

**Director General Bangladesh Coast Guard, Agargaon
Administrative Area
Sher-e-Bangla Nagar, Dhaka-1207**

**TENDER DOCUMENT
FOR THE PROCUREMENT OF
GOODS (NATIONAL)**

Supply and Installation of 01 Set Desalination Plant with accessories as per technical specification in section-7.

Invitation for Tender No: 44.08.2680.050.02.043.18.682 Date: 13 Sep 2018.

Tender Package No: GR (ENG-63)

SECTION 2. TENDER DATA SHEET

ITT Clause	Amendments of, and Supplements to, Clauses in the Instruction to Tenderers
A. GENERAL	
ITT 1.1	The Purchaser is represented by: Director General, Bangladesh Coast Guard, Agargaon Administrative Area, Sher-e- Bangla Nagar, Dhaka-1207
	The Name and identification number of Tender are: Supply and Installation of 01 set Desalination Plant with accessories as per technical specification in section-7
ITT 3.1	The source of public fund is GoB
ITT 3.3	The name of the Development Partner is: N/A
ITT 5.1	Tenderers from the following countries are not eligible: N/A.
ITT 6.1	Goods and Related Services from the following counties are not eligible: N/A.
B. TENDER DOCUMENT	
ITT8.2	The following are authorised agents/offices of the Procuring Entity for the purpose of issuing the Tender Document: office of the Director Engineering, Bangladesh Coast Guard, Agargaon Administrative Area, Sher-e- Bangla Nagar, Dhaka-1207
ITT 9.1	For <u>Tender submission purposes</u> ,the Purchaser's address is: Attention: Engineering Directorate, Bangladesh Coast Guard Address: Bangladesh Coast Guard Headquarters, Agargaon Administrative Area, Block-E, Plot-12/B, Sher-E-Bangla Nagar, Dhaka-1207. Telephone: 9140722 Facsimile number: 02- 9140092 Electronic mail address: eng_dte@coastguard.gov.bd
ITT 10.1	Pre- Tender meeting shall be held: NA
C. QUALIFICATION CRITERIA	
ITT 14.1(a)	The Tenderer shall have a minimum of 03 years of overall experience in the supply of Ordnance equipment, machinery or related items.
ITT 14.1(b)	The satisfactory completion of 04 in no supply of similar goods and related services within last 02 years.
ITT 14.1(c)	Minimum 00 years experience in the supplying of similar goods and related service.
	The tenderers shall have valid ISO 9001-2015 certificate.

ITT 15.1(a)	The minimum amount of liquid asset or working capital or credit facility from bank TK 1,50,00,000/0 (Taka one core fifty lakh only) proof of such claim to be submitted.
D. PREPARATION OF TENDER	
ITT 21.1(i)	<p>The Tender prepared by the tenderer shall comprise the following additional documents:</p> <ul style="list-style-type: none"> a. Supplier's invoice showing Goods' description, quantity, unit rates, total amount; b. Tender Submission sheet. c. Price schedule. d. The completed Specifications Submission and Compliance Sheet. g. Attested copy of valid trade license. h. Original/Printing catalogue to be provided with the offer. j. Attested copy of latest income tax certificate. k. Attested copy of latest VAT registration certificate. l. Manufacturer authorization letter. m. Warranty Certificate. n. Proof of Bank solvency. p. Tender Security. q. ISO 9001-2015 certificate.
ITT 23.1	Alternatives will not be permitted. NA
ITT24.3	Tenders are being invited for a single lot.
ITT 24.8	<p>The price for the following particular item must be quoted by the Tenderers</p> <p>Supply and Installation of 01 set Desalination Plant with accessories as per technical specification in section-7</p>
ITT 28.1(f)	Manufacturer's Authorization is required.
ITT 29.1	The Tender Validity period shall be 120 days.
ITT 31.1	The amount of the Tender Security shall be Tk 2,75,000/00 (Taka two lakh seventy five thousand only) In favor of Ayon & Beyon Kormokorta by pay order.
ITT36.1	In addition to the original of the Tender shall be submitted 01 copy clearly mark it "ORIGINAL". and other 01 copy clearly mark it "COPY"
E.SUBMISSION OF TENDER	
ITT 37.2	<p>The inner and outer envelopes shall bear the following additional identification marks: To be addressed to Engineering Directorate, Bangladesh Coast Guard</p> <p style="padding-left: 40px;">To bear the name of the Tender Name</p> <p style="padding-left: 40px;">To bear the name and address of the Tenderer;</p>

