



Transnet National Ports Authority

Tender Number: TNPA/2023/08/0004/38114/RFP

Tender description: The provision of electrical equipment, servicing, maintenance, repairs, inspection and certification of electrical components and systems on-board marine crafts for the eight (8) commercial ports of Transnet National Ports Authority (TNPA) for a period of three (3) years on an "as and when required" basis.

**TENDER NUMBER: TNPA/2023/08/0004/38114/RFP**

**REQUEST FOR PROPOSAL (RFP) FOR THE PROVISION OF ELECTRICAL EQUIPMENT, SERVICING, MAINTENANCE, REPAIRS, INSPECTION AND CERTIFICATION OF ELECTRICAL COMPONENTS AND SYSTEMS ON-BOARD MARINE CRAFTS FOR THE EIGHT (8) COMMERCIAL PORTS OF TRANSNET NATIONAL PORTS AUTHORITY (TNPA) FOR A PERIOD OF THREE (3) YEARS ON AN "AS AND WHEN REQUIRED" BASIS.**

**ADDENDUM NO.1**

**DATED: 13 May 2024**

**1. AMENDMENTS ON THE RFP:**

1.1. The following information is furnished in addition to, in amplification and substitution of, matters contained in the tender documents issued in respect of the abovementioned work.

**1.1.1. Section 1- Tender Notice and Invitation to tender.**

Tender Closing date has been extended from **24 May 2024** at 16:00 to **31 May 2024** at 16:00

**1.1.2. ANNEXURE D1-D3: BILL OF QUANTITIES**

Initial Bill of Quantities	Revised Bill of Quantities
<p><b>Section C: Cost per service.</b></p> <ul style="list-style-type: none"> <li>• Western Region - Section C1</li> <li>• Central Region - Section C2</li> <li>• Eastern Region - Section C3</li> </ul>	<p>Changed <b>Cost per service to Rate per Hour</b> for the below sections. <b>Section C: Service rates</b></p> <ul style="list-style-type: none"> <li>• Western Region - Section C1</li> <li>• Central Region - Section C2</li> <li>• Eastern Region - Section C3</li> </ul> <hr/> <p>Added additional information to the below as requested by a bidder. <b>Section B1 Equipment List, Item 1.1.2 General lighting and connection points.</b></p> <ul style="list-style-type: none"> <li>• Western Region - Section B1, 1.1.2</li> <li>• Central Region - Section B2, 1.1.2</li> <li>• Eastern Region - Section B3, 1.1.2</li> </ul>

**NB:** Respondents are to note that the initial RFP documents **Section 1-Tender Notice and Invitation to tender, Annexure D1-D3-Bill of Quantities**, are superseded and replaced with the revised information/documents provided and attached to this addendum.



Transnet National Ports Authority

Tender Number: TNPA/2023/08/0004/38114/RFP

Tender description: The provision of electrical equipment, servicing, maintenance, repairs, inspection and certification of electrical components and systems on-board marine crafts for the eight (8) commercial ports of Transnet National Ports Authority (TNPA) for a period of three (3) years on an "as and when required" basis.

---

**Authorised signatory for and on behalf of Transnet, and the tenderer who warrants that He is duly authorised to sign this First Addendum.**

**TRANSNET SOC LTD**

1.  \_\_\_\_\_

**TENDERER**

1. \_\_\_\_\_

Authorised signatory for and on behalf of Transnet, and the tenderer who warrants that he is witness to sign this First Addendum.

**AS WITNESSES:**

**TRANSNET SOC LTD**

1. S. Mveli

**AS WITNESSES:**

**TENDERER**

1. \_\_\_\_\_



**TO: Transnet National Ports Authority**

Dear Sir / Madam

**TENDER NUMBER: TNPA/2023/08/0004/38114/RFP**

Receipt of **Addendum No. 1** dated **13 May 2024** is hereby acknowledged.

Kind regards

---

**TENDERER**

**NOTE:** This acknowledgement must be signed and returned to this office on or before closing date of tender.

**ANNEXURE D.1: WESTERN REGION**

**TITLE/BOQ:** THE REPAIR, SERVICING, AND INSPECTION OF ELECTRICAL SYSTEMS AND COMPONENTS ON-BOARD MARINE CRAFTS ON AN 'AS AND WHEN REQUIRED' BASIS TO EIGHT (8) PORTS OF TRANSNET NATIONAL PORTS AUTHORITY, FOR A PERIOD OF THREE (3) YEARS

**1. BILL OF QUANTITIES**

SECTION B1: EQUIPMENT LIST MARINE CRAFT

SECTION C1: SERVICE RATES

**SECTION B1: EQUIPMENT LIST WESTERN REGION****SECTION B1: EQUIPMENT LIST MARINE CRAFT**

ITEM	DESCRIPTION	Quantity	Price per Unit	Total
1.1.1	Navigation lights and fittings			
1.1.1.1	Port Side Navigation Light - DHR 112.5° red left side navigation light. Version with base. Light bulb included OS1422001 24V - 25W. Made of black polycarbonate and stainless steel. Equipped with vertical filament bulb. Also type-tested for Marina Mercantile (Merchant Marine). OPTIONAL wall bracket kit OS1141810.	1		
1.1.1.2	Starboard Side Navigation Light - White housing. Meets I.M.O. Specifications (international regulations for prevention of collisions at sea, colreg '72). For boats of less than 20 metres in length. In order to comply with the I.M.O. regulations, each navigation light type 35 requires a special focussed 25 W bulb, type LAMP1225 (12V) or LAMP2425 (24V)	1		
1.1.1.3	Mast Head Navigation Light - 24V 25W Marine LED Masthead Light Marine Waterproof LED Combo Masthead Deck Light. Low Power Consumption LED: This LED mast light consumes only 25W of power, the bright LED bulb.	1		
1.1.1.4	Anchor Navigation Light - All-Round Anchor Navigation	1		
1.1.1.5	Search Light - DHR light adjustable from inside 24V 185mm	1		
1.1.1.6	Flood lights - 220v led, 400w	1		
1.1.1.7	Flood lights - 220v led, 600w	1		
1.1.1.8	Flood lights - 220v led, 900w,	1		
1.1.1.9	Flood lights - 220v led, 1200w	1		
1.1.2	General lighting and connection points			
1.1.2.1	Light - 220v led: e27 bulb, cool white, 15w, 220v	1		
1.1.2.2	Light - 2 foot flourescent (normal or led): cool white, 25w, 220v	1		
1.1.2.3	Light - 4 foot flourescent (normal or led): cool white, 25w, 220v	1		
1.1.2.4	Light - Edison screw(E27): e27 bulb, cool white, 25w, 220v	1		
1.1.2.5	Light - Bayonet(b22D): cool white, 25w, 220v	1		
1.1.2.6	Light - Stik led/stick lights: e27 tube, cool white, 25w, 220v	1		
1.1.2.7	Engine room lights - 20 Watts, 24VDC LED Lights: e27, cool white, 20w, 24v	1		
1.1.2.8	Emergency lighting - 24v Downlight fitting: GU10, cool white, 5w, 24v	1		

