Telex No : 642787 BIWTA BJ
Fax No. : 880-2-9551072
e-mail : biwta @ bttb.net.bd
Grams : AUTHORITY
Phones : 880-2-9556151-55
: 880-2-9555042,
: 9552027, 9552039.

বাংলাদেশ অভ্যন্তরীণ নৌ-পরিবহন কর্তৃপক্ষ

BANGLADESH INLAND WATER TRANSPORT AUTHORITY

No: 18.11.0000.311.14.033.19/1564 Date: 17-10-2019

Addendum-II

Name of the Tender: "Procurement of 04 Nos. 24″ Cutter Suction Dredger and Ancillary Vessel with Other Accessories" (GD-12)
Tender No. 18.11.0000.311.14.033.2019/668, dated: 29-07-2019.

Sl no	Tender clause no	Description in the tender document/ Addendum-I	Modification/Correction
01	Paragraph 08 Of Addendum-I	(i) The amount of Performance Security shall be 10% (ten percent) of the Contract Price. Another security as Bank Guarantee amounting to 5% (five percent) of the Contract Price shall be provided for operation contract at the end of warranty obligation of goods which shall remain valid for another 01 (one) year. (ii) The Supplier/Manufacturer shall have to submit an additional Performance Guarantee (PG) for another 04 (Four) years for HDPE Shore pipe and floating pipe after expiration of 01 (One) year warranty obligation. The amount of performance guarantee (PG) shall be 10% (ten percent) of the contract price of HDPE Shore pipe and floating pipe. (iii) The Supplier/Manufacturer shall have to submit an additional Performance Guarantee (PG) for another 02 (Two) years for Foam type floater after expiration of 01 (One) year warranty obligation. The amount of performance guarantee (PG) shall be 10% (ten percent) of the contract price of Foam type floater.	**This condition shall be replaced as follows:** (i) The amount of Performance Security shall be 10% (ten percent) of the Contract Price. Another security as Bank Guarantee amounting to 5% (five percent) of the Contract Price shall be provided for operation contract at the end of warranty obligation of goods which shall remain valid for another 01 (one) year. (ii) The Supplier/Manufacturer shall have to submit an additional Performance Guarantee (PG) for another 02 (Two) years for HDPE Shore pipe, floating pipe & Foam type floater after expiration of 01 (One) year warranty obligation. The amount of performance guarantee (PG) shall be 10% (ten percent) of the contract price of HDPE Shore pipe, floating pipe & Foam type floater.
02	Paragraph 09 Of Addendum-1	(i) The period of validity of the Warranty shall be 365 (three hundred sixty-five)	**This condition shall be replaced as follows:** (i) The period of validity of the Warranty shall be 365 (three hundred sixty five) days from date of

Sl no	Tender clause no	Description in the tender document/ Addendum-I	Modification/Correction
		days from date of acceptance of the Goods. (ii) The period of validity of replacement and or repair & service warrantee for HDPE Shore pipe and floating pipe shall be 05 (Five) years from the date of final acceptance of HDPE Shore pipe and floating pipe. (iii) The period of validity of replacement and or repair & service warrantee for Foam type floater shall be 03 (Three) years from the date of final acceptance of Foam type floater.	acceptance of the Goods. (ii) The period of validity of repair and or replacement warrantee for HDPE Shore pipe and floating pipe and Foam type floater shall be 03 (Three) years from the date of final acceptance of HDPE Shore pipe and floating pipe, and Foam type floater.
03	Para 1.02 of technical specification of dredger. (Page- 102)	<u>Dredging Depth</u> Maximum: 17.00 m at 45° ladder angle	<u>Dredging Depth</u> Maximum (Not less than): 17.00 m at 45° ladder angle
04	ITT 14.1(b) (i) (Page No-32)	The satisfactory completion of supply of similar goods (Class dredgers or class vessel) of minimum value Tk. 3600.00 (Three thousand six hundred) million or US$ 43.00 (Forty-three) million under maximum 3 (three) contracts in the last 5 (five) years. i.e. years counting backward from the date of publication of IFT in the newspaper.	**This condition shall be replaced as follows:** The minimum specific experience as Supplier in supply of similar Goods (Class dredgers or class vessel) of at least 01(One) contract successfully completed within the last 05 (five) years, each with a value of at least BDT 3600.00 (Three thousand & six hundred) million or US$ 43.00 (Forty-three) million. or The minimum specific experience as Supplier in supply of similar Goods (Class dredgers or class vessel) of at least 02 (Two) contract(s) successfully completed within the last 05 (five) years, each with a value of at least BDT 1800.00 (One Thousand & eight hundred) million or US$ 21.00 (Twenty one) million. or The minimum specific experience as Supplier in supply of similar Goods (Class dredgers or class vessel) of at least 03 (Three) contract(s) successfully completed within the last 05 (five) years, each with a value of at least BDT 1200.00 (One Thousand & two hundred) million or US$ 14.00 (Fourteen) million.

