

Subject: Tender for “The Procurement of Various Survey Equipment Under JMVP– II (Arth Ganga)” – Pre bid minutes

Reference: Tender No.: IN-IWAI-270120-GO-RFB

CPP Portal Tender ID: 2022_JMVP_675234_1

Amendment-2

This amendment forms an integral part of the Bid Document issued on 25th February, 2022

S.no.	Page no & Clause. No	Existing	Amended
1.	Section VII, Page no 85, and, Section XI, Page no 178. Schedule “A” Shallow water Multibeam Echo Sounder	Shallow water Multibeam Echo Sounder	(i) Photo of IWAI Survey vessel installed with MBES is at <u>Annex-1</u> . (ii) Two numbers trained technicians are to be deployed for Operation and Maintenance (O&M) period for three years.
2.	Section VII, Page no. 85 and Section XI, page no. 178 Schedule ‘A’, SI#1 Shallow water Multibeam Echo Sounder	Sounding Method –Shallow Water Multibeam system : Multi-Phase Echo Sounder (MPES)/Interferometric (with bathymetric data with IHO SP 44 Special Order Compliant)	Sounding Method – Shallow Water Multi-beam system : Multi-Phase Echo Sounder (MPES) / Interferometric / CAATI (bathymetric data with IHO SP 44 Special Order Compliant)
3.	Section VII, Page no. 85. and Section XI, page no. 178 Schedule ‘A’, SI#2 Shallow water Multibeam Echo Sounder	Minimum Depth measurement : 0.5 mtr below transducer	Minimum Depth measurement : 0.7m below transducer or better
4.	Section VII, Page no. 85 and Section XI, page no. 178 Schedule ‘A’, SI#3 Shallow water Multibeam Echo Sounder	Bathymetric and side scan frequency: Minimum 230 kHz	Bathymetric and side scan frequency: Minimum 200 KHz
5.	Section VII, Page no. 85 and Section XI, page no. 178 Schedule ‘A’, SI#4	Maximum depth measurement: 100 meter or better	Maximum measurement depth: 75 meter or more

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	Shallow water Multibeam Echo Sounder		
6.	Section VII, Page no. 85 and Section XI, page no 178 Schedule 'A', Sl#13(a) Shallow Water Multi Beam Echo Sounder System	Data Resolution:- Heave 1cm, Roll & Pitch 0.01° or better	Accuracy: Heave: 5cm or better, Roll & Pitch: 0.05° or better.
7.	Section VII, Page no. 85 and Section XI, page no 179 Schedule 'A', Sl#15(f) Shallow Water Multi Beam Echo Sounder System	Communications:- RS 232	Communications: RS 232 / USB / Bluetooth
8.	Section VII, Page no. 85 and Section XI, page no 179 Schedule 'A', Sl#16 Shallow Water Multi Beam Echo Sounder System	Data acquisition /Processing Software and Laptop:- Fully Rugged Laptop with latest Windows Operating system with i10 processor, 2TB HDD, 4GB dedicated graphic card, 64GB RAM and 14” Helmsman color Monitor with VGA Splitter or better.	Data acquisition /Processing Software and Laptop: Fully Rugged Laptop with latest Windows Operating system with i7 processor, 1TB SDD HDD, 4GB dedicated Graphic card, 64GB RAM and 14” Helmsman color Monitor with VGA Splitter or better.
9.	Section VII, Page no. 86 and Section XI, page no 179 Schedule 'A', Sl#18 Shallow Water Multi Beam Echo Sounder System	Interface:- Serial interface for motion data, gyro data, navigation data, pps and sound velocity data	Interface: Serial / Ethernet interface for motion data, gyro data, navigation data, pps and sound velocity data
10.	Section VII, Page no. 94 and Section XI, page no. 180 Schedule 'B', Sl#15 SIDE SCAN SONAR	Towing Cable: Towing cable shall be flexible for transportation and operation purpose. Stainless steel coated minimum length of 100 mtr.	Towing Cable: Towing cable shall be flexible for transportation and operation purpose. Stainless steel/ Kevlar cables coated minimum length of 100 mtr.
11.	Section VII, Page no. 94 and Section XI, page no. 180 Schedule 'B', Sl#18	Hardware : Fully Rugged Laptop with latest Windows Operating system with i10 processor, 2TB HDD, 4GB dedicated graphic card, 32GB RAM or better	Hardware : Fully Rugged Laptop with latest Windows Operating system with i7 processor, 1TB SDD HDD, 4GB dedicated Graphic card, 32GB RAM or better

