

**TNPA MARINE SERVICES**

REQUEST FOR PROPOSAL [RFP] No:

**FOR THE PROVISION OF:**

DRYDOCK OF TUG ORCA AND TUG LIZIBUKO FOR A ONCE-OFF PERIOD



DRYDOCKING IN PORT OF EAST LONDON - 2024/2025					
TASK 1 - TUG ORCA					
Item no	Description	Unit	Qty	Rate	Amount
1	<b>SERVICES AND SURVEYS</b>				
1.1	<b>SERVICES REQUIRED</b>				
1.1.1	Provision of Fire Watch Man (8hrs/day)	Days	2		
1.1.2	Provision of Hot Work Permit (8hrs/day)	Days	2		
1.1.3	Provision of Non Destructive, Crack and Thickness Testing Where Needed	p/m	10		
1.1.4	Mobile Crane (1 Ton) (4hrs/day)	Days	3		
2	<b>ENGINE ROOM WORK</b>				
2.1	<b>VALVES</b>				
2.1.1	Remove, Overhaul and Assemble Discharge Valves as Per South African Maritime Safety Authority Requirements and;				
2.1.2	Remove, Overhaul and Assemble Suction Valves as Per Samsa Requirements and;				
2.1.3	Renew all gaskets (non-metallic)				
2.1.4	Pressure Test Certificates for Valves to Be Supplied for the following valves				
	<b>All valves to be inspected by Surveyor, assembled and pressure tested/Certified to 4 bar.</b>				
	<b>LIST OF VALVES</b>				
V1	Black Water Overboard Valve 100 NB	No.	1		
V2	Sewage Plant Overboard Valve 25 NB	No.	1		
V3	Grey Water Overboard Valve 50 NB	No.	1		
V4	A/C Plant Overboard Valve 32 NB	No.	1		
V5	General Service Pump Isolating Valve 100 NB	No.	1		
V6	Aft General Service Overboard Discharge Valve 80 NB	No.	1		
V7	Fwd General Service Overboard Discharge Valve 80 NB	No.	1		
V8	Oily Water Separator Overboard Valve 25 NB	No.	1		
V9	Galley Overboard Valve 50 NB	No.	1		
V10	Starboard Fire Pump Isolating Valve (Butterfly - To Be Cleaned In Place) 303 NB	No.	1		
V11	Port Fire Pump Isolating Valve (Butterfly - To Be Cleaned In Place) 303 NB	No.	1		
V12	Main Sea Chest Vent Valves 50 NB	No.	2		
V13	Voith Vent Valves 25 NB	No.	2		
V14	Service Hydraulic Fuel Drop Valves	No.	4		
V15	Overhaul Miscellaneous Valves As Per Request 80 NB	No.	4		
2.2	<b>PIPING (Quote on schedule 40 for all)</b>				
2.2.1	Engine Room Sea Water Piping to Be Renewed Subject to Condition	Size	2m X Ø50mm		
2.2.2	Engine Room Lubricating Oil Piping to Be Renewed Subject to Condition	Size	2m X Ø50mm		
2.2.3	Engine Room Fresh Water Piping to Be Renewed Subject to Condition	Size	2m X Ø50mm		
2.2.4	Engine Room Bilge Piping to Be Renewed Subject to Condition	Size	2m X Ø50mm		
2.2.5	Engine Room Hydraulic Piping to Be Renewed Subject to Condition	Size	2m X Ø50mm		
2.2.6	Engine Room Sewage Piping to Be Renewed Subject to Condition	Size	2m X Ø50mm		
2.2.7	Engine Room Compressed Air Piping to Be Renewed Subject to Condition	Size	2m X Ø50mm		
2.2.8	Engine Room Fuel Piping to Be Renewed Subject to Condition	Size	2m X Ø50mm		
2.3	<b>BILGES</b>				
2.3.1	Entire Engine Room Bilges to Be Washed and Cleaned	m³	10		
2.3.2	Bilges To Be Pumped Out After Cleaned	m³	10		
2.4	<b>FIRE PUMP STRUM BOXES &amp; STRAINERS</b>				
2.4.1	Fire Pump Strum Boxes To Be Opened, Hp Cleaned & Inspected	No.	2		
2.4.2	Renew Strum Box Anodes (X2)	No.	2		
2.4.3	Remove Strainer & Hp Wash	No.	2		
2.4.4	Hoist Up Strainer Housing To Access Butterfly Valve, If Necessary	No.	2		
2.4.5	Strum Box & Strainers To Be Painted With Coat Of Antifouling	No.	2		
2.4.6	Strum Boxes With Strainers To Be Boxed Up After Completion	No.	2		
2.4.7	New Gaskets To Be Fitted (5mm Neoprene)	No.	2		
2.5	<b>KEEL COOLERS</b>				
2.5.1	Flush Through Keel Coolers And Refill	No.	2		
2.5.2	Renew Anodes (3kg)	No.	4		
2.5.3	Light Scrapping (With Extreme Caution) To Remove Marine Growth Off Keel Coolers	No.	2		
SUBTOTAL 1					