Sl no	Tender clause no	Description in the tender document/ Addendum-I	Modification/Correction
05	First paragraph of ITT 14.1(b) (ii) (Page No-32)	The foreign reputed dredger manufacturer must submit of its at least 20 (twenty) years' experience in manufacturing & overseas supply of class dredgers (with proven documentary evidences). The foreign reputed dredger manufacturer must submit proven satisfactory performance certificate of its class dredgers which is issued by its client (s) supplied in similar tropical countries like Bangladesh.	**This condition shall be replaced as follows:** The foreign reputed dredger manufacturer must submit of its at least 20 (twenty) years' experience in manufacturing & overseas supply of class dredgers (with proven documentary evidences). The foreign reputed dredger manufacturer must submit proven satisfactory performance certificate of its class dredgers which is issued by its client (s) supplied.

06. The Instruction to Tenderers (ITT) clause (Section-01) shall be replaced in the following manner:

ITT clause No	Description in previous tender document	Modification/correction
2. Interpretation (Section-01)	2.1 Throughout this Tender Document (a) the term "in writing" means communication written by hand or machine duly signed and includes properly authenticated messages by facsimile or electronic mail; (b) if the context so requires, singular means plural and vice versa; and (c) "day" means calendar days unless otherwise specified as working days; (d) "Tender Document ", means the Document provided by a Purchaser to a Tenderer as a basis for preparation of its Tender; (e) "Tender ", depending on the context, means a Tender submitted by a Tenderer for delivery of Goods and Related Services to a Purchaser in response to an Invitation for Tender ;	2.1 Throughout this Tender Document (a) the term "in writing" means communication written by hand or machine duly signed and includes properly authenticated messages by facsimile or electronic mail; (b) if the context so requires, singular means plural and vice versa; and (c) "day" means calendar days unless otherwise specified as working days; (d) "Person" means and includes an individual, body of individuals, sole proprietorship, partnership, company, association or cooperative society that wishes to participate in Procurement proceedings; (e) "Tenderer" means a Person who submits a Tender; (f) "Tender Document ", means the Document provided by a Purchaser to a Tenderer as a basis for preparation of its Tender; (g) "Tender ", depending on the context, means a Tender submitted by a Tenderer for delivery of Goods and Related Services to a Purchaser in response to an Invitation for Tender ;
5.6 (Section-01)	Tenderers in its own name or its other names or also in the case of its Persons	Tenderers in its own name or its other names or also in the case of its Persons in different

	in different names, shall not be under a declaration of ineligibility for corrupt, fraudulent, collusive or coercive practices as stated under ITT Sub Clause 4.3.	names, shall not be under a declaration of ineligibility for corrupt, fraudulent, collusive, coercive practices as stated under ITT Sub Clause 4.3 (or obstructive practice, in case of Development Partner) in relation to the Development Partner's Regulation/ Guidelines in projects financed by Development Partner.
14.1 (b) (Section-01)	Specific experience of satisfactory completion of supply of similar goods of minimum value stated in the TDS under maximum number of contracts stated in TDS within the period stated in TDS; and	Specific experience of satisfactory completion of supply of Goods similar to the proposed goods in at least a number of contract(s) and, each with a minimum value, over the period, as specified in TDS; and
16.5 (Section-01)	Subcontractors must comply with the provision of ITT Clause 5. For this purpose contractor shall complete the Subcontractor's information in Form PG4-1 for submission with tender.	Subcontractors must comply with the provision of ITT Clause 5. For this purpose contractor shall complete the Subcontractor's information in Form PG4-2A for submission with tender.
21.1 (b) (Section-01)	Tenderer information sheet (Form PG4-2) as furnished in Section 5: Tender and Contract Forms;	Tenderer information sheet (Form PG4-2) and Subcontractor Information (Form PG4-2A) as furnished in Section 5: Tender and Contract Forms;
23.9 (Section-01)	The Tenderer wishing to offer any discount shall indicate the methodology for their application in the Tender Submission Letter (Form PG4-1) for being awarded of more than one lot.	a) Tenderers shall quote any unconditional discount in the Tender Submission Letter as stated under ITT Sub Clause 23.9 (b); b) Tenderers wishing to offer any unconditional discount shall be equally applicable on all the items of price schedule after arithmetical correction.

07. In Section-01of Tender document, an additional clause having no 4.3(e) shall be added to the respective clause as

"obstructive practice" (applicable in case of Development Partner) means deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede an investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and /or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation.