	To bear a statement "DO NOT OPEN BEFORE".
ITT 38.1	For <u>Tender submission purposes</u> ,the Purchaser's address is: Attention: Engineering Directorate, Bangladesh Coast Guard Address: Bangladesh Coast Guard Headquarters, Agargaon Administrative Area, Block-E, Plot-12/B, Sher-E-Bangla Nagar, Dhaka-1207. Telephone: 9140722 Facsimile number: 02- 9140092 Electronic mail address: eng_dte@coastguard.gov.bd The deadline for submission of Tenders is 1200 hrs on 07 October 2018.
ITT 38.3	For <u>Tender submission purposes</u> only, the Procuring Entity's address is: Engineering Directorate, Bangladesh Coast Guard Address: Bangladesh Coast Guard Headquarters, Agargaon Administrative Area, Block-E, Plot-12/B, Sher-E-Bangla Nagar, Dhaka-1207
F. OPENING AND EVALUATION OF TENDERS	
ITT44.1	The Tender opening shall take place at Engineering Directorate, Bangladesh Coast Guard Address: Bangladesh Coast Guard Headquarters, Agargaon Administrative Area, Block-E, Plot-12/B, Sher-E-Bangla Nagar, Dhaka-1207 Time & Date: 1230 hrs on 07 October 2018.
G. Contract Award	
ITT 53.1	The maximum percentage by which quantities per item may be increased is: 20%. The maximum percentage by which quantities per item may be decreased is: 20%.
ITT 55.1	The amount of Performance Security shall be 10% (as pay order/crossed cheque) of the Contract Price in favour of Ayon Bayon Kormokorta by pay order, Coast Guard Headquarters. The performance security will return as per following sequence: a) After warranty period 60%. b) One year after warranty period 20%. c) Rest of the amount will be paid after two years from the warranty period, deducting the penalty (if any) as per Para 13.

Section 4. Particular Conditions of Contract

GCC 1.1(n)	The Procuring Entity is Bangladesh Coast Guard, Agargaon Administrative Area, Block-E, Plot-12/B, Sher-E-Bangla Nagar, Dhaka-1207 represented by Director General .
GCC 1.1(s)	The site of delivery is: Bangladesh Coast Guard Headquarters, Agargaon Administrative Area, Sher-e-Bangla Nagar, Dhaka-1207.
GCC 3.1	<p>For notices, the Procuring Entity's contact details shall be: Attention: Office of the Engineering Directorate Address : Office of the Engineering Directorate , Bangladesh Coast Guard, Agargaon Administrative Area, Sher-e- Bangla Nagar, Dhaka-1207 Facsimile number: 02- 9140092</p> <hr/> <p>For notices, the Supplier's contact details shall be: Attention: Office of the Engineering Directorate Address: Office of the Engineering Directorate , Bangladesh Coast Guard, Agargaon Administrative Area, Sher-e- Bangla Nagar, Dhaka-1207 Telephone: 9144351 Facsimile number: 02- 9140092 Electronic mail address: eng_dte@coastguard.gov.bd</p>
GCC 7.1(i)	<p>The following documents shall also be part of the Contract:</p> <ol style="list-style-type: none"> a. Acceptance of Notification of Award b. Any Negotiation Correspondences c. Manufacturer's Authorization Letter d. Classification society Certificate e. Valid Trade License f. Income Tax Certificate g. Bank Solvency Proof h. Warranty Certificate j. Experience Proofs
GCC 8.1	The scope of Supply shall be defined in: "as per se section 6, Schedule of Supply"
GCC 10	<p>The Supplier or the Subcontractor that is a national of, or registered in, the following countries are not eligible: NA</p> <hr/> <p>Goods and related services to be supplied shall not have their origin in the following countries: NA</p>