Item no	Description	Unit	Qty	Rate	Amount
<b>2.6 BOX COOLERS</b>					
<b>Appropriate Chemical with MSDS Information To Be Supplied By Contractor</b>					
2.6.1	Remove/Refit Piping & Electrical Fittings In Way Of Coolers	No.	4		
2.6.2	Pressure Tested In Situ To Check For Leaks Prior To Removal (1,5 Bar)	No.	4		
2.6.3	Remove Coolers (X 4) - (Weight - 600 Kg Ea)	No.	4		
2.6.4	Coolers To Be Chemically Cleaned (Soaked) & Pressure Tested 1,5 Bar (15 Mins)	No.	4		
2.6.5	Anodes To Be Fitted On Cooler Bonnets (Replacement Anodes Supplied By Tnpa)	No.	4		
2.6.6	Coolers To Be Refitted (Replacement Gaskets Supplied By Tnpa)	No.	4		
2.6.7	Pressurize System In Situ To Check For Leaks (15 Mins)	No.	4		
<b>2.7 VARIOUS BRACKETS</b>					
2.7.1	Brackets In ER To Be Renewed As Per Chief Engineers Instructions (200mm X 50mm MS)	No.	10		
2.7.2	Brackets On Deck To Be Renewed As Per Masters Instructions (200mm X 50mm MS)	No.	10		
<b>2.8 MAIN FIRE PUMP</b>					
2.8.1	Repack Glands & Test When Afloat (16mm Graphite Packing)	No.	2		
<b>2.9 HT &amp; LT MAIN ENGINE ATTACHED PUMPS (MAN 8L 27/38)</b>					
2.9.1	Service Attached Pumps & Renew Defectives Parts As Necessary	No.	4		
<b>2.10 FUEL TRANSFER MAIN ENGINE ATTACHED PUMPS (MAN 8L 27/38)</b>					
2.10.1	Service Attached Pumps & Renew Defectives Parts As Necessary	No.	2		
<b>2.11 STANDBY LUBE OIL PUMPS (gp 185-125 G200)</b>					
2.11.1	Service Pumps X 2 & Electric Motors X 2	No.	2		
2.11.2	Renew Pump Couplings And Loctite (Tnpa To Supply Couplings)	No.	2		
2.11.3	Rewind Motor, As Necessary	No.	1		
<b>2.12 STANDBY HT &amp; LT FRESH WATER PUMPS (STORK CB50-160)</b>					
2.12.1	Service Pumps X 2 & Electric Motors X 2	No.	2		
2.12.2	Rewind Motor, As Necessary	No.	1		
<b>3 HULL AND SUPERSTRUCTURE WORK PREPARATION</b>					
*Cleaning Agent For Chemically Cleaning To Be Provided By Contractor					
*MSDS Information To Be Provided For Chemicals					
<b>3.1 HULL CLEANING</b>					
3.1.1	Barnicles to be scraped off entire hull	m²	150		
3.1.2	Entire hull to be pressure washed (350bar)	m²	1200		
3.1.3	Port & Stbd Box Coolers Seachest	No.	2		
3.1.4	Port & Stbd Main Seachest	No.	2		
3.1.5	Port & Stbd Keel Coolers	No.	2		
3.1.6	Spot Blast Affected Areas Of Hull Including Inner And Outer Gunnel	m²	600		
3.1.7	Entire Exterior Hull Including Inner And Outer Gunnel To Be Pressure Washed (350bar)	m²	1200		
3.1.8	Remove Sea Chest Gratings For Cleaning, Blasting And Later Replaced (Remove Prior Blasting)	No.	22		
3.1.9	Clean Dock, Barnicles, Paint Flakes & Blasting Debris To Be Disposed Of	m²	350		
<b>3.2 ANODES</b>					
3.2.1	Remove Existing Anodes (64 X Hull + 20 Vsp Units + 4 X Sea Strainers . Total 100)	No.	100		
3.2.2	Replace Anodes With New After Paint Application	No.	100		
<b>3.3 PORT &amp; STBD VOITH UNITS</b>					
3.3.1	Remove Voith Inspections Covers	No.	2		
3.3.2	Hp Wash Rotor Casings	No.	2		
3.3.3	Cut Out Docking Platform For Dropping Of Blades	No.	4		
3.3.4	Descale Voith Rotor Wells, Rotor Table Sides & Table Tops	No.	2		
3.3.5	Degrease & Hp Wash Voith Rotor Wells And Tables (After Repairs)	No.	2		
3.3.6	Paint Voith Rotor Wells & Tables (1 X Primer, 1 X Undercoat)	No.	2		
3.3.7	Paint Rotor Casings (Seaquantum Ultra Dark Red) (2 X Coats)	No.	2		
3.3.8	Reweld Docking Platform After Voith Repairs	No.	4		
3.3.9	Crack Detecting Tests To Be Done On All Welds For The Platform Repairs (Submit Report)	No.	2		
3.3.10	Refit Voith Inspection Covers, Fit New Gaskets (Gaskets Supplied By Tnpa)	No.	2		
3.3.11	Mechanically Clean Voith Blades	No.	10		
<b>3.4 DOCKING PLATFORM STRUTS</b>					
3.4.1	Crack Detecting Tests To Be Done On All Welds (Submit Report)	No.	2		
3.4.2	Repairs To Be Done On Welds	p/m	10		
<b>3.5 SKEG</b>					
5.5.1	Lower Plug On Skeg To Be Removed And Check For Water	No.	1		
5.5.2	Refit Plug & Renew Teflon Plug Washer If Necessary	No.	1		
<b>3.6 DOCKING GUARD</b>					
3.6.1	Remove Lower Plug And Check For Water	No.	1		
3.6.2	Refit Plug & Renew Teflon Plug Washer If Necessary	No.	1		
<b>SUBTOTAL 2</b>					

Item no	Description	Unit	Qty	Rate	Amount
<b>3.7 FENDERS</b>					
3.7.1	Remove All Tyre Fenders And Land On Dock Floor	No.	16		
3.7.2	Repair/Replace Lugs	No.	10		
3.7.3	Refit Tyre Fenders On Completion Of Painting	No.	16		
<b>3.8 MAST, WHEELHOUSE &amp; SUPERSTRUCTURE (INC. YARDARMS, LADDERS &amp; RAILINGS)</b>					
3.8.1	Chemically Clean	m²	400		
3.8.2	Mechanically Descale Affected Areas	m²	10		
3.8.3	Renew Corroded/Damaged Steelwork (50kg)	kg	50		
3.8.4	Hp Wash After Mechanical Descale	m²	400		
<b>3.9 MONKEY ISLAND &amp; BRIDGE DECK (INC. LADDERS,RAILINGS &amp; VENTS)</b>					
3.9.1	Chemically Clean	m²	200		
3.9.2	Mechanically Descale Affected Areas	m²	10		
3.9.3	Hp Wash After Mechanical Descale	m²	200		
<b>3.10 MAIN DECK (INCLUDING BITS, CRUCIFORM, WINCH PLATFORM)</b>					
3.10.1	Chemically Clean	m²	200		
3.10.2	Mechanically Descale Affected Areas	m²	10		
3.10.3	Hp Wash After Mechanical Descale	m²	200		
<b>3.11 WATER LINE TO GUNNNEL (INCLUDING INSIDE BULWARKS)</b>					
3.11.1	Chemically Clean	m²	200		
3.11.2	Mechanically Descale Affected Areas	m²	10		
3.11.3	Hp Wash After Mechanical Descale	m²	200		
<b>3.12 WHEELHOUSE SLIDING WINDOWS</b>					
3.12.1	Remove Sliding Windows	No.	8		
3.12.2	Mechanically Descale Affected Areas Of Frames	m²	2		
3.12.3	Repair Frames (3190MM x 825MM)	No.	8		
3.12.4	Paint As Per Wheelhouse Paint Specs	m²	2		
3.12.5	Renew Window Rubbers - To Be Tested For Leaks	No.	8		
3.12.6	Refit Locking Mechanisms	No.	32		
<b>3.13 EXHAUST FUNNELS</b>					
3.13.1	Wash Down Exhaust Funnel To Remove Salt ( X2)	m²	35		
3.13.2	Remove Heat Shield & Mechanically Descale Affected Areas Of Exhaust Funnel & Heat Shield	m²	10		
3.13.3	Wash Out/Degrease Entire Inner Space Of Exhaust Funnel (X 2)	m²	35		
3.13.4	Retightened All Bolts & Nuts On All Flanges, Mountings And Shock Dampers. (Top & Bottom Spaces)	No.	2		
3.13.5	Renew Corroded Steelwork (50kg)	kg	50		
<b>4 PAINTING</b>					
<b>4.1 MAST, WHEELHOUSE &amp; SUPERSTRUCTURE (INC. YARDARMS, LADDERS &amp; RAILINGS)</b>					
4.1.1	Prime Affected Areas (Smartpack Red) First Coat	m²	10		
4.1.2	Prime Affected Areas (Smartpack Grey) Second Coat	m²	10		
4.1.3	Apply Top Coat As Per Paint Spec (Hardtop XP White) Complete 2 Coats	m²	400		
<b>4.2 MONKEY ISLAND &amp; BRIDGE DECK (INC. LADDERS,RAILINGS &amp; VENTS)</b>					
4.2.1	Prime Affected Areas (Smartpack Red) First Coat	m²	10		
4.2.2	Prime Affected Areas (Smartpack Grey) Second Coat	m²	10		
4.2.3	Apply Top Coat As Per Paint Spec (White/Green) Complete 2 Coats	m²	200		
<b>4.3 MAIN DECK (INCLUDING BITS, CRUCIFORM, WINCH PLATFORM)</b>					
4.3.1	Prime Affected Areas (Smartpack Red) First Coat	m²	10		
4.3.2	Prime Affected Areas (Smartpack Grey) Second Coat	m²	10		
4.3.3	Apply Top Coat As Per Paint Spec (Green) Complete 2 Coats	m²	200		
<b>4.4 WATER LINE TO GUNNNEL (INCLUDING INSIDE BULWARKS)</b>					
4.4.1	Prime Affected Areas (Smartpack Red) First Coat	m²	200		
4.4.2	Prime Affected Areas (Smartpack Grey) Second Coat	m²	200		
4.4.3	Apply Top Coat As Per Paint Spec (Black) Complete 2 Coats	m²	450		
<b>4.5 HULL (INCLUDING SEA CHESTS)</b>					
4.5.1	Apply Primer As Per Paint Spec (90 Aluminium)	m²	750		
4.5.2	Apply Undercoat (Tie-Coat) As Per Paint Spec (Safeguard Universal Es Plum)	m²	750		
4.5.3	Apply Antifouling As Per Paint Spec (Seaforce Active Plus Light Red)	m²	750		
4.5.4	Apply Antifouling As Per Paint Spec (Seaforce Active Plus Dark Red)	m²	750		
4.5.5	Draught And Plimsol Marks To Be Painted	m²	10		
<b>4.6 EXHAUST FUNNELS</b>					
4.6.1	Apply Full Coat As Per Paint Spec (1000c Aluminium)	m²	35		
4.6.2	Apply Full Coat As Per Paint Spec (Solvalitt Black)	m²	35		
<b>SUBTOTAL 3</b>					