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	SIDE SCAN SONAR		
12.	Page no 95, Section VII and Section XI, page no 181 Schedule "C", SI#3 Acoustic Doppler Current Profiler	Frequency:- Single frequency 600 KHz	Frequency: Single or Multi frequencies between 400-800 KHz
13.	Page no 95, Section VII and Section XI, page no 181 Schedule "C", SI#4 Acoustic Doppler Current Profiler	Velocity Profiling range:- 0.4m to 60m profiling.	Velocity Profiling range: 0.4m to 40m profiling or better
14.	Page no 95, Section VII and Section XI, page no 181 Schedule "C", SI#9 Acoustic Doppler Current Profiler	No. of cells :- 200 minimum,	No. of cells : minimum 128
15.	Section VII, Page no. 95 and Section XI, page no. 181 Schedule "C", SI#10 Acoustic Doppler Current Profiler	Cell Size:- 2.0 cm minimum	Cell Size: 10 cm or better
16.	Page no 95, Section VII and Section XI, page no 181 Schedule "C", SI#11 Acoustic Doppler Current Profiler	Depth Range :- 0.3-100 m	Depth Range : 0.3m to 80 m or more.
17.	Page no 95, Section VII and Section XI, page no 181 Schedule "C", SI#12 Acoustic Doppler Current Profiler	Bottom Tracking:- At least 100m	Bottom Tracking: minimum 40 mtr

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18.	Page no 95, Section VII and Section XI, page no 181 Schedule "C", SI#16 Acoustic Doppler Current Profiler	<p><u>Transducer</u></p> <p>i) Configuration:- At least 4 Beams</p> <p>ii) Communication:- RS-232/RS-485/RS-422/Ethernet</p> <p>iii) Depth rating:- 100m or better</p> <p>iv) Tilt sensor Range:- +/-150, Accuracy +/- 0.50</p>	<p>i) Configuration: minimum 4 Beams</p> <p>ii) Communication: RS-232/RS-485/RS-422/Ethernet/USB</p> <p>iii) Depth rating: Minimum 80m</p> <p>iv) Tilt sensor Range: maximum accuracy $\pm 1^\circ$ of range</p>
19.	Page no 95, Section VII and Section XI, page no 181 Schedule "C", SI#19 Acoustic Doppler Current Profiler	Accuracy : 1⁰	Accuracy: 2° or better
20.	Page no 96, Section VII and Section XI, page no 182 Schedule "C", SI#20(vi) Acoustic Doppler Current Profiler	Hardware : Fully Rugged Laptop with latest Windows Operating system with i10 processor, 2TB HDD, 4GB dedicated Graphic card, 32GB RAM or better	Hardware : Fully Rugged Laptop with latest Windows Operating system with i7 processor, 1TB SDD HDD, 4GB dedicated Graphic card, 32GB RAM or better
21.	Section VII, Page no 97, and Section XI, page no. 183 Schedule "D", SL#1(a) RTK DGPS	CHANNELS:- DISPLAY CONTROLLER Receiver For tracking GPS (L1, L2, L5), Glonass (L1, L2, L2C), Galileo, SBAS (WAAS,EGNOS, MSAS, GAGAN). Tilt sensor on base and rover (optional).	CHANNELS: 500 or more Parallel Channel Receiver for tracking GPS (L1, L2, L5), Glonass (L1, L2, L2C), Galileo, SBAS (WAAS, EGNOS, MSAS, GAGAN), Bediou (optional). Tilt sensor on base and rover.
22.	Section VII, Page no 98, and Section XI, page no. 185 Schedule "D", SL#7 RTK DGPS	Tilt Sensor (optional), GSM and Radio Modems	Tilt Sensor, GSM and Radio Modems
23.	Section VII, Page no. 97 and Section XI, page no. 184	Ports :- 1 RS232/Power port 1 Bluetooth Port	Ports: 1no. RS232 Power port