GCC 20.2	<p>The packing, marking and documentation inside and outside the packages shall be commercial pack. The outer packing may be clearly marked on at least four slides as follows:</p> <ol style="list-style-type: none"> a. Name and address of Procuring Entity b. Name of the Supplier C. contract Description d. Final Destination/Delivery Point e. Gross weight f. Package number of total number of packages g. Brief description of the content h. Any special lifting instructions j. Any special handling instructions
GCC 21.1	<p>The documents to be furnished by the Supplier shall be as follows:</p> <ol style="list-style-type: none"> a. Copies of Supplier's invoice showing goods' description, quantity, unit price, total amount; b. Attested copy of valid trade licence.
GCC 25.3	<p>Full payment will be made in local currency after satisfactory test/trial and final acceptance by Bangladesh Coast Guard.</p>
GCC 30.1	<p>Test and Trial of Bullet Proof Jacket will be carried out by BCG in presence of the supplier representative. A test-trials certificate in this regard is to be signed by the supplier's and BCG representative(s).</p>
GCC 31.3	<p>The Warranty Period shall be : 12 months</p>
GCC 31.7	<p>During the warranty period, if any of Bullet proof Jacket is found non - operational for any action pending by the supplier, the warranty period will be extended for the same period. The warranty covers all parts and labour (including service engineer's cost) throughout the warranty period.</p>
	<p>The amount of Liquidated Damages is 0.5 percent of the contract value of the undelivered Goods or any part thereof delivered after expiry of the Delivery and Completion Schedule or extended Delivery and Completion Schedule, as applicable, per day of delay.</p> <p><u>Guide to application of GCC Sub Clause 33.1 above</u></p> <p>[Liquidated damages is equivalent to an amount to be determined in accordance with the following formulae</p> $T = V \times P \times n$ <p>Where;</p> <p>T = Total amount of Liquidated Damages</p> <p>V= Contract Value of undelivered Goods or any part thereof, delivered after expiry of the Delivery and Completion Schedule or extended Delivery and Completion Schedule, as applicable</p> <p>P = Percent-rate at which the Liquidated Damages shall be imposed per day of delay</p> <p>n = No of days delayed for delivery of the undelivered Goods or any part thereof, after expiry of the Delivery and Completion Schedule or extended Delivery and Completion Schedule, as applicable.</p>

	The maximum amount of Liquidated Damages for the undelivered Goods or any part thereof is 10 percent of the final Contract Price of the whole of the Goods and related services.
GCC 42.3(b)	Arbitration shall take place in: Engineering Directorate, Bangladesh Coast Guard Headquarters, Dhaka, Bangladesh

Section 6. Schedule of Requirements

Invitation for Tender No: **44.08.2680.050.02.043.18.682** Date **13 Sep 2018**
 Tender Package No: **GR (ENG-63)**

A. List of Goods and Delivery Schedule

Item No.	Description of Item	Unit of Supply	Quantity of Units required	Point of Delivery	Date Required (in weeks)
1	3	3	3	4	6
Purchaser's Option for delivery terms is:					
	Supply and Installation of 01 set Desalination Plant with accessories as per technical specification in section-7	QTY	01 set	After Initial Inspection by CI&QC (CGHQ) the items are to be delivered BCG Base Mongla or any place decided by CGHQ	16 Weeks