Item no	Description	Unit	Qty	Rate	Amount
<b>4.7 ENGINE ROOM FAN SPACES</b>					
4.7.1	Spot Blast Affected Area	m²	4		
4.7.2	Prime Affected Areas As Per Paint Spec	m²	4		
4.7.3	Apply Top Coat As Per Paint Spec (Hardtop Xp White) Complete	m²	10		
<b>4.8 EXTRA'S</b>					
4.8.1	Removal Of Debris	m²	5		
<b>5 TANKS</b>					
*Contractor To Provide For Gas Free Certificate Where Required.					
*All Water Tanks & Void Space Plugs To Be Opened & Replaced On Completion					
*All Water Tanks & Void Space Plugs Teflon Plug Washers To Be Replaced					
<b>5.1 FRESH WATER TANK (O² Readings To Be Taken On Every Entry And Log To Be Kept For SAMSA)</b>					
5.1.1	Fresh Water Tank To Be Drained	No.	1		
5.1.2	Open Fresh Water Tank And Ventilate	No.	1		
5.1.3	Fresh Water Tank To Be Hp Cleaned	m²	38		
5.1.4	Fresh Water Tank To Be Mechanically Descaled And Primed (1 Coat Tankguard 412 Red)	m²	10		
5.1.5	Fresh Water Tank To Be Touched Up As Required (1 Coat Tankguard 412 White)	m²	10		
5.1.6	New Gaskets To Be Made Up	No.	2		
5.1.7	Fresh Water Manhole Covers To Be Refitted	No.	2		
5.1.8	Inspect Condition Of Echo Sounder Cable Conduit Inside Tank	No.	1		
5.1.9	Replace Damaged Studs, As Necessary	No.	6		
<b>5.2 FOREPEAK TANK (O² Readings To Be Taken On Every Entry And Log To Be Kept For SAMSA)</b>					
5.2.1	Forepeak Tank To Be Drained	No.	1		
5.2.2	Open Forepeak Tank And Ventilate	No.	1		
5.2.3	Forepeak Tank To Be Cleaned	m²	50		
5.2.4	Forepeak Tank To Be Mechanically Descaled And Primed (1 Coat Tankguard 412 Red)	m²	10		
5.2.5	Forepeak Tank To Be Touched Up As Required (1 Coat Tankguard 412 White)	m²	10		
5.2.6	New Gaskets To Be Made Up	No.	1		
5.2.7	Forepeak Tank Manhole Cover To Be Refitted	No.	1		
5.2.8	Replace Damaged Studs, As Necessary	No.	6		
<b>5.3 AFTPEAK TANK (O² Readings To Be Taken On Every Entry And Log To Be Kept For SAMSA)</b>					
5.3.1	Aftpeak Tank To Be Drained	No.	1		
5.3.2	Open Aftpeak Tank And Ventilate	No.	1		
5.3.3	Aftpeak Tank To Be Cleaned	m²	40		
5.3.4	Aftpeak Tank To Be Mechanically Descaled And Primed (1 Coat Tankguard 412 Red)	m²	10		
5.3.5	Aftpeak Tank To Be Touched Up As Required (1 Coat Tankguard 412 White)	m²	10		
5.3.6	New Gaskets To Be Made Up	No.	1		
5.3.7	Aftpeak Tank Manhole Cover To Be Refitted	No.	1		
5.3.8	Replace Damaged Studs, As Necessary	No.	6		
<b>5.4 DOUBLE BOTTOM FUEL TANKS</b>					
5.4.1	Open Double Bottom Fuel Tanks And Ventilate	No.	2		
5.4.2	Gas Free Certificate To Be Issued Before Entry	No.	1		
5.4.3	Double Bottom Fuel Tanks To Be Cleaned (X2)	m²	68		
5.4.4	Double Bottom Fuel Tanks To Be Mechanically Descaled And Primed (1 Coat Tankguard Storage Light Red)	m²	10		
5.4.5	Double Bottom Fuel Tanks To Be Touched Up As Required (1 Coat Tankguard Storage Light Grey)	m²	10		
5.4.6	New Gaskets To Be Made Up	No.	2		
5.4.7	Double Bottom Fuel Tanks Manhole Covers To Be Refitted	No.	2		
5.4.8	Replace Damaged Studs, As Necessary	No.	6		
<b>5.5 DIRTY OIL TANKS (O² Readings To Be Taken On Every Entry And Log To Be Kept For SAMSA)</b>					
5.5.1	Dirty Oil Tanks To Be Pumped Out	m²	5		
5.5.2	Open Dirty Oil Tanks And Ventilate	No.	2		
5.5.3	Dirty Oil Tanks To Be Cleaned	m²	16		
5.5.4	Dirty Oil Tanks To Be Mechanically Descaled And Primed (1 Coat Tankguard Storage Light Red)	m²	4		
5.5.5	Dirty Oil Tanks To Be Touched Up As Required (1 Coat Tankguard Storage Light Grey)	m²	4		
5.5.6	New Gaskets To Be Made Up	No.	2		
5.5.7	Dirty Oil Tank Manhole Covers To Be Refitted	No.	2		
5.5.8	Replace Damaged Studs, As Necessary	No.	6		
<b>SUBTOTAL 4</b>					

