphibious/land mode.	
Two alternator arrangements (dynamos) one driven by outboard and another driven by inboard. Power management with preferential trip arrangement	Capable of producing adequate kW to power petrol engine electrical distributors, cabin airconditioning, navigational equipment & systems, cabin lighting, searchlight and headlights.
Bilge pump arrangement, sensor and alarm	
Outboard engine seawater cooling pump	
24 V battery pack - 2 no.	Emergency power for cabin lighting, nav equipment, nav lights and engine starting (cranking and electrical distribution). Ampere hours of adequate rating

Means of starting - redundancy	Second battery pack or other means of starting (hand cranking, hydraulic compression of air bottle etc). Such mechanical means must also be able to drive the dynamo for electrical distribution.
Fuel tank & means of cleaning	Additionally, so constructed to enable crew to be able to clean an empty tank free of sediments
Fuel pipes & means of isolation	
Fuel flow meter (Coriolis Mass flow)	
Save-all arrangement to prevent oily bilges	
Hydraulic power pack and piping for steering, landing gear and 4WD	3WD
Tow valve arrangement	Valve to release hydraulic lock on wheels in case of emergency towing ashore
Propeller must be provided with guard to minimise risk of entangling with fishing nets or floating ropes or debris	
ELECTRICAL	
12 ~ 24 V DC systems, two wire core, with double pole switches.	
Insulation not to drop below 0.3 MegaOhms on electrical system. Alarm display on nav consol	
Fuel tanks and other metal objects without contact to sea, must have earthing arrangements.	

All Electrical circuits and gadgets, except main supplies must have suitable overload & short circuit protection	
All electrical connections & terminals must be marine grade with crimped insulated sleeves. The panel and wiring must be protected with weathertight covers	
All electrical cabling must be of approved marine grade and wiring must be of flame retardant cable.	
Battery installation must have adequate ventilation for evolved flammable gases to escape. Means of preventing overcharging must be provided	
Noise levels from machinery not to exceed 65dB(A) inside acccomodation	
MAINTENANCE OVERSIGHT	

Complete maintenance, inspection, testing, calibrating and overhaul routines for all systems of Sealegs (including third party equipment) to be documented abd supervised by Manufacturer with local licensed and qualified technical teams. Manufacturer must be a signatory to the final agreement for this aspect (does not include operational responsibility).	

Anchor & Mooring

Item	*Remarks*
Anchor of adequate size and High Holding Power to be able to hold the craft in BF 7 weather conditions	
Designated cable must be approved to be capable of holding the craft in above weather conditions	
Anchor cable must be at least 50 meters length	Exceeding the length requirement considering river port with strong currents and variable holding ground quality
Mooring bitt with adequate strengthening forward and stern must be provided should the craft need to be towed at 15 knots in moderate weather	

pilot transfer and crew safety

Item	*Remarks*
Approved Work vests or inflatable lifejackets for 12 persons on board	
Pilot boarding platform and walkway on weather deck	Pilot boarding platform and walkway on weather deck leading to it must have permanent anti-slip surface. The location should be not more than 250mm off the Pilot ladder when the boat is alongside parallelly with the shipside
Handrails and harness	Handrails and harness arrangements must be available both along the walkway and at th boarding platform so that the Pilot is able to hold either the handrail or the pilot ladder manropes at any given time.
Boarding platform designated location	The boarding will usually take place with the ship underway between 8 and 10 knots speed. The boarding platform must be free from shipping heavy spray in 1.5 meter head swell and 20 knot wind speed
Searchlight	The searchlight must be capable of illuminating the boarding arrangement and pilot ladder area adequately at night. The control of the Searchlight about vertical and horizontal axis must be from the driver's position.

Walkway width	If the walkway from the accommodation of the craft to the Pilot boarding platform is along the sides of the boat, then such a walkway should have at least 400 mm width and 6 ft height for free walking while holding inboard handrail
The Pilot platform area must be able to accommodate one crew member in addition to the Pilot in order to ensure safe transfer.	
Pilot embarkation platform, if made from atop the cabin must be at a safe distance from radar scanner and other antennae to prevent eye damage or radiation exposure	

Fire Safety

Item
RIB and hull to comply with SOLAS Chapter III
Fire protection of inboard engine with A-15 aluminium casing and reasonably gastight packing
No open cooking range or equipment other than electric microwave over and tea kettle to be installed on board
Upholstery material on seating of approved material
2 no. Portable multi-purpose fire extinguishers, 2 no. sand buckets
One electrically powered fire pump, hydrant, hose and nozzle of suficient length, throw and spray
No open flame gas installations permitted on board
No smoking signs inside accommodation visible at all locations

Life Saving Appliances

Item
Lifesaving equipment should be of approved type and as per RSV and Pilot Code
Lifejackets should be of inflatable type capable of keeping a person in water afloat for 24 hrs. Alternately, work vests of approved type can be supplied
Two no. 6 persons compact liferaft for coastal use, duly certified and approved. Revere or Viking are some of the makers
4 no. Lifebuoys (2 with lifeline and 2 with SIL)
Pyrotechnics
Line throwing apparatus with one spare cartridge

Marine Pollution

Item
Labelled waste bins of adequate capacity and colour coding for food, plastics and other waste
Easy means of visual observation of bilges for oil sheen. Efficient means of pumping completely to shore facility while on land
Means of safe and traceable storage, treatment and disposal of sewage
Engines capable of burning BS IV or equivalent standard of petrol fuel.
Emmission test certificate issed by Certifying authority (CE certification is acceptable)
Permanent MARPOL placard on Annex 1 and Annex 5 restrictions of disposal to sea.

Accommodation & Welfare

Item
Adequate lighting for crew and passengers to be able to safely negotiate within accommodation and on deck
Comfortable and cushioned settees adequate for 8 passengers must be provided
Out of the 8 passenger seats above, full reclining seats for at least three settees above
Toilet with entrance outside the cabin space
Potable water of R.O standard must be made available
Microwave oven, coffee/tea and beverages along with suitable cutlery
Refrigirator with provision for ice, milk, juice or soda.
Airconditioning to provide at least 27 degrees C ambient temperature with openings shut. Alternate means of natural cross ventilation in case of failure of airconditioning. The area of operation is in tropical and mild weather region.
Adequate and dedicated cabin baggage space (overhead) plus one weather tight container on open deck for a cabin baggage for each of the 8 passengers/Pilots. Leg room and cabin area must be free of luggage