SECTION-7

TECHNICAL SPECIFICATION OF DESALINATION PLANT WITH ACCESSORIES

1. **Name of the Equipment.** Desalination Plant with accessories.
2. **Purpose.** Desalination Plant will be used as purifying the water of BCG Base Mongla Annex
3. **Quantity.** : One (01) Complete set.
4. **Capacity** :
 - a. Pretreatment Capacity : Not less than 5 m³/h.
 - b. RO Capacity : Not less than 2 m³/h.
 - c. Operating hour : Not less than 16 h per day
5. **Year of Manufacture.** : 2018 or later.
6. **Qualification / Eligibility of Bidder.** Original manufacturer of the Desalination Plant with Accessories sets agents/ dealers can submit quotations through their authorized local agents in Bangladesh. In case of offer from authorized agents/ dealers, following certificates from the Original Equipment Manufacturer (OEM) are to be submitted with the offer:
 - a. Authorization certificate.
 - b. Warranty certificate.
 - c. Guarantee certificate for supplying of spares.
7. **Scope of Supply.** 01 in Desalination Plant with accessories set is to be supplied as per the specifications enumerated in the subsequent paragraphs. The Desalination plant set and associated accessories should be complete with all standard accessories, attachments and ready in all aspect for operation after installation at the site. The scope of supply shall include:
 - a. Desalination Plant set.
 - b. Control and Monitoring panel.
 - c. Supply breaker .
 - d. Necessary Cables (Power cable and Control cable).
 - e. Necessary pipings & Fittings and associated ancillary works.
 - f. Installation supervision, test and trial.
 - g. Training.
8. **Technical Specification.**

S No	Name of Item	Specification		
1)	River Water Intake Pump	1.	Type	Submersible type centrifugal pump for turbid, corrosive & saline river water.
		2.	Quantity	02 Nos
		3.	Flow (Q) In L/S	3.78-7.78
		4.	Head (H) In Meter	14 Meter
		5.	MOC	SS
		6.	Brand and Model	To be mentioned
		7.	Country of Manufacture	USA, UK, Australia, Canada, Taiwan, EU

		8.	RPM	2760
		9.	Electric Connection	230v, 50 Hz.
2)	Floating Structure For Intake Pump	1.	Type	Floating and movable.
		2.	Quantity	01 Set
		3.	MOC	Floating arrangement constructed by combination of high density polyethylene HDPE pipe & ss profile.
3)	River Water Intake Pipeline	1.	Diameter	Not less than 110 mm
		2.	Quantity	250 M
		3.	Length	Not less than 250 feet
		4.	Origin	Bangladesh
		5.	MOC of Pipe	HDPE
4)	Bar Screener For River Water	1.	Type	Plain / Basket type
		2.	Quantity	01 Pc
		3.	Maximum Flow (Q) In M3	10 m ³ /h
		4.	Materials	Ss304
		5.	Origin	Local
5)	Stilling Tank	1.	Type	RCC
		2.	Quantity	01 unit
		3.	Capacity In M3	10 M3
		4.	Drain Valve	1 Pc
6)	Alum Dosing System	1.	Type	Submersible type centrifugal dosing pump for mixing & agitation.
		2.	Quantity	02 Nos
		3.	Flow (Q) In L/S	2.78-3.85
		4.	Head (H) In Meter	10 Meter
		5.	MOC	SS
		6.	Brand	To be mentioned
		7.	Country Of Manufacturing	USA, UK, Australia, Canada, Taiwan, EU
		8.	RPM	2760
		9.	Electric Connection	230v, 50 H
		b) Dosing Tank		
		1.	Capacity	300 Liter
		2.	MOC of Tank	HDPE
7)	Lime Dosing System	a) Dosing Pump		
		1.	Type	Submersible type centrifugal dosing pump for mixing & agitation.
		2.	Quantity	02 Nos
		3.	Flow (Q) In L/S	2.78-3.85
		4.	Head (H) In Meter	10 Meter
		5.	MOC	SS
		6.	Brand	To be mentioned
		7.	Country of Manufacturing	USA, UK, Australia, Canada, Taiwan, EU
		8.	RPM	2760
		9.	Electric Connection	230v, 50 H
		b) Dosing Tank		
		1.	Capacity	300 liter
		2.	Quantity	01nos