Item no	Description	Unit	Qty	Rate	Amount
<b>5.6 VOID SPACE (O<sup>2</sup> Readings To Be Taken On Every Entry And Log To Be Kept For SAMS)</b>					
5.6.1	Void Space Tank To Be Cleaned	m²	10		
5.6.2	Void Space Tank To Be Mechanically Descaled And Primed (1 Coat Tankguard 412 Red)	m²	4		
5.6.3	Void Space Tank To Be Touched Up As Required (1 Coat Tankguard 412 White)	m²	4		
5.6.4	New Gaskets To Be Made Up	No.	2		
5.6.5	Void Space Tank Manhole Cover To Be Refitted	No.	2		
5.6.6	Renew Flexi Hoses (Ø120 X 150mm, 5mm) & Heavy Duty Clamps On Keel Cooler Inside Tank	No.	4		
5.6.7	Replace Damaged Studs, As Necessary	No.	6		
<b>5.7 FOAM TANK</b>					
5.7.1	Supply Clean Tank/S To Store Foam During Tank Cleaning (Pumping Included)	m²	14		
5.7.2	Pumping Of Foam To & From Shoreside Storage Tank (Discard Any Non-Usable Foam)	m²	10		
5.7.3	Open Foam Tank And Ventilate	No.	2		
5.7.4	Gas Free Certificate To Be Issued Before Entry	No.	1		
5.7.5	Foam Tank To Be Mechanically Descaled And Primed (1 Coat Tankguard 412 Red)	m²	4		
5.7.6	Foam Tank To Be Touched Up As Required (1 Coat Tankguard 412 White)	m²	4		
5.7.7	New Gaskets To Be Made Up	No.	2		
5.7.8	Foam Tank Manhole Cover To Be Refitted	No.	2		
5.7.9	Replace Damaged Studs, As Necessary	No.	6		
<b>5.8 ANCHOR AND CHAIN</b>					
5.8.1	Anchor And Chain To Be Dropped And Ranged	No.	1		
5.8.2	Anchor And Chain To Be Shot Blast If Required	No.	1		
5.8.3	Anchor And Chain To Be High Pressure Cleaned	No.	1		
5.8.4	Free Up Anchor Chain Swivel	No.	1		
5.8.5	Chain Thickness Measurements To Be Taken (Submit Report) (5 Spots Per Shackle- 4 Shackles)	No.	20		
5.8.6	Anchor To Be Painted (1 Coat "No Rust", 1 Coat Red Oxide, 1 Coat Hardtop Black)	No.	1		
5.8.7	Entire Chain To Be Painted With Boiled Linseed Oil (2 Coats) Allow For Adequate Drying Time Between Coats	No.	2		
5.8.8	Chain To Be Remarked (Red & White Paint)	No.	1		
5.8.9	Chain And Anchor To Be Restowed	No.	1		
5.8.10	Spare Anchor To Be Removed, Derusted & Painted. (1 Coat "No Rust", 1 Coat Red Oxide, 1 Coat Black)	No.	1		
5.8.11	Spare Anchor D-Shackle To Be Freed Up	No.	1		
<b>5.9 CHAIN LOCKER</b>					
5.9.1	Manhole Cover To Be Removed	No.	1		
5.9.2	Manhole Cover To Be Mechanically Descaled	m²	0.5		
5.9.3	Manhole Cover To Be Washed And Painted (Smartpack Red)	m²	1		
5.9.4	Mud To Be Removed And Disposed Of	m²	1		
5.9.5	Chain Locker To Be Hp Washed	m²	4		
5.9.6	Chain Locker To Be Mechanically Descaled	m²	1		
5.9.7	Chain Locker To Be Painted Complete (Smartpack Red)	m²	4		
5.9.8	Grids To Be Removed, Hp Washed And Painted (Smartpack Red) Then Refitted	No.	4		
5.9.9	Manhole Cover To Be Refitted With New Gasket	No.	1		
<b>6 DECK WORK</b>					
<b>6.1 ANCHOR WINDLASS x 1</b>					
6.1.1	Spot Blast Affected Areas	m²	1		
6.1.2	Apply Primer As Per Paint Spec	m²	2		
6.1.3	Apply Top Coat As Per Paint Spec (1 Coat Hardtop As Green/Black)	m²	1		
6.1.4	Renew All Hydraulic Pipes & Fittings As Necessary	No.	5		
6.1.5	Service Hydraulic Motor On Deck (Pay Special Attention To Coupling)	No.	1		
6.1.6	Service Hydraulic Power Pack (Pay Special Attention To Coupling)	No.	1		
6.1.7	Service Control Valve	No.	1		
<b>6.2 PORT HOLES x 7</b>					
6.2.1	Mechanically Descale Affected Areas	m²	1		
6.2.2	Repair Sealing Surface If Necessary	No.	7		
6.2.3	Paint Sealing Surface & Window Boxes As Per Wheelhouse Paint Spec	m²	1		
6.2.4	Renew Rubbers	No.	7		
<b>6.3 DAVIT CRANE x 1</b>					
6.3.1	Mechanically Descale Affected Areas	m²	0.5		
6.3.2	Apply Primer As Per Paint Spec (Red, Grey)	m²	2		
6.3.3	Apply Top Coat As Per Paint Spec (2 Coats White)	m²	2		
<b>6.4 WINCH</b>					
6.4.1	Mechanically Descale Affected Areas	m²	4		
6.4.2	Apply Primer As Per Paint Spec (Red, Grey)	m²	4		
6.4.3	Apply Top Coat As Per Paint Spec (2 Coats Green)	m²	4		
<b>SUBTOTAL 5</b>					