1.1.3	Plug sockets			
1.1.3.1	Single 3 prong - 220v	1		
1.1.3.2	Double 3 prong - 220v	1		
1.1.3.3	Waterproof 380v plug sockets	1		
1.1.3.4	Double Industrial Switched Socket: Material: Steel, Working Voltage: AC100-240V ~ 50/60Hz. Dimensions: 6cm(L) x 12.5cm(W) x 13cm(H)	1		
1.1.4	Batteries			
1.1.4.1	Battery chargers-The battery charger is a fully automatic charger for 24V batteries and accepts any mains supply that delivers 90-265 V AC, with frequencies ranging from 45 to 65 Hz. It also accepts DC supply, ranging from 90 up to 400 V DC	1		
1.1.4.2	Batteries -Communication, starting and emergency battery-105Ah 12 volt. Deep cycle battery. Operating temperature 18°C to 52°C	1		
1.1.4.3	Batteries - Deep cycle battery 205 Ah. 12 volt	1		
1.1.5	Shore Supply			
1.1.5.1	Shore supply plug - 125A (amp) 4 pin, Earth pin positioned at 6 hour,380 - 415V (volt), 3 phase, Red colour coding, Dimensions: (L)295 x (Diameter)125mm	1		
1.1.5.2	Shore supply cable-20m, 5 core, 125 Amp - The cable used is 35mm 5core H07RN F Double insulated, Ethylene Propylene Rubber, flexible cable designed to withstand; the weather, oils/greases, mechanical and thermal stresses.	1		
1.1.6	Motors - 220~240V or 380v - Speeds and voltage vary depending on motor			
1.1.6.1	<1 Kw, 3 phase motor - Voltage: 220~240V 4 Pole = 1400rpm rated for 50/60hz	1		
1.1.6.2	1 Kw, 3 phase motor - Speed: +-2900 Voltage:380v frequency:50hz IP 44	1		
1.1.6.3	2 Kw, 3 phase motor - Speed: +-2900 Voltage:380v frequency:50hz IP 55 B3 foot mount	1		
1.1.6.4	3 Kw, 3 phase motor - Speed: +-970 Voltage:380v frequency:50hz IP 55 B3 foot moun	1		

1.1.6.5	4 Kw, 3 phase motor - Speed: +-2900 Voltage:380v frequency:50hz IP 55 B3 foot mount	1		
1.1.6.6	5 Kw, 3 phase motor - Speed: +-2895 Voltage:400v frequency:50hz	1		
1.1.6.7	6 Kw, 3 phase motor - Speed: +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.8	7 Kw, 3 phase motor - Speed: +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.9	8 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.10	9 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.11	10 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.12	11 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		

1.1.6.13	12 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.14	13 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.15	14 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.16	15 Kw, 3 phase motor - Speed: +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.17	16 Kw, 3 phase motor - +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		
1.1.6.18	17 Kw, 3 phase motor - +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		
1.1.6.19	18 Kw, 3 phase motor - +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		

1.1.6.20	19 Kw, 3 phase motor - +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		
1.1.6.21	20 Kw, 3 phase motor - +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		
1.1.6.22	21 Kw, 3 phase motor - +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		
1.1.6.23	22 Kw, 3 phase motor - Speed: +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		
1.1.7	Switchboard/ distribution panel components			
1.1.7.1	24 VOLT Consumers panel	1		
1.1.7.2	220 VOLT Consumers panel	1		
1.1.7.3	380 VOLT Consumers panel	1		
1.1.8	Fans			
1.1.8.1	Main engine room fans - Aerofoil Axial flow, Type: 1000JM kW: 4.5/14.0RPM: 975/1470 Hz/Ph: 50/3 Pitch: 28/B V: Delta – 380V A: 11.61(Star) /29.5 (Delta)	1		
1.1.8.2	Inline extractor fans - 220v Inline 100mm, extractor fan Ranging from 200m3/hr to 2210m3/hr	1		
1.1.8.3	Inline extractor fans - 220v Inline 150mm extractor fan	1		
1.1.8.4	Inline extractor fans - 220v Inline 200mm extractor fan	1		
1.1.8.5	Inline extractor fans - 220v Inline 250mm extractor fan	1		
1.1.8.6	Inline extractor fans - 220v Inline 315mm extractor fan	1		
1.1.9	Miscellaneous			
1.1.9.1	Emergency Stops - mushroom pushbutton, 22 mm, round, metal, red, 40 mm, positive latching, according to EN ISO 13850, rotate-to-unlatch, without yellow backing plate, with holder, 1 NC, screw terminal	1		
1.1.9.2	Electric geysers - 150l, SANS 151 approved.			
1.1.9.3	Electrical cables - Marine grade (per metre)	1		
<b>Sub-Total for SECTION B1: EQUIPMENT LIST MARINE CRAFT carried to Final Summary</b>				



**SECTION C1: SERVICE RATES WESTERN REGION****SECTION C1.1: Annual service of batteries and battery chargers**

<b>Port</b>	<b>Vessel</b>	<b>Quantity</b>	<b>Rate per Hour</b>	<b>Total</b>
<b>Cape Town C1.1.1</b>				
C1.1.1.1	Usiba tugboat	1		
C1.1.1.2	Merlot tugboat	1		
C1.1.1.3	Enseleni tugboat	1		
C1.1.1.4	Umbilo tugboat	1		
C1.1.1.5	Plover pilot boat	1		
C1.1.1.6	Bishop pilot boat	1		
C1.1.1.7	Kestrel workboat	1		
C1.1.1.8	Blue Jay workboat	1		
C1.1.1.9	Koester launch	1		
C1.1.1.10	Kite launch	1		
C1.1.1.11	Adhoc Vessel	1		
<b>Sub Total of section C1.1.1</b>				
<b>Saldanha C1.1.2</b>				
C1.1.2.1	Osprey tugboat	1		
C1.1.2.2	Cormarant tugboat	1		
C1.1.2.3	Jutten tugboat	1		
C1.1.2.4	Chardonnay tugboat	1		
C1.1.2.5	Avocet pilot boat	1		
C1.1.2.6	Crested Tern workboat	1		
C1.1.2.7	Adhoc Vessel	1		
<b>Sub Total of section C1.1.2</b>				
<b>Mossel Bay C1.1.3</b>				
C1.1.3.1	Artic Tern workboat	1		
C1.1.3.2	Snipe launch	1		
C1.1.3.3	Adhoc Vessel	1		
<b>Sub Total of section C1.1.3</b>				
<b>TOTAL SECTION C1.1 carried forward to Final Summary</b>				

<b>SECTION C1.2: Annual service of Distribution boards, shore supply, transformers, switchgear and electrical wiring</b>			
<b><u>Cape Town C1.2.1</u></b>			
C1.2.1.1	Usiba tugboat	1	
C1.2.1.2	Merlot tugboat	1	
C1.2.1.3	Enseleni tugboat	1	
C1.2.1.4	Umbilo tugboat	1	
C1.2.1.5	Plover pilot boat	1	
C1.2.1.6	Bishop pilot boat	1	
C1.2.1.7	Kestrel workboat	1	
C1.2.1.8	Blue Jay workboat	1	
C1.2.1.9	Koester launch	1	
C1.2.1.10	Kite launch	1	
C1.2.1.11	Adhoc Vessel	1	
			<b>Sub Total of section C1.2.1</b>
<b><u>Saldanha C1.2.2</u></b>			
C1.2.2.1	Osprey tugboat	1	
C1.2.2.2	Cormarant tugboat	1	
C1.2.2.3	Jutten tugboat	1	
C1.2.2.4	Chardonnay tugboat	1	
C1.2.2.5	Avocet pilot boat	1	
C1.2.2.6	Crested Tern workboat	1	
C1.2.2.7	Adhoc Vessel	1	
			<b>Sub Total of section C1.2.2</b>
<b><u>Mossel Bay C1.2.3</u></b>			
C1.2.3.1	Artic Tern workboat	1	
C1.2.3.2	Snipe launch	1	
C1.2.3.3	Adhoc Vessel	1	
			<b>Sub Total of section C1.2.3</b>
			<b>TOTAL SECTION C1.2 carried forward to Final Summary</b>