		3.	MOC of Tank	HDPE
8)	Flocculent Dosing System	a) Dosing Pump		
		1.	Type	Mechanical actuated diaphragm type with adjustable stroke.
		2.	Quantity	02 No
		3.	Flow (Q)	4 – 12 LPH (Liter per hour)
		4.	Max. Pressure In PSI	50-100
		5.	Brand	To be mentioned
		6.	Country of Origin	Usa, Uk, Australia, Canada, Eu Country
		7.	Power Requirement	220 Volts, 50 Hz,
		b) Dosing Tank		
		1.	Capacity	60 liter
		2.	Quantity	01 nos
3.	MOC of Tank	HDPE		
9)	Flash Mixing System	a) Mixing Tank		
		1.	Volume	1000 Ltr.
		2.	Quantity	01 No
		3.	MOC	RCC
		b) Mixing System		
		1.	Type	Mixing propeller with gear head motor.
		2.	Quantity	01Nos
		3.	MOC	Ss-316
4.	Electric Connection	3 Phase, 2.2 kW		
10)	Clarifier	Clarifier		
		1.	MOC OF Tank	RCC
		2.	Quantity	01 Lot
		3.	Capacity	10 M3
		4.	Tube Settler	7 Bundle
		5.	Tube Settler Origin	To be mentioned
		6.	Tube Settler Materials	Fiber /PVC
		7.	Tube Settler Mounting Structure	Ms Angle + Sheet
		8.	Drain Valve For Sludge Drain Out	01 Pc
11)	Sludge Holding Tank And Drying Bed	Sludge holding tank and drying bed		
		1.	Volume Of Tank	2 M ³ ,
		2.	Quantity	2 nos
		3.	MOC	RCC
		4.	Drain Valve	02 nos
12)	Transfer Pump From Settling Tank To Mixing Tank/ Drying Bed	Transfer Pump		
		1.	Type	Submersible sewage pump for turbid, corrosive& saline river water.
		2.	Quantity	02 nos
		3.	Flow (Q) In L/S	3.78
		4.	Head (H) In Meter	8 Meter
		5.	Brand	To be mentioned
		6.	Country of Manufacturing	USA, UK, Australia, Canada, Taiwan, EU Country
		7.	RPM	2760
		8.	Input Voltage	230v, 50 Hz.

13)	Clarified Water Reservoir	1.	Volume Of Tank	10 m ³
		2.	Quantity	01 nos
		3.	MOC	RCC
		4.	Drain Valve	1 Pc
14)	Ro Pre-Treatment System	a) Filter Feed Pump		
		1.	Type	Centrifugal pump
		2.	Quantity	02 nos
		3.	Flow (Q) in m ³	8-16 M3/H
		4.	Head (H) In Meter	21.9 Meter
		5.	Power	2.2 kW, 380v, 50 Hz
		6.	Brand	To be mentioned
		7.	Country of Manufacturing	USA, UK, Australia, Canada, Eu Country.
		8.	RPM	2900 (± 10)
		b) Multi Media Filter		
		1.	MOC Of Vessel	Fiber Reinforced Plastic (FRP)
		2.	Quantity	01 No
		3.	Capacity Of Filter Vessel	5 M3/H
		4.	Height of Vessel	72 inch
		5.	Diameter of Vessel	30 inch
		6.	Brand Name of Vessel	To be mentioned
		7.	Type of Media	Anthracite
		8.	Origin	USA, UK, Australia, Canada, India, EU Country
		9.	MOC of Frontal Pipe Network	UPVC
		10.	Type Of Valve	Multiport Valve
		11.	Service Of Frontal Pipe Work	Backwash-Rinse-Service
		c) Activated Carbon Filter		
		1.	MOC of Vessel	FRP
		2.	Quantity	01 No
		3.	Capacity of Filter Vessel	5 M3/H
		4.	Height of Vessel	72 inch
		5.	Diameter of Vessel	30 inch
		6.	Brand Name of Vessel	To be mentioned
		7.	Type of Media	Activated Carbon
		8.	Origin of Activated Carbon	USA, UK, Australia, Canada, India, EU Country
		9.	MOC of Fontal Pipe Network	UPVC
		10.	Type of Valve	Multiport Valve
		11.	Service of Frontal Pipe Work	Backwash-Rinse- Service
d) Cartridge Filter Unit				
1.	MOC of Housing	PVC/HDPE		
2.	Capacity of Filter Housing	5 M3/H		