Item no	Description	Unit	Qty	Rate	Amount
<b>7.1 MISCELLANEOUS WORK</b>					
7.1.1	Budget R100 000 For Unplanned Work Identified After Inspection	Prov. Sum	1	R 100 000.00	R 100 000.00
7.1.2	Budget For Skilled Labour	hrs.	20		
7.1.3	Budget For Semi-Skilled Labour	hrs.	20		
7.1.4	Budget For Machine Shop Cost	hrs.	20		
7.1.5	Assist CMEQ And Voith Technician With Voith Health Check For 4hrs Per Day	Days	2		
7.1.6	Signage And Stickers To Be Replaced After Painting Completed	No.	100		
7.1.7	Budget For Skilled Labour Overtime For 3 Saturdays And 3 Sundays for 4hrs Per Day	Days	6		
7.1.8	Scaffolding	Days	14		
7.1.9	She File, She Plan And Risk Assessment	Prov. Sum	1		
<b>7.2 GENERAL CLEANING</b>					
7.2.1	Provide Semi Skilled Labour 8 Hrs For Cleaning And Assisting TNPA Engine Room Staff	Days	10		
<b>7.3 METAL WORK</b>					
7.3.1	Metal For Repairs	Ton	0.5		
<b>8 SUNDRIES</b>					
<b>8.1 DISBURSEMENTS</b>					
8.1.1	Travelling Expenses	Days	31		
8.1.2	Accommodation	Days	31		
8.1.3	Other Disbursements	Days	31		
SUBTOTAL 6					

NB: SUBTOTALS AT THE BOTTOM OF EACH PAGE TO BE CARRIED OVER TO PRICING SUMMARY

TASK 1 PRICING SUMMARY	
Subtotal 1	
Subtotal 2	
Subtotal 3	
Subtotal 4	
Subtotal 5	
Subtotal 6	
Total excl VAT	

Item no	Description	Unit	Qty	Rate	Amount
DRYDOCKING IN PORT OF EAST LONDON - 2024/2025					
TASK 2 - TUG LIZIBUKO					
Item no	Description	Unit	Qty	Rate	Amount
1	<b>SERVICES AND SURVEYS</b>				
1.1	<b>SERVICES REQUIRED</b>				
1.1.1	Provision of Fire Watch Man (8hrs/day)	Days	2		
1.1.2	Provision of Hot Work Permit (8hrs/day)	Days	2		
1.1.3	Provision of Non Destructive, Crack and Thickness Testing Where Needed	p/m	10		
1.1.4	Mobile Crane (1 Ton) (4hrs/day)	Days	3		
2	<b>ENGINE ROOM WORK</b>				
2.1	<b>VALVES</b>				
2.1.1	Remove, Overhaul and Assemble Discharge Valves as Per South African Maritime Safety Authority Requirements and;				
2.1.2	Remove, Overhaul and Assemble Suction Valves as Per Samsa Requirements and;				
2.1.3	Renew all gaskets (non-metallic)				
2.1.4	Pressure Test Certificates for Valves to Be Supplied for the following valves <b>All valves to be inspected by Surveyor, assembled and pressure tested/Certified to 4 bar.</b> <b>LIST OF VALVES</b>				
V1	Black Water Overboard Valve 100 NB	No.	1		
V2	Sewage Plant Overboard Valve 25 NB	No.	1		
V3	Grey Water Overboard Valve 50 NB	No.	1		
V4	A/C Plant Overboard Valve 32 NB	No.	1		
V5	General Service Pump Isolating Valve 100 NB	No.	1		
V6	Aft General Service Overboard Discharge Valve 80 NB	No.	1		
V7	Fwd General Service Overboard Discharge Valve 80 NB	No.	1		
V8	Oily Water Separator Overboard Valve 25 NB	No.	1		
V9	Galley Overboard Valve 50 NB	No.	1		
V10	Starboard Fire Pump Isolating Valve (Butterfly - To Be Cleaned In Place) 303 NB	No.	1		
V11	Port Fire Pump Isolating Valve (Butterfly - To Be Cleaned In Place) 303 NB	No.	1		
V12	Main Sea Chest Vent Valves 50 NB	No.	2		
V13	Voith Vent Valves 25 NB	No.	2		
V14	Service Hydraulic Fuel Drop Valves	No.	4		
V15	Overhaul Miscellaneous Valves As Per Request 80 NB	No.	4		
2.2	<b>PIPING (Quote on schedule 40 for all)</b>				
2.2.1	Engine Room Sea Water Piping to Be Renewed Subject to Condition	Size	2m X Ø50mm		
2.2.2	Engine Room Lubricating Oil Piping to Be Renewed Subject to Condition	Size	2m X Ø50mm		
2.2.3	Engine Room Fresh Water Piping to Be Renewed Subject to Condition	Size	2m X Ø50mm		
2.2.4	Engine Room Bilge Piping to Be Renewed Subject to Condition	Size	2m X Ø50mm		
2.2.5	Engine Room Hydraulic Piping to Be Renewed Subject to Condition	Size	2m X Ø50mm		
2.2.6	Engine Room Sewage Piping to Be Renewed Subject to Condition	Size	2m X Ø50mm		
2.2.7	Engine Room Compressed Air Piping to Be Renewed Subject to Condition	Size	2m X Ø50mm		
2.2.8	Engine Room Fuel Piping to Be Renewed Subject to Condition	Size	2m X Ø50mm		
2.3	<b>BILGES</b>				
2.3.1	Entire Engine Room Bilges to Be Washed and Cleaned	m³	10		
2.3.2	Bilges To Be Pumped Out After Cleaned	m³	10		
2.4	<b>FIRE PUMP STRUM BOXES &amp; STRAINERS</b>				
2.4.1	Fire Pump Strum Boxes To Be Opened, Hp Cleaned & Inspected	No.	2		
2.4.2	Renew Strum Box Anodes (X2)	No.	2		
2.4.3	Remove Strainer & Hp Wash	No.	2		
2.4.4	Hoist Up Strainer Housing To Access Butterfly Valve, If Necessary	No.	2		
2.4.5	Strum Box & Strainers To Be Painted With Coat Of Antifouling	No.	2		
2.4.6	Strum Boxes With Strainers To Be Boxed Up After Completion	No.	2		
2.4.7	New Gaskets To Be Fitted (5mm Neoprene)	No.	2		
2.5	<b>KEEL COOLERS</b>				
2.5.1	Flush Through Keel Coolers And Refill	No.	2		
2.5.2	Renew Anodes (3kg)	No.	4		
2.5.3	Light Scrapping (With Extreme Caution) To Remove Marine Growth Off Keel Coolers	No.	2		
SUBTOTAL 1					