08. In Section-01of Tender document, an additional clause having no 26.1(d) shall be added to the respective clause as

"adequacy of minimum liquid assets i.e. working capital substantiated by Audit Reports or Bank Statement or credit line(s) substantiated in the format as specified (Form PG4-6A), without alteration as stated under ITT Sub Clause 15.1(a);"

09. 02 (Two) additional Forms regarding Subcontractor Information (Form PG4-2A) and Bank's Commitment for Line of Credit (Form PG4 – 6A) shall have to be added to the tender document which has been attached to this amendment.

10. Tender Submission Letter (Form PG4 – 1) shall be replaced by new Format of Tender Submission Letter (Form PG4 – 1) which has been attached herewith.

11. Serial 15 of Addendum-I shall be replaced as follows

Each dredger shall be equipped with following online monitoring system:

a. General Specification:

The system should have RTK(Real Time Kinematic) heading GNSS (Global Navigation Satellite System) with beacon tracking capability; inclinometers/angle sensors and on-board software which should be able to work with a RTK GNSS base station both using radio as well as cellular RTK communication. This system should be able to work with a predefined design surface providing guidance to dredger operator for accurate dredging and should be able to update and store the as-built dredging surface in real time during operation. It should provide requisite software in office to view remote dredger in real time - the views and data will be similar to what the dredge operator is viewing, that is position of dredger and cutter depth relative to the bathymetry survey and the design surface. All parts (sensors, GNSS & & software) shall be supplied preferably from one manufacturer. Tenderer shall submit manufacturer Authorization. Letter for online monitoring system. Details Specification has given below:

Sl no	Item	Quantity (unit)	Characteristics	Specification
i	**GNSS Rover**	**1 no.**	Satellite Tracking	Should be Capable of tracking, GPS, GLONASS, GALILEO, BeiDou DGNSS Corrections via MSK Beacon Reception , 2 Channel SBAS (WAAS/EGNOS/MSAS/GAGAN)
			Measuring Modes	Real-time Kinematic
			Number of Channels	400 or more
			Real Time Accuracy for Kinematic	
			Horizontal	8 mm + 1 ppm or Better
			Vertical	15 mm + 1 ppm or Better
			Code Differential Accuracy	25 cm + 1 ppm or Better
			GNSS Antenna	2 nos separate antenna with each GNSS Rover for heading. Should be able to work with MSK Beacon. To be supplied with 10 meter antenna cables.
			Memory	6GB Internal memory, Should have expandable facilities through memory stick
			Communication	Should have 3 serial ports or more Mini USB, Ethernet port, pps output or Better Should have inbuilt Wi-Fi, Bluetooth, Radio, cellular in a single housing as GNSS Receiver.
			Physical and Environmental Specification	
			Operating Temperature of GNSS Receiver	-40°C to +65°C or Better

			Storage Temperature of GNSS Receiver	-40°C to +95°C or Better
			Shock	MIL-STD 810F or Better
			Position Update Rate	20 Hz or Better
			Water and Dust	IP67 water proof, Should be Dust proof or Better
			NMEA output	Support for NMEA output.
			RTK Corrections data format input/output	At least RTCM 2.x, 3.x, 3.1 input & output, CMR+ CMRx
			Power	
			Internal	Removable Internal battery for minimum 6 hours rover operation
			External Power	9-36 V DC external power input. Should have Overvoltage protection
			System	
			On-board keyboard and display	OLED display with 4 arrow keys (up, down, left, right) and OK key or Better
ii	**Dual Axis Angle Sensors**	**1 set (Each set consists of 2 nos)**	**Dual Axis Angle Sensors**	
			Sensor Enclosure	E-Coated aluminum 6061 equivalent alloy. Stainless Steel backing or Better
			Connection Port	Minimum 2 x Deutsch DT series 4-pin male compatible
			Signal Output	CAN bus J1939.Pin 1:GND, PIN 2: V+, Pin 3:CAN Low, Pin 4: Can High or more
			Range	+/- 180° pitch, +/- 75° roll, +/- 2 G acceleration, +/- 200°/s rate of rotation
			Output Rate	1, 25, 50, 250 Hz configurable
			Low dynamic tilt accuracy	+/- 0.01° Less than 5 metres per second
			High dynamic tilt accuracy	+/- 0.5°
			Dynamic Accuracy Limit	300°/s or Better
			Operating Vibration Limit	5 G peak or Better
			Supply Voltage	9 ~ 30 V DC
			Power Supply Protection	Any polarity up to 36 V
			Environment Protection	IP67 or Better
iii	**Rugged Computer to Run On-dredge Marine Software**	01 No	Rugged Computer	Rugged vehicle type computer running windows 10 & UPS with a separate screen with OEM specified specification to run on-dredge Marine Software with power cable carrying bag and other related accessories
iv	**On Dredge Software**	01 No	The software should supports visualization and monitoring of the angle and position of the ladder and cutter head.	
			It also should shows the absolute position of the dredge head in relation to the surveyed and any number of design surfaces.	