<b>SECTION C 1.3: Annual Service of Pump motors and fans(incuding megger testing when required)</b>			
<b><u>Cape Town C1.3.1</u></b>			
C1.3.1.1	Usiba tugboat	1	
C1.3.1.2	Merlot tugboat	1	
C1.3.1.3	Enseleni tugboat	1	
C1.3.1.4	Umbilo tugboat	1	
C1.3.1.5	Plover pilot boat	1	
C1.3.1.6	Bishop pilot boat	1	
C1.3.1.7	Kestrel workboat	1	
C1.3.1.8	Blue Jay workboat	1	
C1.3.1.9	Koester launch	1	
C1.3.1.10	Kite launch	1	
C1.3.1.11	Adhoc Vessel	1	
			<b>Sub Total of section C1.3.1</b>
<b><u>Saldanha C1.3.2</u></b>			
C1.3.2.1	Osprey tugboat	1	
C1.3.2.2	Cormarant tugboat	1	
C1.3.2.3	Jutten tugboat	1	
C1.3.2.4	Chardonnay tugboat	1	
C1.3.2.5	Avocet pilot boat	1	
C1.3.2.6	Crested Tern workboat	1	
C1.3.2.7	Adhoc Vessel	1	
			<b>Sub Total of section C1.3.2</b>
<b><u>Mossel Bay C1.3.3</u></b>			
C1.3.3.1	Artic Tern workboat	1	
C1.3.3.2	Snipe launch	1	
C1.3.3.3	Adhoc Vessel	1	
			<b>Sub Total of section C1.3.3</b>
			<b>TOTAL SECTION C1.3 carried forward to Final Summary</b>

<b>SECTION C1.4: Annual Service of Alternators, air compressors and pre-heaters</b>			
<b><u>Cape Town C1.4.1</u></b>			
C1.4.1.1	Usiba tugboat	1	
C1.4.1.2	Merlot tugboat	1	
C1.4.1.3	Enseleni tugboat	1	
C1.4.1.4	Umbilo tugboat	1	
C1.4.1.5	Plover pilot boat	1	
C1.4.1.6	Bishop pilot boat	1	
C1.4.1.7	Kestrel workboat	1	
C1.4.1.8	Blue Jay workboat	1	
C1.4.1.9	Koester launch	1	
C1.4.1.10	Kite launch	1	
C1.4.1.11	Adhoc Vessel	1	
			<b>Sub Total of section C1.4.1</b>
<b><u>Saldanha C1.4.2</u></b>			
C1.4.2.1	Osprey tugboat	1	
C1.4.2.2	Cormarant tugboat	1	
C1.4.2.3	Jutten tugboat	1	
C1.4.2.4	Chardonnay tugboat	1	
C1.4.2.5	Avocet pilot boat	1	
C1.4.2.6	Crested Tern workboat	1	
C1.4.2.7	Adhoc Vessel	1	
			<b>Sub Total of section C1.4.2</b>
<b><u>Mossel Bay C1.4.3</u></b>			
C1.4.3.1	Artic Tern workboat	1	
C1.4.3.2	Snipe launch	1	
C1.4.3.3	Adhoc Vessel	1	
			<b>Sub Total of section C1.4.3</b>
			<b>TOTAL SECTION C1.4 carried forward to Final Summary</b>

<b>SECTION C 1. 5 Annual Service of electrical wiring, plug sockets, light fixtures and bulbs (including insulation tests conducted on a 4 year cycle)</b>			
<b><u>Cape Town C1.5.1</u></b>			
C1.5.1.1	Usiba tugboat	1	
C1.5.1.2	Merlot tugboat	1	
C1.5.1.3	Enseleni tugboat	1	
C1.5.1.4	Umbilo tugboat	1	
C1.5.1.5	Plover pilot boat	1	
C1.5.1.6	Bishop pilot boat	1	
C1.5.1.7	Kestrel workboat	1	
C1.5.1.8	Blue Jay workboat	1	
C1.5.1.9	Koester launch	1	
C1.5.1.10	Kite launch	1	
C1.5.1.11	Adhoc Vessel	1	
			<b>Sub Total of section C1.5.1</b>
<b><u>Saldanha C1.5.2</u></b>			
C1.5.2.1	Osprey tugboat	1	
C1.5.2.2	Cormarant tugboat	1	
C1.5.2.3	Jutten tugboat	1	
C1.5.2.4	Chardonnay tugboat	1	
C1.5.2.5	Avocet pilot boat	1	
C1.5.2.6	Crested Tern workboat	1	
C1.5.2.7	Adhoc Vessel	1	
			<b>Sub Total of section C1.5.2</b>
<b><u>Mossel Bay C1.5.3</u></b>			
C1.5.3.1	Artic Tern workboat	1	
C1.5.3.2	Snipe launch	1	
C1.5.3.3	Adhoc Vessel	1	
			<b>Sub Total of section C1.5.3</b>
			<b>TOTAL SECTION C1.5 carried forward to Final Summary</b>

<b>SECTION C 1. 6 Adhoc fault finding, maintenance, repairs and replacements</b>			
<b><u>Cape Town C1.6.1</u></b>			
C1.6.1.1	Usiba tugboat	1	
C1.6.1.2	Merlot tugboat	1	
C1.6.1.3	Enseleni tugboat	1	
C1.6.1.4	Umbilo tugboat	1	
C1.6.1.5	Plover pilot boat	1	
C1.6.1.6	Bishop pilot boat	1	
C1.6.1.7	Kestrel workboat	1	
C1.6.1.8	Blue Jay workboat	1	
C1.6.1.9	Koester launch	1	
C1.6.1.10	Kite launch	1	
C1.6.1.11	Adhoc Vessel	1	
			<b>Sub Total of section C1.6.1</b>
<b><u>Saldanha C1.6.2</u></b>			
C1.6.2.1	Osprey tugboat	1	
C1.6.2.2	Cormarant tugboat	1	
C1.6.2.3	Jutten tugboat	1	
C1.6.2.4	Chardonnay tugboat	1	
C1.6.2.5	Avocet pilot boat	1	
C1.6.2.6	Crested Tern workboat	1	
C1.6.2.7	Adhoc Vessel	1	
			<b>Sub Total of section C1.6.2</b>
<b><u>Mossel Bay C1.6.3</u></b>			
C1.6.3.1	Artic Tern workboat	1	
C1.6.3.2	Snipe launch	1	
C1.6.3.3	Adhoc Vessel	1	
			<b>Sub Total of section C1.6.3</b>
			<b>TOTAL SECTION C1.6 carried forward to Final Summary</b>

<b>FINAL SUMMARY TABLE</b>		<b>Total</b>	
Total brought forward from SECTION B1: EQUIPMENT LIST MARINE CRAFT			
Total brought forward from SECTION C1.1: Annual service of Distribution boards, shore supply, transformers, switchgear and electrical wiring			
Total brought forward from SECTION C1.2: Annual Service of Pump motors and fans(incl megger testing when required)			
Total brought forward from SECTION C1.3: Annual Service of Alternators, air compressors and pre-heaters			
Total brought forward from SECTION C1.4: Insulation tests and Annual Service of electrical wiring, plug sockets, light fixtures and bulbs			
Total brought forward from SECTION C1.5: Annual Service of electrical wiring, plug sockets, light fixtures and bulbs (including insulation test conducted on a 4 year cycle)			
Total brought forward from SECTION C1.6: Adhoc fault finding, maintenance, repairs and replacements			
<b>Total carried forward to MULTI-YEAR PRICING TABLE WESTERN REGION</b>			
<b>MULTI-YEAR PRICING TABLE - EASTERN REGION</b>		<b>CPI</b>	<b>TOTAL</b>
TOTAL COSTS YEAR 1 = (YR1 Total costs) BROUGHT FORWARD FROM FINAL SUMMARY TABLE		0	
TOTAL COSTS YEAR 2 = (YR1 total cost X CPI adjustment)		4.5	
TOTAL COSTS YEAR 3 = (YR2 total cost XCPI adjustment)		4.4	
<b>TOTAL EXCL. VAT</b>			
<b>15% VAT</b>			
<b>TOTAL INCL. VAT</b>			
<b>Notes to the Multi- Year Pricing Table:</b>			
<b>1</b>	The first year of the contract will not be subject to price escalation		
<b>2</b>	Tendered rates will be subject to escslation from year 2 onwards		
<b>3</b>	Tendered rates will be adjusted annually based on the actual escalation indices published by Stats SA.		
<b>4</b>	The formula for adjustment and the method of adjustment is set out in more detail in the tender document		
<b>5</b>	The "CPI" figures provided in the "Multi-Year Pricing Table" above are forward projections from the Bureau for Economic Research and are used as an estimate in able to obtain a total price over the contract term.		