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	Schedule "D", Sl#1(g) RTK DGPS	1 Internal GSM Slot 1 Radio Port	1 Internal GSM Slot 1 Radio Port Wireless communication.
24.	Section VII, Page no. 98, and Section XI, page no. 184 Schedule "D", Sl#3 RTK DGPS	One number Controller should be supplied for Base and Rovers	DISPLAY CONTROLLER: One number Controller should be supplied for Base and Rovers. Inbuilt distance meter (Optional).
25.	Section VII, Page no. 101 and Section XI, page no. 188 Schedule "D", Sl#14(d) RTK DGPS	Hardware: Laptop with latest Windows Operating system with i10 processor, 2TBHDD, 4GB dedicated Graphic card, 8GB RAM or better	Hardware: Laptop with latest Windows Operating system with i9 processor, 1TB SDD HDD, 4GB dedicated Graphic card, 8GB RAM or better.
26.	Section VII, Page no. 102 and Section XI, page no. 189 Schedule 'E', Sl#9 DGPS Receiver	Keyboard and Display: VFD display 16 characters by 2 rows, On/Off key for one button start up or better	Keyboard and Display: VFD/LCD display 16 characters by 2 rows, On/Off key for one button start up or better
27.	Section VII, Page no. 102 and Section XI, page no. 189 Schedule 'E', Sl#10 DGPS Receiver	Operating temperature: -40 °C to +65 °C	Operating temperature: -5°C to +55°C or better
28.	Section VII, Page no. 102 and Section XI, page no. 189 Schedule 'E', Sl#12 DGPS Receiver	Waterproof Dustproof	Waterproof Dustproof Antenna
29.	Section VII, Page no 103 and Section XI, page no 190	GNSS Receiver:- Hemisphere / NovAtel / Trimble	GNSS Receiver of all reputed brand, meeting with all the specifications as per tender Schedule of Requirements.

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	Schedule "F", SI#9 'ECHOSOUNDER CUM DGPS RECEIVER'		
30.	Section VII, Page no. 103 and Section XI, page no. 190 Schedule 'F', SI#10 Echo Sounder Cum DGPS Receiver	Vertical resolution: 1 cm	Vertical resolution: 1 Cm (Depth data)
31.	Section VII, Page no. 103 and Section XI, page no. 191 Schedule 'F', SI#14 Echo Sounder Cum DGPS Receiver	RS232/RS422 output	RS232/RS422/Ethernet output
32.	Section VII, Page no. 103 and Section XI, page no. 192 Schedule 'F', SI#15 Echo Sounder Cum DGPS Receiver	GPS/Nav Integration	GPS/Nav Integration (optional)
33.	Section VII, Page no. 104 and Section XI, page no. 191 Schedule 'F', SI#17 Echo Sounder Cum DGPS Receiver	Data output: ODEC PMC dt (True Depth & Status), Atlas DESO -25, Odom Digitrac, Odom Echotrac, NMEA DBT, NMEA DBS, NMEA.	Data output: ODEC PMC dt (True Depth & Status) / Atlas / DESO -25 / Odom Digitrac / Odom Echotrac / NMEA DBT, NMEA DBS or NMEA.
34.	Section VII, Page no 106 and Section XI, Page no 193 Schedule "G", SI#23 'Single Beam Echo Sounder with Transducer'	Nominal Impedance :- 50 ohms	"Nominal Impedance: 50/60 ohms.