Item no	Description	Unit	Qty	Rate	Amount
<b>2.6 BOX COOLERS</b>					
<b>Appropriate Chemical with MSDS Information To Be Supplied By Contractor</b>					
2.6.1	Remove/Refit Piping & Electrical Fittings In Way Of Coolers	No.	4		
2.6.2	Pressure Tested In Situ To Check For Leaks Prior To Removal (1,5 Bar)	No.	4		
2.6.3	Remove Coolers (X 4) - (Weight - 600 Kg Ea)	No.	4		
2.6.4	Coolers To Be Chemically Cleaned (Soaked) & Pressure Tested 1,5 Bar (15 Mins)	No.	4		
2.6.5	Anodes To Be Fitted On Cooler Bonnets (Replacement Anodes Supplied By Tnpa)	No.	4		
2.6.6	Coolers To Be Refitted (Replacement Gaskets Supplied By Tnpa)	No.	4		
2.6.7	Pressurize System In Situ To Check For Leaks (15 Mins)	No.	4		
<b>2.7 VARIOUS BRACKETS</b>					
2.7.1	Brackets In ER To Be Renewed As Per Chief Engineers Instructions (200mm X 50mm MS)	No.	10		
2.7.2	Brackets On Deck To Be Renewed As Per Masters Instructions (200mm X 50mm MS)	No.	10		
<b>2.8 MAIN FIRE PUMP</b>					
2.8.1	Repack Glands & Test When Afloat (16mm Graphite Packing)	No.	2		
<b>2.9 HT &amp; LT MAIN ENGINE ATTACHED PUMPS (MAN 8L 27/38)</b>					
2.9.1	Service Attached Pumps & Renew Defectives Parts As Necessary	No.	4		
<b>2.10 FUEL TRANSFER MAIN ENGINE ATTACHED PUMPS (MAN 8L 27/38)</b>					
2.10.1	Service Attached Pumps & Renew Defectives Parts As Necessary	No.	2		
<b>2.11 STANDBY LUBE OIL PUMPS (gp 185-125 G200)</b>					
2.11.1	Service Pumps X 2 & Electric Motors X 2	No.	2		
2.11.2	Renew Pump Couplings And Loctite (Tnpa To Supply Couplings)	No.	2		
2.11.3	Rewind Motor, As Necessary	No.	1		
<b>2.12 STANDBY HT &amp; LT FRESH WATER PUMPS (STORK CB50-160)</b>					
2.12.1	Service Pumps X 2 & Electric Motors X 2	No.	2		
2.12.2	Rewind Motor, As Necessary	No.	1		
<b>3 HULL AND SUPERSTRUCTURE WORK PREPARATION</b>					
*Cleaning Agent For Chemically Cleaning To Be Provided By Contractor					
*MSDS Information To Be Provided For Chemicals					
<b>3.1 HULL CLEANING</b>					
3.1.1	Barnacles to be scraped off entire hull	m²	150		
3.1.2	Entire hull to be pressure washed (350bar)	m²	1200		
3.1.3	Port & Stbd Box Coolers Seachest	No.	2		
3.1.4	Port & Stbd Main Seachest	No.	2		
3.1.5	Port & Stbd Keel Coolers	No.	2		
3.1.6	Spot Blast Affected Areas Of Hull Including Inner And Outer Gunnel	m²	600		
3.1.7	Entire Exterior Hull Including Inner And Outer Gunnel To Be Pressure Washed (350bar)	m²	1200		
3.1.8	Remove Sea Chest Gratings For Cleaning, Blasting And Later Replaced (Remove Prior Blasting)	No.	22		
3.1.9	Clean Dock, Barnacles, Paint Flakes & Blasting Debris To Be Disposed Of	m²	350		
<b>3.2 ANODES</b>					
3.2.1	Remove Existing Anodes (64 X Hull + 20 Vsp Units + 4 X Sea Strainers . Total 100)	No.	100		
3.2.2	Replace Anodes With New <b>After Paint Application</b>	No.	100		
<b>3.3 PORT &amp; STBD VOITH UNITS</b>					
3.3.1	Remove Voith Inspections Covers	No.	2		
3.3.2	Hp Wash Rotor Casings	No.	2		
3.3.3	Cut Out Docking Platform For Dropping Of Blades	No.	4		
3.3.4	Descale Voith Rotor Wells, Rotor Table Sides & Table Tops	No.	2		
3.3.5	Degrease & Hp Wash Voith Rotor Wells And Tables (After Repairs)	No.	2		
3.3.6	Paint Voith Rotor Wells & Tables (1 X Primer, 1 X Undercoat)	No.	2		
3.3.7	Paint Rotor Casings (Seaquantum Ultra Dark Red) (2 X Coats)	No.	2		
3.3.8	Reweld Docking Platform After Voith Repairs	No.	4		
3.3.9	Crack Detecting Tests To Be Done On All Welds For The Platform Repairs ( Submit Report)	No.	2		
3.3.10	Refit Voith Inspection Covers, Fit New Gaskets (Gaskets Supplied By Tnpa)	No.	2		
3.3.11	Mechanically Clean Voith Blades	No.	10		
<b>3.4 DOCKING PLATFORM STRUTS</b>					
3.4.1	Crack Detecting Tests To Be Done On All Welds (Submit Report)	No.	2		
3.4.2	Repairs To Be Done On Welds	p/m	10		
<b>3.5 SKEG</b>					
5.5.1	Lower Plug On Skeg To Be Removed And Check For Water	No.	1		
5.5.2	Refit Plug & Renew Teflon Plug Washer If Necessary	No.	1		
<b>3.6 DOCKING GUARD</b>					
3.6.1	Remove Lower Plug And Check For Water	No.	1		
3.6.2	Refit Plug & Renew Teflon Plug Washer If Necessary	No.	1		
<b>SUBTOTAL 2</b>					