**ANNEXURE D.2: CENTRAL REGION**

**TITLE/BOQ:** THE REPAIR, SERVICING, AND INSPECTION OF ELECTRICAL SYSTEMS AND COMPONENTS ON-BOARD MARINE CRAFTS ON AN 'AS AND WHEN REQUIRED' BASIS TO EIGHT (8) PORTS OF TRANSNET NATIONAL PORTS AUTHORITY, FOR A PERIOD OF THREE (3) YEARS

**1. BILL OF QUANTITIES**

SECTION B2: EQUIPMENT LIST MARINE CRAFT

SECTION C2: SERVICE RATES

<b>SECTION B2: EQUIPMENT LIST WESTERN REGION</b>				
<b>SECTION B2: EQUIPMENT LIST MARINE CRAFT</b>				
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>Quantity</b>	<b>Price per Unit</b>	<b>Total</b>
1.1.1	Navigation lights and fittings			
1.1.1.1	Port Side Navigation Light - DHR 112.5° red left side navigation light. Version with base. Light bulb included OS1422001 24V - 25W. Made of black polycarbonate and stainless steel. Equipped with vertical filament bulb. Also type-tested for Marina Mercantile (Merchant Marine). OPTIONAL wall bracket kit OS1141810.	1		
1.1.1.2	Starboard Side Navigation Light - White housing. Meets I.M.O. Specifications (international regulations for prevention of collisions at sea, colreg '72). For boats of less than 20 metres in length. In order to comply with the I.M.O. regulations, each navigation light type 35 requires a special focussed 25 W bulb, type LAMP1225 (12V) or LAMP2425 (24V)	1		
1.1.1.3	Mast Head Navigation Light - 24V 25W Marine LED Masthead Light Marine Waterproof LED Combo Masthead Deck Light. Low Power Consumption LED: This LED mast light consumes only 25W of power, the bright LED bulb.	1		
1.1.1.4	Anchor Navigation Light - All-Round Anchor Navigation	1		
1.1.1.5	Search Light - DHR light adjustable from inside 24V 185mm	1		
1.1.1.6	Flood lights - 220v led, 400w	1		
1.1.1.7	Flood lights - 220v led, 600w	1		
1.1.1.8	Flood lights - 220v led, 900w,	1		
1.1.1.9	Flood lights - 220v led, 1200w	1		
1.1.2	General lighting and connection points			
1.1.2.1	Light - 220v led: e27 bulb, cool white, 15w, 220v	1		
1.1.2.2	Light - 2 foot flourescent (normal or led): cool white, 25w, 220v	1		
1.1.2.3	Light - 4 foot flourescent (normal or led): cool white, 25w, 220v	1		
1.1.2.4	Light - Edison screw(E27): e27 bulb, cool white, 25w, 220v	1		
1.1.2.5	Light - Bayonet(b22D): cool white, 25w, 220v	1		
1.1.2.6	Light - Stik led/stick lights: e27 tube, cool white, 25w, 220v	1		
1.1.2.7	Engine room lights - 20 Watts, 24VDC LED Lights: e27, cool white, 20w, 24v	1		
1.1.2.8	Emergency lighting - 24v Downlight fitting: GU10, cool white, 5w, 24v	1		



1.1.3	Plug sockets			
1.1.3.1	Single 3 prong - 220v	1		
1.1.3.2	Double 3 prong - 220v	1		
1.1.3.3	Waterproof 380v plug sockets	1		
1.1.3.4	Double Industrial Switched Socket: Material: Steel, Working Voltage: AC100-240V ~ 50/60H. Dimensions: 6cm(L) x 12.5cm(W) x 13cm(H)	1		
1.1.4	Batteries			
1.1.4.1	Battery chargers-The battery charger is a fully automatic charger for 24V batteries and accepts any mains supply that delivers 90-265 V AC, with frequencies ranging from 45 to 65 Hz. It also accepts DC supply, ranging from 90 up to 400 V DC	1		
1.1.4.2	Batteries -Communication, starting and emergency battery-105Ah 12 volt. Deep cycle battery. Operating temperature 18°C to 52°C	1		
1.1.4.3	Batteries - Deep cycle battery 205 Ah. 12 volt	1		
1.1.5	Shore Supply			
1.1.5.1	Shore supply plug - 125A (amp) 4 pin, Earth pin positioned at 6 hour,380 - 415V (volt), 3 phase, Red colour coding, Dimensions: (L)295 x (Diameter)125mm	1		
1.1.5.2	Shore supply cable-20m, 5 core, 125 Amp - The cable used is 35mm 5core H07RN-F Double insulated, Ethylene Propylene Rubber, flexible cable designed to withstand; the weather, oils/greases, mechanical and thermal stresses.	1		
1.1.6	Motors - 220~240V or 380v - Speeds and voltage vary depending on motor			
1.1.6.1	<1 Kw, 3 phase motor - Voltage: 220~240V 4 Pole = 1400rpm rated for 50/60hz	1		
1.1.6.2	1 Kw, 3 phase motor - Speed: +-2900 Voltage:380v frequency:50hz IP 44	1		
1.1.6.3	2 Kw, 3 phase motor - Speed: +-2900 Voltage:380v frequency:50hz IP 55 B3 foot mount	1		
1.1.6.4	3 Kw, 3 phase motor - Speed: +-970 Voltage:380v frequency:50hz IP 55 B3 foot moun	1		

1.1.6.5	4 Kw, 3 phase motor - Speed: +-2900 Voltage:380v frequency:50hz IP 55 B3 foot mount	1		
1.1.6.6	5 Kw, 3 phase motor - Speed: +-2895 Voltage:400v frequency:50hz	1		
1.1.6.7	6 Kw, 3 phase motor - Speed: +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.8	7 Kw, 3 phase motor - Speed: +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.9	8 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.10	9 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.11	10 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.12	11 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		

1.1.6.13	12 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.14	13 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.15	14 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.16	15 Kw, 3 phase motor - Speed: +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.17	16 Kw, 3 phase motor - +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		
1.1.6.18	17 Kw, 3 phase motor - +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		
1.1.6.19	18 Kw, 3 phase motor - +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		

1.1.6.20	19 Kw, 3 phase motor - +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		
1.1.6.21	20 Kw, 3 phase motor - +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		
1.1.6.22	21 Kw, 3 phase motor - +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		
1.1.6.23	22 Kw, 3 phase motor - Speed: +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		
1.1.7	Switchboard/ distribution panel components			
1.1.7.1	24 VOLT Consumers panel	1		
1.1.7.2	220 VOLT Consumers panel	1		
1.1.7.3	380 VOLT Consumers panel	1		
1.1.8	Fans			
1.1.8.1	Main engine room fans - Aerofoil Axial flow, Type: 1000JM kW: 4.5/14.0RPM: 975/1470 Hz/Ph: 50/3 Pitch: 28/B V: Delta – 380V A: 11.61(Star) /29.5 (Delta)	1		
1.1.8.2	Inline extractor fans - 220v Inline 100mm, extractor fan Ranging from 200m3/hr to 2210m3/hr	1		
1.1.8.3	Inline extractor fans - 220v Inline 150m extractor fan	1		
1.1.8.4	Inline extractor fans - 220v Inline 200mm extractor fan	1		
1.1.8.5	Inline extractor fans - 220v Inline 250mm extractor fan	1		
1.1.8.6	Inline extractor fans - 220v Inline 315mm extractor fan	1		
1.1.9	Miscellaneous			
1.1.9.1	Emergency Stops - mushroom pushbutton, 22 mm, round, metal, red, 40 mm, positive latching, according to EN ISO 13850, rotate-to-unlatch, without yellow backing plate, with holder, 1 NC, screw terminal	1		
1.1.9.2	Electric geysers - 150l, SANS 151 approved.			
1.1.9.3	Electrical cables - Marine grade (per metre)	1		
<b>Sub-Total for SECTION B2: EQUIPMENT LIST MARINE CRAFT carried to Final Summary</b>				