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35.	Section VII, Page no 108 and Section XI, Page no 195 Schedule “I”, Sl#1 Water Sampler	The standard water sampler should be simple tube type sampler which can be lowered into the water by rope. Upon reaching the desired depth, the messenger should activate the closing mechanism or release the closing mechanism, so that it closes the lid of the sampling tube in the water at that depth and sampler to be recovered by rope. To retrieve the water sample, open lid and save the water sample	The standard water sampler of any reputed brand should be simple tube type sampler which can be lowered into the water by rope. Upon reaching the desired depth, the messenger should activate the closing mechanism or release the closing mechanism, so that it closes the lid of the sampling tube in the water at that depth and sampler to be recovered by rope. To retrieve the water sample, open lid and save the water sample.
36.	Section VII, Page no 108 and Section XI, Page no 195 Schedule “I”, Sl#3 Water Sampler	Size: 1.2 litre capacity including messenger	Size: Capacity between 1.0 to 2.0 litre including messenger
37.	Section VII, Page no. 108 and Section XI, page no. 195 Schedule “I”, Sl#10 Water sampler	Empty weight: 2.0 KG	Empty weight: 2.0 / 3.0 Kg
38.	Section VII, Page no. 108 and Section XI, page no. 195 Schedule “I”, Sl#11 Water sampler	Full weight : 3.24 Kg	Full weight : Minimum 3.0 Kg and maximum 4.5 Kg
39.	Section VII, Page no 109 and Section XI, page no. 196 Schedule “J”, Sl#1 Bottom Sampler	The Bottom Sampler to be quantitative sampler with precise sampling area to achieve nearly undisturbed samples in soft grounds. It should consist of a sturdy-walled metal cabinet equipped with two spring-loaded jaws which are released by a messenger. Two light plates cover the top opening of the sampler to prevent the sample from being washed out during ascent.	The Grab type Bottom Sampler to be quantitative sampler with precise sampling area to achieve nearly undisturbed samples in soft grounds. It should consist of a sturdy-walled metal cabinet equipped with two spring-loaded jaws which are released by a messenger. Two light plates cover the top opening of the sampler to prevent the sample from being washed out during ascent.

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40.	Section VII, Page no. 109 and Section XI, page no. 196 Schedule “J”, Sl#3 Bottom sampler	Stainless steel, electro polished surface, small model manufactured from 3 mm plate with a surface area of 250 cm ² , weight approx. 5 kg	Stainless steel, electro polished surface, small model manufactured from 3 mm plate with a surface area of 225 to 250 cm ² , weight approx. 5 kg. Depth of operation: 0.5m to 25m												
41.	Technical Part – 1.1. - Qualification Criteria (ITB 32.1) – page 50	<u><i>B. If Bidder is not manufacturer:</i></u> <i>If a Bidder is not a manufacturer, but is offering the Goods on behalf of the Manufacturer under Manufacturer's Authorization Form (Section IV, Bidding Forms), the Manufacturer shall demonstrate the above qualifications (a), (b), (c) and the Bidder shall demonstrate that it has successfully completed at least 03 contracts of similar goods in the past 07 years.</i>	<u><i>B. If Bidder is not manufacturer:</i></u> <i>If a Bidder is not a manufacturer, but is offering the Goods on behalf of the Manufacturer under Manufacturer's Authorization Form (Section IV, Bidding Forms), the Bidder shall demonstrate the above qualifications (a), (b), (c) and the Bidder shall demonstrate that it has successfully completed at least 03 contracts of similar goods in the past 07 years.</i>												
42.	Technical Part – 1.1.(e) - Qualification Criteria (ITB 32.1): page 49-50	Liquid Assets : The minimum amount of liquid assets and/or credit facilities net of other contractual commitments of the successful Bidder shall be: <table border="1"> <thead> <tr> <th>SCHEDULE</th> <th>EQUIPMENTS</th> <th>Solvency (in ₹)</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Shallow Water Multi Beam Echo Sounder System with O & M (03 yrs) and CAMC (02 yrs)</td> <td>1,08,36,610</td> </tr> </tbody> </table>	SCHEDULE	EQUIPMENTS	Solvency (in ₹)	A	Shallow Water Multi Beam Echo Sounder System with O & M (03 yrs) and CAMC (02 yrs)	1,08,36,610	Bank Solvency The minimum amount of Bank Solvency shall be: <table border="1"> <thead> <tr> <th>SCHEDULE</th> <th>EQUIPMENTS</th> <th>Bank Solvency (in ₹)</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Shallow Water Multi Beam Echo Sounder System with O & M (03 yrs)</td> <td>1,08,36,610</td> </tr> </tbody> </table>	SCHEDULE	EQUIPMENTS	Bank Solvency (in ₹)	A	Shallow Water Multi Beam Echo Sounder System with O & M (03 yrs)	1,08,36,610
SCHEDULE	EQUIPMENTS	Solvency (in ₹)													
A	Shallow Water Multi Beam Echo Sounder System with O & M (03 yrs) and CAMC (02 yrs)	1,08,36,610													
SCHEDULE	EQUIPMENTS	Bank Solvency (in ₹)													
A	Shallow Water Multi Beam Echo Sounder System with O & M (03 yrs)	1,08,36,610													