		3.	Quantity	01 nos
		4.	Height of Vessel	20 inch
		5.	Diameter of Vessel	10 inch
		6.	No. of Filter in housing	5 nos
		7.	Brand Name of Housing	To be mentioned
		8.	Origin	USA, UK, Australia, Canada, EU Country
		9.	Type of Filter	PP
		e) Ro High Pressure Pump		
		1.	Type	Vertical multi stage centrifugal pump
		2.	Quantity	02 nos
		3.	Flow (Q) In M3	5 m ³ /h
		4.	Head (H) In Meter	160 meter
		5.	Power	5.5 kW, 380v, 50 Hz
		6.	Brand	To be mentioned
		7.	Country of Manufacturing	USA, UK, Australia, Canada, EU Country
		8.	RPM	2900 (±10)
15)	Antiscalant Dosing System	a) Dosing Pump		
		1.	Type	Type mechanical actuated diaphragm type with adjustable stroke
		2.	Quantity	02 nos
		3.	Flow (Q)	5 LPH
		4.	Max. Pressure In Bar	7 Bar
		5.	Brand	To be mentioned
		6.	Country of Manufacturing	USA, UK, Australia, Canada, EU Country
		7.	Power Requirement	220 Volt, 50 Hz
		b) Dosing Tank		
		1.	Capacity	60 liter
		2.	Quantity	01 nos
		3.	MOC of Tank	HDPE
		4.	Qty of Dosing Tank	01 No
16)	Reverse Osmosis (Ro) Pressure Vessel	Ro Pressure Vessel		
		1.	MOC	Fiber Reinforced Plastic (FRP)
		2.	Quantity	01 Nos
		3.	Diameter of RO Housing	8"
		4.	No of Element of Housing	3 Element
		5.	Max. Pressure In PSI	300
		6.	Brand	To be mentioned
		7.	Country of Manufacturing	USA, UK, Australia, Canada, EU Country
17)	Reverse Osmosis (Ro) Membrane	Ro Membrane		
		1.	Type	Sea water membrane
		2.	Quantity	3 Nos
		3.	Diameter of RO Membrane	8"