			The working surface should be updated with the dredged depths in real time and displayed in plan, profile and 3D views.	
			Over-dredge and under-dredge tolerances can be set and are visible on the profile view of the dredge head.	
			The software should support customizable interface: Multiple monitors, with independent layouts can be tailored to the needs of the dredge operator. A color-coded plan view and 3D rendering highlights high and low spots.	
			The surface Digital Terrain Model (DTM) is updated in real time registering the progress of the dredging work showing depth, differential and production models all updated according to progress of the cutter head.	
			Should support Continuous data logging for as build and volume reports.	
			Should support Dredge tolerance visualization provides guidance for accurate, efficient dredging productivity.	
			Should be configurable by Administrator who can configure the screens for a specific workflow/user and lock it down for the operator, this helping to work on a preconfigured manner without any obstacle.	
			Import or build project design and survey models in the office or field.	
			Should Supports RTK for precise tide and heave calculation.	
v	**GNSS Base**	**01 No**	**Measurements Specification**	
			Satellite Tracking	Should be Capable of tracking, GPS, GLONASS, GALILEO, BeiDou or more
			Measuring Modes	Real-time Kinematic
			Number of Channels	400 or more
			Real Time Kinematic Accuracy	
			Horizontal	8 mm + 1 ppm or Better
			Vertical	15 mm + 1 ppm Better
			Code Differential GPS Positioning	
			Horizontal	25 cm + 1 ppm or better
			Vertical	50 cm + 1 ppm or better
			GNSS Antenna	Modular receiver and antenna
			Others	Tripod, Tribrach with optical plummet and Tribrach Adaptor for Base GNSS- 01 Set to be supplied.
			Communication	Minimum 2 External Power ports (Power ports should not be connected internally), 1 Serial Port, 1 lemo port, Bluetooth, Ethernet. Base Station should be configurable using Ethernet port
				External 35watt UHF radio for RTK Base.
			Physical and Environmental Specification	

			Operating Temperature for GNSS	-40°C to +65°C or Better
			Storage Temperature for GNSS	-40°C to +75°C or Better
			Position Update Rate	upto 20 Hz
			Water/Dust	IP67 1m water immersible/ Should be Dust proof or Better
			Power	
			Internal Battery	at least 10 Hours
			External Power	Cable to connect the system to a 12v battery should be supplied.

b. **Software Supply: For 04 Dredgers.**

i.	**Remote Monitoring Software in Office providing real time field information to office when field dredgers are connected to office through Internet using cellular or some other communication**	01 No.	Should be able to view a remote dredger operation in real-time
			The views and data will be similar to what the dredge operator is viewing i.e. position of dredger and cutter depth relative to the bathymetry survey and the design surface.
			The office software can view individual dredgers as required.
			Tracking of each Dredgers productivity from Office computer

Country of origin for online monitoring system- USA/CANADA/JAPAN/EU Countries/Australia/ UK/ New Zealand/Mexico

c. Local Training on RTK-GPS online monitoring system is to be arranged for 10 (ten) BIWTA engineers for 10 (ten) days. Accommodation, food, transport and all other allowances to be borne by the supplier.

12. The word 'Tk/Taka' mentioned at anywhere of Tender Document shall be replaced by 'BDT'.

This addendum shall be the integral part of the tender document. All other terms & conditions shall remain unchanged.

-sd-
(Md. Abdul Matin)
Chief Engineer (Dredging)
&
Project Director

Distribution:

1. Ananda Shipyard & Slipways Ltd. 10/1 (9th floor), City Heart, 67, Naya Paltan, Dhaka-1000. Phone-PABX-+880-2-9352031, Fax-+88-02-8312681, E-mail-ananda@anandagroup.biz
2. China Harbour Engineering Company Limited. Level-14, NB Tower, 40/7, North Avenue, Gulshan-2, Dhaka, Bangladesh. Tel- 02-9886888, Fax-02-9886988, E-mail-checbd@checbd.com

3. Karnafuly shipbuilders limited. 944/A, Strand road, Majirghat, Chittagong, Bangladesh. tel-880-31-616869, Email- ksblbd@gmail.com
4. Inai Kaira SDN BHD, Level 3, Bangunan Palm Grove, No 14, Jalan Glenmarie Sek U1, Persiaran Kerjaya, Hicom-glenmarie Industrial Park, 40150 Shah Alam, Selangor, Malaysia.
5. Dockyard and Engineering Works Ltd. Bangladesh Navy, Sonakanda, Bandar, Narayangonj, Bangladesh. Tel-88-02-7661033, Fax-88-02-7661027, Email-dewltdbd@yahoo.com
6. China National Machineries IMP & EXP Corporation, Fuchengmewai Avenue, Beijing 100037, China, Tel- 0086-10-68991137, Email- qubei@cmc.genertec.com.cn.

17/10/19

Chief Engineer (Dredging)
&
Project Director