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		B	Side Scan Sonar	48,81,356		and CAMC (02 yrs)	
		C	ADCP (Acoustic Doppler Current Profiler)	35,59,322	B	Side Scan Sonar	48,81,356
		D	RTK DGPS	51,80,000	C	ADCP (Acoustic Doppler Current Profiler)	35,59,322
		E	DGPS Receiver	14,40,000	D	RTK DGPS	51,80,000
		F	Echo Sounder Cum DGPS Receiver	15,39,840	E	DGPS Receiver	14,40,000
		G	Single Beam Echo Sounder With Transducer	17,62,712	F	Echo Sounder Cum DGPS Receiver	15,39,840
		H	Transducer for Echo Sounder	2,13,559	G	Single Beam Echo Sounder With Transducer	17,62,712
		I	Water Sampler	84,746	H	Transducer for Echo Sounder	2,13,559
		J	Bottom Sampler	1,60,000	I	Water Sampler	84,746
		K	FTP Server and Data Storage System	83,31,773	J	Bottom Sampler	1,60,000
		L	Hydrographic Survey Software Hysweep and Hypack	14,04,000	K	FTP Server and Data Storage System	83,31,773
					L	Hydrographic Survey Software Hysweep and Hypack	14,04,000

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			<p>The Bidder shall submit Bank Solvency certificate from a nationalized / scheduled bank in India for a minimum amount as mentioned above. The Bank Solvency certificate submitted by the Bidder shall not be older than six (06) months from the Bid Submission Last Date.</p>
43.	IFB Clause-6	<p>For submission of the bids, the bidder is required to have Digital Signature Certificate (DSC) from one of the authorized Certifying Authorities, authorised by Government of India for issuing DSC. Aspiring bidders who have not obtained the user ID and password for participating in e-procurement in this Project, may obtain the same from the website: https://eprocure.gov.in/eprocure/app. A non-refundable fee of *Rs. 5,900/-(inclusive of tax) is required to be paid (to be submitted along with other documents listed in paragraph 7 below) before the opening of the bid i.e. before 29.03.2022. The mode of payment shall be in the form of DD drawn in favour of IWAI Fund, Jal Marg Vikas on any scheduled Bank payable at Noida/New Delhi.</p> <p>*Tender fees of Rs. 5900/- is in total for one or multiple schedules.</p>	<p>For submission of the bids, the bidder is required to have Digital Signature Certificate (DSC) from one of the authorized Certifying Authorities, authorised by Government of India for issuing DSC. Aspiring bidders who have not obtained the user ID and password for participating in e-procurement in this Project, may obtain the same from the website: https://eprocure.gov.in/eprocure/app. A non-refundable fee of *Rs. 5,900/-(inclusive of tax) is required to be paid (to be submitted along with other documents listed in paragraph 7 below) before the opening of the bid i.e. before 19.04.2022. The mode of payment shall be in the form of DD drawn in favour of IWAI Fund, Jal Marg Vikas on any scheduled Bank payable at Noida/New Delhi.</p> <p>*Tender fees of Rs. 5900/- is in total for one or multiple schedules.</p>

All other terms and conditions of the Tender remains unaltered.