		4.	Length of RO Membrane	40"
		5.	Brand	To be mentioned
		6.	Country of Manufacturing	USA, UK, Australia, Canada, EU Country
18)	Electro Magnetic Equipment	1.	Electro Mechanical Equipment	Pressure switch, magnetic conductor, overload relay, timer, automatic star delta starting system, VFD, indicator lamp and necessary equipment to run the plant efficiently.
		2.	Quantity	01 Lot
		3.	Brand	To be mentioned
		4.	Country of Manufacturing	USA, UK, Australia, Canada, EU Country
19)	Pipe And Fittings	1.	Materials	Food Grade, 40 Schedule UPVC & Fitting.
		2.	Quantity	01 Lot
		3.	Color	White / Gray
		4.	Origin	China
		5.	Brand	To be mentioned
20)	Water Quality Monitor	a) Conductivity Monitor		
		1.	Quantity	01 Unit
		2.	Type	Online
		3.	Operating Temp	0 ~ 500c
		4.	Installation Mode	Panel mounted
		5.	Display	3-1/2 bit led
		6.	Usage	It can measure water quality
		7.	Brand	To be mentioned
		8.	Origin	Taiwan/USA/EU
		b) Total Dissolved Solid Monitor		
		1.	Quantity	01 Unit
		2.	Type	Online
		3.	Operating Temp	0 ~ 500c
		4.	Installation Mode	Panel Mounted
		5.	Display	3-1/2 Bit Led
		6.	Usage	It can measure water quality
		7.	Brand	To be mentioned
		8.	Origin	Taiwan/USA/EU
21)	Skid	1.	MOC of Skid	Ms Angle & U Channel.
		2.	Quantity	01 Lot
		3.	Type of Skid	Standard skid will be fabricated with mild steel and epoxy painted.
22)	CIP System	a) CIP Pump		
		1.	Type	Centrifugal Pump
		2.	Quantity	01 Unit
		3.	MOC	SS
		4.	Flow (Q) in m ³	2.5 M3/H
		5.	Head (H) In Meter	40 Meter
		6.	Power	1.5 Kw,50 Hz
		7.	Brand	To be mentioned
		8.	Country of Manufacturing	USA, UK, Australia, Canada, EU Country

		b) Cartridge Filter Unit		
		1.	MOC of Housing	PVC/HDPE
		2.	Quantity	01 Nos
		3.	Capacity	2.5 M3/H
		4.	Brand	To be mentioned
		5.	Origin	USA, UK, Australia, Canada, Russia, EU Country
		6.	Type of Filter	PP
		c) Heater		
		1.	Power	3 kW
		2.	Quantity	01 nos
		3.	MOC	SS
		4.	Qty	01 no
		d) CIP Tank With Flowmeter & Thermometer		
		1.	Capacity	500 Liter
		2.	Quantity	01 lot
		3.	MOC of Tank	HDPE
		4.	Qty of CIP Tank	01 no
23)	Electrical Work	1.	50 KVA, 3 Phase distribution Transformer, LT Panel, Motor Control Panel, Plant Automation Panel and Internal Electrification works. Detail specification (Brand, Model, Country of origin etc) of the equipment is to be mentioned separately.	01 lot
24)	Functional Building	1.	All Civil Works For Plant Room Including WTP Stilling Tank, Flash Mixing Tank, Lamella Clarifier, CWR Execute Works as per specification, Drawing, Site Requirements. Dimension of the room is to be mentioned clearly. Materials are to be used as per purchaser choice.	01 Job
		2.	MOC	RCC & BRICK

9. **Spare parts for 02 year post warranty period.**

S No	Name of Item	Qty(Per Month)	Qty 24(Month)	Unit Price	Total Price
01	05 Micron PPM Filter	5 Pcs	120 Pcs		
02	Anti-Scaling Dosing Chemicals	3 Liter	72 Liter		
Grand Total					
In Word:					

10. **Maintenance (after 3000 hour running operation).**

S No	Name of Item	Qty	Unit Price	Total Price
01	Graded Sand	200 kg		
02	Manganese Media	60 Kg		
03	Activated Carbon	100 Kg		
04	RO Membrane	04 Pcs		
05	UPVC Fittings	01 Lot		
Grand Total				
In Word:				

11. **Water Parameter.** At any time water will be tested in any govt authorised organization where the water parameter will not be less than the following standard. The test will be conducted jointly by user and supplier but the cost will bear by the supplier. Such test will be carried out once in 03 months:

Parameter (unit)	Bangladesh Standard (GoB, 1997)	WHO guideline value
pH	6.5-8.5	--
TSS (mg/l)	10	--
TDS (mg/l)	1,000	--
True Color (Pt-Co unit)	15	--
Turbidity (NTU)	10	--
Chloride (mg/l)	150-600*	--
Total Ammonia (mg/l)	0.5**	--
Phosphate (mg/l)	6	--
Arsenic (mg/l)	0.05	0.01

12. **Operator.** An operator should be available for 24 x 7 x 365 hrs (2 years after warranty period). Per month Cost should be quoted separately which should include with the total price. Bangladesh Cost Guard will provide the accommodation as per availability. If both purchaser and the seller agree then this time duration may extend for which cost will be reviewed.