**SECTION C2: SERVICE RATES CENTRAL REGION****SECTION C2.1: Annual service of batteries and battery chargers**

<b>Port</b>	<b>Vessel</b>	<b>Quantity</b>	<b>Rate per Hour</b>	<b>Total</b>
<b>Port Elizabeth C2.1.1</b>				
C2.1.1.1	Mvezo tugboat	1		
C2.1.1.2	Qunu tugboat	1		
C2.1.1.3	Ivubu pilot boat	1		
C2.1.1.4	Royal Tern workboat	1		
C2.1.1.5	Adhoc Vessel	1		
<b>Sub Total of section C2.1.1</b>				
<b>Nggura C2.1.2</b>				
C2.1.2.1	Shasa tugboat	1		
C2.1.2.2	Orca tugboat	1		
C2.1.2.3	Lizibuko tugboat	1		
C2.1.2.4	Tsitsikama pilot boat	1		
C2.1.2.5	Adhoc Vessel	1		
<b>Sub Total of section C2.1.2</b>				
<b>East London C2.1.3</b>				
C2.1.3.1	Umthwalume tugboat	1		
C2.1.3.2	Impunzi tugboat	1		
C2.1.3.3	Tristan Tern workboat	1		
C2.1.3.4	Adhoc Vessel	1		
<b>Sub Total of section C2.1.3</b>				
<b>TOTAL SECTION C2.1 carried forward to Final Summary</b>				

<b>SECTION C2.2 Annual service of Distribution boards, shore supply, transformers, switchgear and electrical wiring</b>				
<b>Port Elizabeth C2.2.1</b>				
C2.2.1.1	Mvezo tugboat		1	
C2.2.1.2	Qunu tugboat		1	
C2.2.1.3	Ivubu pilot boat		1	
C2.2.1.4	Royal Tern workboat		1	
C2.2.1.5	Adhoc Vessel		1	
			<b>Sub Total of section C2.2.1</b>	
<b>Nggura C2.2.2</b>				
C2.2.2.1	Shasa tugboat		1	
C2.2.2.2	Orca tugboat		1	
C2.2.2.3	Lizibuko tugboat		1	
C2.2.2.4	Tsitsikama pilot boat		1	
C2.2.2.5	Adhoc Vessel		1	
			<b>Sub Total of section C2.2.2</b>	
<b>East London C2.2.3</b>				
C2.2.3.1	Umthwalume tugboat		1	
C2.2.3.2	Impunzi tugboat		1	
C2.2.3.3	Tristan Tern workboat		1	
C2.2.3.4	Adhoc Vessel		1	
			<b>Sub Total of section C2.2.3</b>	
			<b>TOTAL SECTION C2.2 carried forward to Final Summary</b>	

<b>SECTION C 2.3 Annual Service of Pump motors and fans(incuding megger testing when required)</b>				
<b>Port Elizabeth C2.3.1</b>				
C2.3.1.1	Mvezo tugboat		1	
C2.3.1.2	Qunu tugboat		1	
C2.3.1.3	Ivubu pilot boat		1	
C2.3.1.4	Royal Tern workboat		1	
C2.3.1.5	Adhoc Vessel		1	
			<b>Sub Total of section C2.3.1</b>	
<b>Nggura C.2.3.2</b>				
C2.3.2.1	Shasa tugboat		1	
C2.3.2.2	Orca tugboat		1	
C2.3.2.3	Lizibuko tugboat		1	
C2.3.2.4	Tsitsikama pilot boat		1	
C2.3.2.5	Adhoc Vessel		1	
			<b>Sub Total of section C2.3.2</b>	
<b>East London C.2.3.3</b>				
C2.3.3.1	Umthwalume tugboat		1	
C2.3.3.2	Impunzi tugboat		1	
C2.3.3.3	Tristan Tern workboat		1	
C2.3.3.4	Adhoc Vessel		1	
			<b>Sub Total of section C2.3.3</b>	
			<b>TOTAL SECTION C2.3 carried forward to Final Summary</b>	

<b>SECTION C2.4 Annual Service of Alternators, air compressors and pre-heaters</b>				
<b>Port Elizabeth C2.4.1</b>				
C2.4.1.1	Mvezo tugboat		1	
C2.4.1.2	Qunu tugboat		1	
C2.4.1.3	Ivubu pilot boat		1	
C2.4.1.4	Royal Tern workboat		1	
C2.4.1.5	Adhoc Vessel		1	
			<b>Sub Total of section C2.4.1</b>	
<b>Nggura C2.4.2</b>				
C2.4.2.1	Shasa tugboat		1	
C2.4.2.2	Orca tugboat		1	
C2.4.2.3	Lizibuko tugboat		1	
C2.4.2.4	Tsitsikama pilot boat		1	
C2.4.2.5	Adhoc Vessel		1	
			<b>Sub Total of section C2.4.2</b>	
<b>East London C2.4.3</b>				
C2.4.3.1	Umthwalume tugboat		1	
C2.4.3.2	Impunzi tugboat		1	
C2.4.3.3	Tristan Tern workboat		1	
C2.4.3.4	Adhoc Vessel		1	
			<b>Sub Total of section C2.4.3</b>	
			<b>TOTAL SECTION C2.4 carried forward to Final Summary</b>	



<b>SECTION C2.5 Annual Service of electrical wiring, plug sockets, light fixtures and bulbs (including insulation tests conducted on a 4 year cycle)</b>				
<b>Port Elizabeth C2.5.1</b>				
C2.5.1.1	Mvezo tugboat		1	
C2.5.1.2	Qunu tugboat		1	
C2.5.1.3	Ivubu pilot boat		1	
C2.5.1.4	Royal Tern workboat		1	
C2.5.1.5	Adhoc Vessel		1	
			<b>Sub Total of section C2.5.1</b>	
<b>Nggura C2.5.2</b>				
C2.5.2.1	Shasa tugboat		1	
C2.5.2.2	Orca tugboat		1	
C2.5.2.3	Lizibuko tugboat		1	
C2.5.2.4	Tsitsikama pilot boat		1	
C2.5.2.5	Adhoc Vessel		1	
			<b>Sub Total of section C2.5.2</b>	
<b>East London C2.5.3</b>				
C2.5.3.1	Umthwalume tugboat		1	
C2.5.3.2	Impunzi tugboat		1	
C2.5.3.3	Tristan Tern workboat		1	
C2.5.3.4	Adhoc Vessel		1	
			<b>Sub Total of section C2.5.3</b>	
			<b>TOTAL SECTION C2.5 carried forward to Final Summary</b>	

<b>SECTION C2.6 Adhoc fault finding, maintenance, repairs and replacements</b>				
<b>Port Elizabeth C2.6.1</b>				
C2.6.1.1	Mvezo tugboat		1	
C2.6.1.2	Qunu tugboat		1	
C2.6.1.3	Ivubu pilot boat		1	
C2.6.1.4	Royal Tern workboat		1	
C2.6.1.5	Adhoc Vessel		1	
			<b>Sub Total of section C2.6.1</b>	
<b>Nggura C2.6.2</b>				
C2.6.2.1	Shasa tugboat		1	
C2.6.2.2	Orca tugboat		1	
C2.6.2.3	Lizibuko tugboat		1	
C2.6.2.4	Tsitsikama pilot boat		1	
C2.6.2.5	Adhoc Vessel		1	
			<b>Sub Total of section C2.6.2</b>	
<b>East London C2.6.3</b>				
C2.6.3.1	Umthwalume tugboat		1	
C2.6.3.2	Impunzi tugboat		1	
C2.6.3.3	Tristan Tern workboat		1	
C2.6.3.4	Adhoc Vessel		1	
			<b>Sub Total of section C2.6.3</b>	
			<b>TOTAL SECTION C2.6 carried forward to Final Summary</b>	