Item no	Description	Unit	Qty	Rate	Amount
<b>3.7 FENDERS</b>					
3.7.1	Remove All Tyre Fenders And Land On Dock Floor	No.	16		
3.7.2	Repair/Replace Lugs	No.	10		
3.7.3	Refit Tyre Fenders On Completion Of Painting	No.	16		
<b>3.8 MAST, WHEELHOUSE &amp; SUPERSTRUCTURE (INC. YARDARMS, LADDERS &amp; RAILINGS)</b>					
3.8.1	Chemically Clean	m²	400		
3.8.2	Mechanically Descale Affected Areas	m²	10		
3.8.3	Renew Corroded/Damaged Steelwork (50kg)	kg	50		
3.8.4	Hp Wash After Mechanical Descale	m²	400		
<b>3.9 MONKEY ISLAND &amp; BRIDGE DECK (INC. LADDERS,RAILINGS &amp; VENTS)</b>					
3.9.1	Chemically Clean	m²	200		
3.9.2	Mechanically Descale Affected Areas	m²	10		
3.9.3	Hp Wash After Mechanical Descale	m²	200		
<b>3.10 MAIN DECK (INCLUDING BITS, CRUCIFORM, WINCH PLATFORM)</b>					
3.10.1	Chemically Clean	m²	200		
3.10.2	Mechanically Descale Affected Areas	m²	10		
3.10.3	Hp Wash After Mechanical Descale	m²	200		
<b>3.11 WATER LINE TO GUNNEL (INCLUDING INSIDE BULWARKS)</b>					
3.11.1	Chemically Clean	m²	200		
3.11.2	Mechanically Descale Affected Areas	m²	10		
3.11.3	Hp Wash After Mechanical Descale	m²	200		
<b>3.12 WHEELHOUSE SLIDING WINDOWS</b>					
3.12.1	Remove Sliding Windows	No.	8		
3.12.2	Mechanically Descale Affected Areas Of Frames	m²	2		
3.12.3	Repair Frames (3190MM x 825MM)	No.	8		
3.12.4	Paint As Per Wheelhouse Paint Specs	m²	2		
3.12.5	Renew Window Rubbers - To Be Tested For Leaks	No.	8		
3.12.6	Refit Locking Mechanisms	No.	32		
<b>3.13 EXHAUST FUNNELS</b>					
3.13.1	Wash Down Exhaust Funnel To Remove Salt ( X2)	m²	35		
3.13.2	Remove Heat Shield & Mechanically Descale Affected Areas Of Exhaust Funnel & Heat Shield	m²	10		
3.13.3	Wash Out/Degrease Entire Inner Space Of Exhaust Funnel (X 2)	m²	35		
3.13.4	Retightened All Bolts & Nuts On All Flanges, Mountings And Shock Dampers. (Top & Bottom Spaces)	No.	2		
3.13.5	Renew Corroded Steelwork (50kg)	kg	50		
<b>4 PAINTING</b>					
<b>4.1 MAST, WHEELHOUSE &amp; SUPERSTRUCTURE (INC. YARDARMS, LADDERS &amp; RAILINGS)</b>					
4.1.1	Prime Affected Areas (Smartpack Red) First Coat	m²	10		
4.1.2	Prime Affected Areas (Smartpack Grey) Second Coat	m²	10		
4.1.3	Apply Top Coat As Per Paint Spec (Hardtop XP White) Complete 2 Coats	m²	400		
<b>4.2 MONKEY ISLAND &amp; BRIDGE DECK (INC. LADDERS,RAILINGS &amp; VENTS)</b>					
4.2.1	Prime Affected Areas (Smartpack Red) First Coat	m²	10		
4.2.2	Prime Affected Areas (Smartpack Grey) Second Coat	m²	10		
4.2.3	Apply Top Coat As Per Paint Spec (White/Green) Complete 2 Coats	m²	200		
<b>4.3 MAIN DECK (INCLUDING BITS, CRUCIFORM, WINCH PLATFORM)</b>					
4.3.1	Prime Affected Areas (Smartpack Red) First Coat	m²	10		
4.3.2	Prime Affected Areas (Smartpack Grey) Second Coat	m²	10		
4.3.3	Apply Top Coat As Per Paint Spec (Green) Complete 2 Coats	m²	200		
<b>4.4 WATER LINE TO GUNNEL (INCLUDING INSIDE BULWARKS)</b>					
4.4.1	Prime Affected Areas (Smartpack Red) First Coat	m²	200		
4.4.2	Prime Affected Areas (Smartpack Grey) Second Coat	m²	200		
4.4.3	Apply Top Coat As Per Paint Spec (Black) Complete 2 Coats	m²	450		
<b>4.5 HULL (INCLUDING SEA CHESTS)</b>					
4.5.1	Apply Primer As Per Paint Spec (90 Aluminium)	m²	750		
4.5.2	Apply Undercoat (Tie-Coat) As Per Paint Spec (Safeguard Universal Es Plum)	m²	750		
4.5.3	Apply Antifouling As Per Paint Spec (Seaforce Active Plus Light Red)	m²	750		
4.5.4	Apply Antifouling As Per Paint Spec (Seaforce Active Plus Dark Red)	m²	750		
4.5.5	Draught And Plimsol Marks To Be Painted	m²	10		
<b>4.6 EXHAUST FUNNELS</b>					
4.6.1	Apply Full Coat As Per Paint Spec (1000c Aluminium)	m²	35		
4.6.2	Apply Full Coat As Per Paint Spec (Solvalit Black)	m²	35		
<b>SUBTOTAL 3</b>					

Item no	Description	Unit	Qty	Rate	Amount
<b>4.7 ENGINE ROOM FAN SPACES</b>					
4.7.1	Spot Blast Affected Area	m²	4		
4.7.2	Prime Affected Areas As Per Paint Spec	m²	4		
4.7.3	Apply Top Coat As Per Paint Spec (Hardtop Xp White) Complete	m²	10		
<b>4.8 EXTRA'S</b>					
4.8.1	Removal Of Debris	m²	5		
<b>5 TANKS</b>					
*Contractor To Provide For Gas Free Certificate Where Required.					
*All Water Tanks & Void Space Plugs To Be Opened & Replaced On Completion					
*All Water Tanks & Void Space Plugs Teflon Plug Washers To Be Replaced					
<b>5.1 FRESH WATER TANK (O² Readings To Be Taken On Every Entry And Log To Be Kept For SAMSA)</b>					
5.1.1	Fresh Water Tank To Be Drained	No.	1		
5.1.2	Open Fresh Water Tank And Ventilate	No.	1		
5.1.3	Fresh Water Tank To Be Hp Cleaned	m²	38		
5.1.4	Fresh Water Tank To Be Mechanically Descaled And Primed (1 Coat Tankguard 412 Red)	m²	10		
5.1.5	Fresh Water Tank To Be Touched Up As Required (1 Coat Tankguard 412 White)	m²	10		
5.1.6	New Gaskets To Be Made Up	No.	2		
5.1.7	Fresh Water Manhole Covers To Be Refitted	No.	2		
5.1.8	Inspect Condition Of Echo Sounder Cable Conduit Inside Tank	No.	1		
5.1.9	Replace Damaged Studs, As Necessary	No.	6		
<b>5.2 FOREPEAK TANK (O² Readings To Be Taken On Every Entry And Log To Be Kept For SAMSA)</b>					
5.2.1	Forepeak Tank To Be Drained	No.	1		
5.2.2	Open Forepeak Tank And Ventilate	No.	1		
5.2.3	Forepeak Tank To Be Cleaned	m²	50		
5.2.4	Forepeak Tank To Be Mechanically Descaled And Primed (1 Coat Tankguard 412 Red)	m²	10		
5.2.5	Forepeak Tank To Be Touched Up As Required (1 Coat Tankguard 412 White)	m²	10		
5.2.6	New Gaskets To Be Made Up	No.	1		
5.2.7	Forepeak Tank Manhole Cover To Be Refitted	No.	1		
5.2.8	Replace Damaged Studs, As Necessary	No.	6		
<b>5.3 AFTPEAK TANK (O² Readings To Be Taken On Every Entry And Log To Be Kept For SAMSA)</b>					
5.3.1	Aftpeak Tank To Be Drained	No.	1		
5.3.2	Open Aftpeak Tank And Ventilate	No.	1		
5.3.3	Aftpeak Tank To Be Cleaned	m²	40		
5.3.4	Aftpeak Tank To Be Mechanically Descaled And Primed (1 Coat Tankguard 412 Red)	m²	10		
5.3.5	Aftpeak Tank To Be Touched Up As Required (1 Coat Tankguard 412 White)	m²	10		
5.3.6	New Gaskets To Be Made Up	No.	1		
5.3.7	Aftpeak Tank Manhole Cover To Be Refitted	No.	1		
5.3.8	Replace Damaged Studs, As Necessary	No.	6		
<b>5.4 DOUBLE BOTTOM FUEL TANKS</b>					
5.4.1	Open Double Bottom Fuel Tanks And Ventilate	No.	2		
5.4.2	Gas Free Certificate To Be Issued Before Entry	No.	1		
5.4.3	Double Bottom Fuel Tanks To Be Cleaned (X2)	m²	68		
5.4.4	Double Bottom Fuel Tanks To Be Mechanically Descaled And Primed (1 Coat Tankguard Storage Light Red)	m²	10		
5.4.5	Double Bottom Fuel Tanks To Be Touched Up As Required (1 Coat Tankguard Storage Light Grey)	m²	10		
5.4.6	New Gaskets To Be Made Up	No.	2		
5.4.7	Double Bottom Fuel Tanks Manhole Covers To Be Refitted	No.	2		
5.4.8	Replace Damaged Studs, As Necessary	No.	6		
<b>5.5 DIRTY OIL TANKS (O² Readings To Be Taken On Every Entry And Log To Be Kept For SAMSA)</b>					
5.5.1	Dirty Oil Tanks To Be Pumped Out	m²	5		
5.5.2	Open Dirty Oil Tanks And Ventilate	No.	2		
5.5.3	Dirty Oil Tanks To Be Cleaned	m²	16		
5.5.4	Dirty Oil Tanks To Be Mechanically Descaled And Primed (1 Coat Tankguard Storage Light Red)	m²	4		
5.5.5	Dirty Oil Tanks To Be Touched Up As Required (1 Coat Tankguard Storage Light Grey)	m²	4		
5.5.6	New Gaskets To Be Made Up	No.	2		
5.5.7	Dirty Oil Tank Manhole Covers To Be Refitted	No.	2		
5.5.8	Replace Damaged Studs, As Necessary	No.	6		
<b>5.6 VOID SPACE (O² Readings To Be Taken On Every Entry And Log To Be Kept For SAMSA)</b>					
5.6.1	Void Space Tank To Be Cleaned	m²	10		
5.6.2	Void Space Tank To Be Mechanically Descaled And Primed (1 Coat Tankguard 412 Red)	m²	4		
5.6.3	Void Space Tank To Be Touched Up As Required (1 Coat Tankguard 412 White)	m²	4		
5.6.4	New Gaskets To Be Made Up	No.	2		
5.6.5	Void Space Tank Manhole Cover To Be Refitted	No.	2		
5.6.6	Renew Flexi Hoses (Ø120 X 150mm, 5mm) & Heavy Duty Clamps On Keel Cooler Inside Tank	No.	4		
5.6.7	Replace Damaged Studs, As Necessary	No.	6		
<b>SUBTOTAL 4</b>					