13. **Penalty.** If the qualified bidder cannot satisfy Para 4, 11 and 12 above, penalty will be imposed to the qualified bidder. The amount of penalty will be decided by 04 member joint committee headed by Bangladesh Coast Guard Officer where specialist officer from any govt organization can be included.

14. **Installation Material.** All installation materials whether mentioned or not has to be provided by the qualified bidder to operate the plant smoothly.

15. **Source of water.** There are two ponds form where water will be used in RO Plant. If there is no usable water in the pond than river water will be used for purification. Total arrangement should meet this requirement.

16. **Piping arrangement.** All piping should be underground. The pipe should be laid down 3 feet below from the surface and pass through a duct/housing. A visible mark 'water line' on MS plate should be placed every after 20 feet.
17. **Block Diagram.** The schematic diagram with dimension of the desalination plant should be submitted with the offer. The interested bidder can visit the installation site (Mongla Annex).
18. **Manuals.** Following manuals (one set) for this plant in English are to be provided along with set.
- a. Instructional and operation manual.
 - b. Maintenance manual.
 - c. Parts catalogue.
19. **Documentation.** 02 sets of following documents and manuals in English are to be provided with the plant:
- a. Operation Manual.
 - b. Technical Manual with Circuit Diagram and Parts Catalogue.
20. **Brochure.** A complete original brochure (English) is to be supplied.
21. **Place of Delivery of the plant.**
- a. The supplied items shall be delivered within 16 (Sixteen) weeks after signing the Contract to the following Consignee:

The Director General
Bangladesh Coast Guard Headquarters
Agargaon Administrative Area
Sher-e-Bangla Nagar
Dhaka-1207
 - b. The Desalination Plant to be delivered to the BCG Base Mongla Annex or at any place within Bangladesh as directed by CGHQ.
22. **Schedule of Delivery.** 16 weeks from the date of signing the contract.
23. **Inspection, Test, Trial and Acceptance.** The supplier's representative will carry out test and trial of the supplied items at buyer's premises at BCG Base Mongla Annex or at any CG Base directed by CGHQ. The items are to be handed over in fully operational condition. The test/ trial report will be signed jointly and is to be forwarded to CI&QC office.
24. **Acceptance.** Acceptance certificate will be signed on completion of successful test/trial by Coast Guard and Supplier representative.
25. **Warranty.** Warranty for trouble free operation is to be given by the supplier for all the supplied items for a period of at least 12 months from the date of acceptance by the purchaser. During the warranty period, 01 in no operator should be available for 24 x 7. . Within this period if the plants remain non-operational for any action pending by the

supplier, the warranty period will be extended for the same period. The warranty covers all parts and labour (Including service engineer's cost) throughout the warranty period.

26. **Guarantee.** The supplier will guarantee to supply the spares for at least 10 years with reasonable price. Yearly increase of price of spares should not be more than 5%, the price list for spares to be supplied with the quotation.

27. **Validity of Offer.** 120 Days from the date of tender opening.

28. **Terms of Payment.** Payment will be made in local currency on completion of successful test/trial jointly carried out by the buyers and supplier's representative and final acceptance by Coast Guard Headquarters.

29. **Compliance Statement.** A clear and complete compliance statement of the tender specification supported by brochure/booklet is to be submitted with the offer. Any deviation from this specification is also to be clearly mentioned in the offer. Incomplete compliance statement may attribute to cancellation of the offer.

30. **Condition for Acceptance of Quotation.** Quotation may not be considered if detailed information / specifications, original maker's books and catalogue about the offered model generator, accessories etc are not provided.