<b>FINAL SUMMARY TABLE</b>		<b>Total</b>	
Total brought forward from SECTION B2: EQUIPMENT LIST MARINE CRAFT			
Total brought forward from SECTION C2.1: Annual service of Distribution boards, shore supply, transformers, switchgear and electrical wiring			
Total brought forward from SECTION C2.2: Annual Service of Pump motors and fans(incl megger testing when required)			
Total brought forward from SECTION C2.3: Annual Service of Alternators, air compressors and pre-heaters			
Total brought forward from SECTION C2.4: Insulation tests and Annual Service of electrical wiring, plug sockets, light fixtures and bulbs			
Total brought forward from SECTION C2.5: Annual Service of electrical wiring, plug sockets, light fixtures and bulbs (including insulation test conducted on a 4 year cycle)			
Total brought forward from SECTION C2.6: Adhoc fault finding, maintenance, repairs and replacements			
<b>Total carried forward to MULTI-YEAR PRICING TABLE CENTRAL REGION</b>			
<b>MULTI-YEAR PRICING TABLE - EASTERN REGION</b>		<b>CPI</b>	<b>TOTAL</b>
TOTAL COSTS YEAR 1 = (YR1 Total costs) BROUGHT FORWARD FROM FINAL SUMMARY TABLE		0	
TOTAL COSTS YEAR 2 = (YR1 total cost X CPI adjustment)		4.5	
TOTAL COSTS YEAR 3 = (YR2 total cost XCPI adjustment)		4.4	
<b>TOTAL EXCL. VAT</b>			
<b>15% VAT</b>			
<b>TOTAL INCL. VAT</b>			

<b>Notes to the Multi- Year Pricing Table:</b>	
<b>1</b>	The first year of the contract will not be subject to price escalation
<b>2</b>	Tendered rates will be subject to escalation from year 2 onwards
<b>3</b>	Tendered rates will be adjusted annually based on the actual escalation indices published by Stats SA.
<b>4</b>	The formula for adjustment and the method of adjustment is set out in more detail in the tender document
<b>5</b>	The "CPI" figures provided in the "Multi-Year Pricing Table" above are forward projections from the Bureau for Economic Research and are used as an estimate in able to obtain a total price over the contract term.

**ANNEXURE D.3: EASTERN REGION**

**TITLE/BOQ:** THE REPAIR, SERVICING, AND INSPECTION OF ELECTRICAL SYSTEMS AND COMPONENTS ON-BOARD MARINE CRAFTS ON AN 'AS AND WHEN REQUIRED' BASIS TO EIGHT (8) PORTS OF TRANSNET NATIONAL PORTS AUTHORITY, FOR A PERIOD OF THREE (3) YEARS

**1. BILL OF QUANTITIES**

SECTION B3: EQUIPMENT LIST MARINE CRAFT

SECTION C3: SERVICE RATES

<b>SECTION B3: EQUIPMENT LIST WESTERN REGION</b>				
<b>SECTION B3: EQUIPMENT LIST MARINE CRAFT</b>				
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>Quantity</b>	<b>Price per Unit</b>	<b>Total</b>
1.1.1	Navigation lights and fittings			
1.1.1.1	Port Side Navigation Light - DHR 112.5° red left side navigation light. Version with base. Light bulb included OS1422001 24V - 25W. Made of black polycarbonate and stainless steel. Equipped with vertical filament bulb. Also type-tested for Marina Mercantile (Merchant Marine). OPTIONAL wall bracket kit OS1141810.	1		
1.1.1.2	Starboard Side Navigation Light - White housing. Meets I.M.O. Specifications (international regulations for prevention of collisions at sea, colreg '72). For boats of less than 20 metres in length. In order to comply with the I.M.O. regulations, each navigation light type 35 requires a special focussed 25 W bulb, type LAMP1225 (12V) or LAMP2425 (24V)	1		
1.1.1.3	Mast Head Navigation Light - 24V 25W Marine LED Masthead Light Marine Waterproof LED Combo Masthead Deck Light. Low Power Consumption LED: This LED mast light consumes only 25W of power, the bright LED bulb.	1		
1.1.1.4	Anchor Navigation Light - All-Round Anchor Navigation	1		
1.1.1.5	Search Light - DHR light adjustable from inside 24V 185mm	1		
1.1.1.6	Flood lights - 220v led, 400w	1		
1.1.1.7	Flood lights - 220v led, 600w	1		
1.1.1.8	Flood lights - 220v led, 900w,	1		
1.1.1.9	Flood lights - 220v led, 1200w	1		
1.1.2	General lighting and connection points			
1.1.2.1	Light - 220v led: e27 bulb, cool white, 15w, 220v	1		
1.1.2.2	Light - 2 foot flourescent (normal or led): cool white, 25w, 220v	1		
1.1.2.3	Light - 4 foot flourescent (normal or led): cool white, 25w, 220v	1		
1.1.2.4	Light - Edison screw(E27): e27 bulb, cool white, 25w, 220v	1		
1.1.2.5	Light - Bayonet(b22D): cool white, 25w, 220v	1		
1.1.2.6	Light - Stik led/stick lights: e27 tube, cool white, 25w, 220v	1		
1.1.2.7	Engine room lights - 20 Watts, 24VDC LED Lights: e27, cool white, 20w, 24v	1		
1.1.2.8	Emergency lighting - 24v Downlight fitting: GU10, cool white, 5w, 24v	1		

1.1.3	Plug sockets			
1.1.3.1	Single 3 prong - 220v	1		
1.1.3.2	Double 3 prong - 220v	1		
1.1.3.3	Waterproof 380v plug sockets	1		
1.1.3.4	Double Industrial Switched Socket: Material: Steel, Working Voltage: AC100-240V ~ 50/60H. Dimensions: 6cm(L) x 12.5cm(W) x 13cm(H)	1		
1.1.4	Batteries			
1.1.4.1	Battery chargers-The battery charger is a fully automatic charger for 24V batteries and accepts any mains supply that delivers 90-265 V AC, with frequencies ranging from 45 to 65 Hz. It also accepts DC supply, ranging from 90 up to 400 V DC	1		
1.1.4.2	Batteries -Communication, starting and emergency battery-105Ah 12 volt. Deep cycle battery. Operating temperature 18°C to 52°C	1		
1.1.4.3	Batteries - Deep cycle battery 205 Ah. 12 volt	1		
1.1.5	Shore Supply			
1.1.5.1	Shore supply plug - 125A (amp) 4 pin, Earth pin positioned at 6 hour,380 - 415V (volt), 3 phase, Red colour coding, Dimensions: (L)295 x (Diameter)125mm	1		
1.1.5.2	Shore supply cable-20m, 5 core, 125 Amp - The cable used is 35mm 5core H07RN-F Double insulated, Ethylene Propylene Rubber, flexible cable designed to withstand; the weather, oils/greases, mechanical and thermal stresses.	1		
1.1.6	Motors - 220~240V or 380v - Speeds and voltage vary depending on motor			
1.1.6.1	<1 Kw, 3 phase motor - Voltage: 220~240V 4 Pole = 1400rpm rated for 50/60hz	1		
1.1.6.2	1 Kw, 3 phase motor - Speed: +-2900 Voltage:380v frequency:50hz IP 44	1		
1.1.6.3	2 Kw, 3 phase motor - Speed: +-2900 Voltage:380v frequency:50hz IP 55 B3 foot mount	1		
1.1.6.4	3 Kw, 3 phase motor - Speed: +-970 Voltage:380v frequency:50hz IP 55 B3 foot moun	1		

1.1.6.5	4 Kw, 3 phase motor - Speed: +-2900 Voltage:380v frequency:50hz IP 55 B3 foot mount	1		
1.1.6.6	5 Kw, 3 phase motor - Speed: +-2895 Voltage:400v frequency:50hz	1		
1.1.6.7	6 Kw, 3 phase motor - Speed: +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.8	7 Kw, 3 phase motor - Speed: +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.9	8 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.10	9 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.11	10 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.12	11 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		

1.1.6.13	12 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.14	13 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.15	14 Kw, 3 phase motor - +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.16	15 Kw, 3 phase motor - Speed: +- 2900 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B5 foot mount	1		
1.1.6.17	16 Kw, 3 phase motor - +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		
1.1.6.18	17 Kw, 3 phase motor - +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		
1.1.6.19	18 Kw, 3 phase motor - +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		

1.1.6.20	19 Kw, 3 phase motor - +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		
1.1.6.21	20 Kw, 3 phase motor - +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		
1.1.6.22	21 Kw, 3 phase motor - +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		
1.1.6.23	22 Kw, 3 phase motor - Speed: +- 735 Voltage:380v frequency:50hz IP rating:IP 55 Mount: B3 foot mount	1		
1.1.7	Switchboard/ distribution panel components			
1.1.7.1	24 VOLT Consumers panel	1		
1.1.7.2	220 VOLT Consumers panel	1		
1.1.7.3	380 VOLT Consumers panel	1		
1.1.8	Fans			
1.1.8.1	Main engine room fans - Aerofoil Axial flow, Type: 1000JM kW: 4.5/14.0RPM: 975/1470 Hz/Ph: 50/3 Pitch: 28/B V: Delta – 380V A: 11.61(Star) /29.5 (Delta)	1		
1.1.8.2	Inline extractor fans - 220v Inline 100mm, extractor fan Ranging from 200m3/hr to 2210m3/hr	1		
1.1.8.3	Inline extractor fans - 220v Inline 150mm extractor fan	1		
1.1.8.4	Inline extractor fans - 220v Inline 200mm extractor fan	1		
1.1.8.5	Inline extractor fans - 220v Inline 250mm extractor fan	1		
1.1.8.6	Inline extractor fans - 220v Inline 315mm extractor fan	1		
1.1.9	Miscellaneous			
1.1.9.1	Emergency Stops - mushroom pushbutton, 22 mm, round, metal, red, 40 mm, positive latching, according to EN ISO 13850, rotate-to-unlatch, without yellow backing plate, with holder, 1 NC, screw terminal	1		
1.1.9.2	Electric geysers - 150l, SANS 151 approved.			
1.1.9.3	Electrical cables - Marine grade (per metre)	1		
<b>Sub-Total for SECTION B3: EQUIPMENT LIST MARINE CRAFT carried to Final Summary</b>				



**SECTION C3: SERVICE RATES EASTERN REGION**

**SECTION C3.1: Annual service of batteries and battery chargers**

<b>Port</b>	<b>Vessel</b>	<b>Quantity</b>	<b>Rate per Hour</b>	<b>Total</b>
<b>Richards Bay C3.1.1</b>				
C3.1.1.1	Ukhozi tugboat	1		
C3.1.1.2	Lilani tugboat	1		
C3.1.1.3	Iphotwe tugboat	1		
C3.1.1.4	Indlazi tugboat	1		
C3.1.1.5	Uhuva tugboat	1		
C3.1.1.6	Jojosi pilot boat	1		
C3.1.1.7	Swift Tern workboat	1		
C3.1.1.8	Adhoc Vessel	1		
<b>Sub Total of section C3.1.1</b>				
<b>Durban C3.1.2</b>				
C3.1.2.1	Umkhomazi tugboat	1		
C3.1.2.2	Pholela tugboat	1		
C3.1.2.3	Lotheni tugboat	1		
C3.1.2.4	Mkhuze tugboat	1		
C3.1.2.5	Utkekela tugboat	1		
C3.1.2.6	Palmiet tugboat	1		
C3.1.2.7	Umvoti tugboat	1		
C3.1.2.8	Inyalazi tugboat	1		
C3.1.2.9	Umhlali tugboat	1		
C3.1.2.10	Umsunduzi tugboat	1		
C3.1.2.11	Lufafa pilot boat	1		
C3.1.2.12	Indlovu pilot boat	1		
C3.1.2.13	Umcishu launch	1		
C3.1.2.14	Uqoyi launch	1		
C3.1.2.15	Moorhen launch	1		
C3.1.2.16	Unonkilonki launch	1		
C3.1.2.17	Ifuba launch	1		
C3.1.2.18	Adhoc Vessel	1		
<b>Sub Total of section C3.1.2</b>				
<b>TOTAL SECTION C3.1 carried forward to Final Summary</b>				

<b>SECTION C3.2 Annual service of Distribution boards, shore supply, transformers, switchgear and electrical wiring</b>				
<b>Richards Bay C3.2.1</b>				
C3.2.1.1	Ukhozi tugboat		1	
C3.2.1.2	Lilani tugboat		1	
C3.2.1.3	Iphotwe tugboat		1	
C3.2.1.4	Indlazi tugboat		1	
C3.2.1.5	Uhuva tugboat		1	
C3.2.1.6	Jojosi pilot boat		1	
C3.2.1.7	Swift Tern workboat		1	
C3.2.1.8	Adhoc Vessel		1	
			<b>Sub Total of section C3.2.1</b>	
<b>Durban C3.2.2</b>				
C3.2.2.1	Umkhomazi tugboat		1	
C3.2.2.2	Pholela tugboat		1	
C3.2.2.3	Lotheni tugboat		1	
C3.2.2.4	Mkhuze tugboat		1	
C3.2.2.5	Uthekelela tugboat		1	
C3.2.2.6	Palmiet tugboat		1	
C3.2.2.7	Umvoti tugboat		1	
C3.2.2.8	Inyalazi tugboat		1	
C3.2.2.9	Umhlali tugboat		1	
C3.2.2.10	Umsunduzi tugboat		1	
C3.2.2.11	Lufafa pilot boat		1	
C3.2.2.12	Indlovu pilot boat		1	
C3.2.2.13	Umcishu launch		1	
C3.2.2.14	Uqoyi launch		1	
C3.2.2.15	Moorhen launch		1	
C3.2.2.16	Unonkilonki launch		1	
C3.2.2.17	Ifuba launch		1	
C3.2.2.18	Adhoc Vessel		1	
			<b>Sub Total of section C3.2.2</b>	
			<b>TOTAL SECTION C3.2 carried forward to Final Summary</b>	

<b>SECTION C 3.3 Annual Service of Pump motors and fans(incuding megger testing when required)</b>				
<b>Richards Bay C3.3.1</b>				
C3.3.1.1	Ukhozi tugboat	1		
C3.3.1.2	Lilani tugboat	1		
C3.3.1.3	Iphotwe tugboat	1		
C3.3.1.4	Indlazi tugboat	1		
C3.3.1.5	Uhuva tugboat	1		
C3.3.1.6	Jojosi pilot boat	1		
C3.3.1.7	Swift Tern workboat	1		
C3.3.1.8	Adhoc Vessel	1		
			<b>Sub Total of section C3.3.1</b>	
<b>Durban C3.3.2</b>				
C3.3.2.1	Umkhomazi tugboat	1		
C3.3.2.2	Pholela tugboat	1		
C3.3.2.3	Lotheni tugboat	1		
C3.3.2.4	Mkhuze tugboat	1		
C3.3.2.5	Uthekela tugboat	1		
C3.3.2.6	Palmiet tugboat	1		
C3.3.2.7	Umvoti tugboat	1		
C3.3.2.8	Inyalazi tugboat	1		
C3.3.2.9	Umhlali tugboat	1		
C3.3.2.10	Umsunduzi tugboat	1		
C3.3.2.11	Lufafa pilot boat	1		
C3.3.2.12	Indlovu pilot boat	1		
C3.3.2.13	Umcishu launch	1		
C3.3.2.14	Uqoyi launch	1		
C3.3.2.15	Moorhen launch	1		
C3.3.2.16	Unonkilonki launch	1		
C3.3.2.17	Ifuba launch	1		
C3.3.2.18	Adhoc Vessel	1		
			<b>Sub Total of section C3.3.2</b>	
			<b>TOTAL SECTION C3.3 carried forward to Final Summary</b>	

<b>SECTION C3.4 Annual Service of Alternators, air compressors and pre-heaters</b>				
<b>Richards Bay C3.4.1</b>				
C3.4.1.1	Ukhozi tugboat		1	
C3.4.1.2	Lilani tugboat		1	
C3.4.1.3	Iphotwe tugboat		1	
C3.4.1.4	Indlazi tugboat		1	
C3.4.1.5	Uhuva tugboat		1	
C3.4.1.6	Jojosi pilot boat		1	
C3.4.1.7	Swift Tern workboat		1	
C3.4.1.8	Adhoc Vessel		1	
			<b>Sub Total of section C3.4.1</b>	
<b>Durban C3.4.2</b>				
C3.4.2.1	Umkhomazi tugboat		1	
C3.4.2.2	Pholela tugboat		1	
C3.4.2.3	Lotheni tugboat		1	
C3.4.2.4	Mkhuze tugboat		1	
C3.4.2.5	Uthekelela tugboat		1	
C3.4.2.6	Palmiet tugboat		1	
C3.4.2.7	Umvoti tugboat		1	
C3.4.2.8	Inyalazi tugboat		1	
C3.4.2.9	Umhlali tugboat		1	
C3.4.2.10	Umsunduzi tugboat		1	
C3.4.2.11	Lufafa pilot boat		1	
C3.4.2.12	Indlovu pilot boat		1	
C3.4.2.13	Umcishu launch		1	
C3.4.2.14	Uqoyi launch		1	
C3.4.2.15	Moorhen launch		1	
C3.4.2.16	Unonkilonki launch		1	
C3.4.2.17	Ifuba launch		1	
C3.4.2.18	Adhoc Vessel		1	
			<b>Sub Total of section C3.4.2</b>	
			<b>TOTAL SECTION C3.4 carried forward to Final Summary</b>	

<b>SECTION C3.5 Annual Service of electrical wiring, plug sockets, light fixtures and bulbs (including insulation tests conducted on a 4 year cycle)</b>				
<b>Richards Bay C3.5.1</b>				
C3.5.1.1	Ukhozi tugboat	1		
C3.5.1.2	Lilani tugboat	1		
C3.5.1.3	Iphotwe tugboat	1		
C3.5.1.4	Indlazi tugboat	1		
C3.5.1.5	Uhuva tugboat	1		
C3.5.1.6	Jojosi pilot boat	1		
C3.5.1.7	Swift Tern workboat	1		
C3.5.1.8	Adhoc Vessel	1		
			<b>Sub Total of section C3.5.1</b>	
<b>Durban C3.5.2</b>				
C3.5.2.1	Umkhomazi tugboat	1		
C3.5.2.2	Pholela tugboat	1		
C3.5.2.3	Lotheni tugboat	1		
C3.5.2.4	Mkhuze tugboat	1		
C3.5.2.5	Uthekelela tugboat	1		
C3.5.2.6	Palmiet tugboat	1		
C3.5.2.7	Umvoti tugboat	1		
C3.5.2.8	Inyalazi tugboat	1		
C3.5.2.9	Umhlali tugboat	1		
C3.5.2.10	Umsunduzi tugboat	1		
C3.5.2.11	Lufafa pilot boat	1		
C3.5.2.12	Indlovu pilot boat	1		
C3.5.2.13	Umcishu launch	1		
C3.5.2.14	Uqoyi launch	1		
C3.5.2.15	Moorhen launch	1		
C3.5.2.16	Unonkilonki launch	1		
C3.5.2.17	Ifuba launch	1		
C3.5.2.18	Adhoc Vessel	1		
			<b>Sub Total of section C3.5.2</b>	
			<b>TOTAL SECTION C3.5 carried forward to Final Summary</b>	

<b>SECTION C2.6 Adhoc fault finding, maintenance, repairs and replacements</b>				
<b>Richards Bay C3.6.1</b>				
C3.6.1.1	Ukhozi tugboat		1	
C3.6.1.2	Lilani tugboat		1	
C3.6.1.3	Iphotwe tugboat		1	
C3.6.1.4	Indlazi tugboat		1	
C3.6.1.5	Uhuva tugboat		1	
C3.6.1.6	Jojosi pilot boat		1	
C3.6.1.7	Swift Tern workboat		1	
C3.6.1.8	Adhoc Vessel		1	
			<b>Sub Total of section C3.6.1</b>	
<b>Durban C3.6.2</b>				
C3.6.2.1	Umkhomazi tugboat		1	
C3.6.2.2	Pholela tugboat		1	
C3.6.2.3	Lotheni tugboat		1	
C3.6.2.4	Mkhuze tugboat		1	
C3.6.2.5	Uthekelela tugboat		1	
C3.6.2.6	Palmiet tugboat		1	
C3.6.2.7	Umvoti tugboat		1	
C3.6.2.8	Inyalazi tugboat		1	
C3.6.2.9	Umhlali tugboat		1	
C3.6.2.10	Umsunduzi tugboat		1	
C3.6.2.11	Lufafa pilot boat		1	
C3.6.2.12	Indlovu pilot boat		1	
C3.6.2.13	Umcishu launch		1	
C3.6.2.14	Uqoyi launch		1	
C3.6.2.15	Moorhen launch		1	
C3.6.2.16	Unonkilonki launch		1	
C3.6.2.17	Ifuba launch		1	
C3.6.2.18	Adhoc Vessel		1	
			<b>Sub Total of section C3.6.2</b>	
			<b>TOTAL SECTION C3.6 carried forward to Final Summary</b>	

<b>FINAL SUMMARY TABLE</b>		<b>Total</b>	
Total brought forward from SECTION B3: EQUIPMENT LIST MARINE CRAFT			
Total brought forward from SECTION C3.1: Annual service of Distribution boards, shore supply, transformers, switchgear and electrical wiring			
Total brought forward from SECTION C3.2: Annual Service of Pump motors and fans(incl megger testing when required)			
Total brought forward from SECTION C3.3: Annual Service of Alternators, air compressors and pre-heaters			
Total brought forward from SECTION C3.4: Insulation tests and Annual Service of electrical wiring, plug sockets, light fixtures and bulbs			
Total brought forward from SECTION C3.5: Annual Service of electrical wiring, plug sockets, light fixtures and bulbs (including insulation test conducted on a 4 year cycle)			
Total brought forward from SECTION C3.6: Adhoc fault finding, maintenance, repairs and replacements			
<b>Total carried forward to MULTI-YEAR PRICING TABLE EASTERN REGION</b>			
<b>MULTI-YEAR PRICING TABLE - EASTERN REGION</b>		<b>CPI</b>	<b>TOTAL</b>
TOTAL COSTS YEAR 1 = (YR1 Total costs) BROUGHT FORWARD FROM FINAL SUMMARY TABLE		0	
TOTAL COSTS YEAR 2 = (YR1 total cost X CPI adjustment)		4.5	
TOTAL COSTS YEAR 3 = (YR2 total cost XCPI adjustment)		4.4	
<b>TOTAL EXCL. VAT</b>			
<b>15% VAT</b>			
<b>TOTAL INCL. VAT</b>			

<b>Notes to the Multi- Year Pricing Table:</b>	
<b>1</b>	The first year of the contract will not be subject to price escalation
<b>2</b>	Tendered rates will be subject to escalation from year 2 onwards
<b>3</b>	Tendered rates will be adjusted annually based on the actual escalation indices published by Stats SA.
<b>4</b>	The formula for adjustment and the method of adjustment is set out in more detail in the tender document
<b>5</b>	The "CPI" figures provided in the "Multi-Year Pricing Table" above are forward projections from the Bureau for Economic Research and are used as an estimate in able to obtain a total price over the contract term.