Item no	Description	Unit	Qty	Rate	Amount
<b>5.7 FOAM TANK</b>					
5.7.1	Supply Clean Tank/S To Store Foam During Tank Cleaning (Pumping Included)	m²	14		
5.7.2	Pumping Of Foam To & From Shoreside Storage Tank (Discard Any Non-Usable Foam)	m²	10		
5.7.3	Open Foam Tank And Ventilate	No.	2		
5.7.4	Gas Free Certificate To Be Issued Before Entry	No.	1		
5.7.5	Foam Tank To Be Mechanically Descaled And Primed (1 Coat Tankguard 412 Red)	m²	4		
5.7.6	Foam Tank To Be Touched Up As Required (1 Coat Tankguard 412 White)	m²	4		
5.7.7	New Gaskets To Be Made Up	No.	2		
5.7.8	Foam Tank Manhole Cover To Be Refitted	No.	2		
5.7.9	Replace Damaged Studs, As Necessary	No.	6		
<b>5.8 ANCHOR AND CHAIN</b>					
5.8.1	Anchor And Chain To Be Dropped And Ranged	No.	1		
5.8.2	Anchor And Chain To Be Shot Blast If Required	No.	1		
5.8.3	Anchor And Chain To Be High Pressure Cleaned	No.	1		
5.8.4	Free Up Anchor Chain Swivel	No.	1		
5.8.5	Chain Thickness Measurements To Be Taken (Submit Report) (5 Spots Per Shackle- 4 Shackles)	No.	20		
5.8.6	Anchor To Be Painted (1 Coat "No Rust", 1 Coat Red Oxide, 1 Coat Hardtop Black)	No.	1		
5.8.7	Entire Chain To Be Painted With Boiled Linseed Oil (2 Coats) Allow For Adequate Drying Time Between Coats	No.	2		
5.8.8	Chain To Be Remarked (Red & White Paint)	No.	1		
5.8.9	Chain And Anchor To Be Restowed	No.	1		
5.8.10	Spare Anchor To Be Removed, Derusted & Painted. (1 Coat "No Rust", 1 Coat Red Oxide, 1 Coat Black)	No.	1		
5.8.11	Spare Anchor D-Shackle To Be Freed Up	No.	1		
<b>5.9 CHAIN LOCKER</b>					
5.9.1	Manhole Cover To Be Removed	No.	1		
5.9.2	Manhole Cover To Be Mechanically Descaled	m²	0.5		
5.9.3	Manhole Cover To Be Washed And Painted (Smartpack Red)	m²	1		
5.9.4	Mud To Be Removed And Disposed Of	m²	1		
5.9.5	Chain Locker To Be Hp Washed	m²	4		
5.9.6	Chain Locker To Be Mechanically Descaled	m²	1		
5.9.7	Chain Locker To Be Painted Complete (Smartpack Red)	m²	4		
5.9.8	Grids To Be Removed, Hp Washed And Painted (Smartpack Red) Then Refitted	No.	4		
5.9.9	Manhole Cover To Be Refitted With New Gasket	No.	1		
<b>6 DECK WORK</b>					
<b>6.1 ANCHOR WINDLASS x 1</b>					
6.1.1	Spot Blast Affected Areas	m²	1		
6.1.2	Apply Primer As Per Paint Spec	m²	2		
6.1.3	Apply Top Coat As Per Paint Spec (1 Coat Hardtop As Green/Black)	m²	1		
6.1.4	Renew All Hydraulic Pipes & Fittings As Necessary	No.	5		
6.1.5	Service Hydraulic Motor On Deck (Pay Special Attention To Coupling)	No.	1		
6.1.6	Service Hydraulic Power Pack (Pay Special Attention To Coupling)	No.	1		
6.1.7	Service Control Valve	No.	1		
<b>6.2 PORT HOLES x 7</b>					
6.2.1	Mechanically Descale Affected Areas	m²	1		
6.2.2	Repair Sealing Surface If Necessary	No.	7		
6.2.3	Paint Sealing Surface & Window Boxes As Per Wheelhouse Paint Spec	m²	1		
6.2.4	Renew Rubbers	No.	7		
<b>6.3 DAVIT CRANE x 1</b>					
6.3.1	Mechanically Descale Affected Areas	m²	0.5		
6.3.2	Apply Primer As Per Paint Spec (Red, Grey)	m²	2		
6.3.3	Apply Top Coat As Per Paint Spec (2 Coats White)	m²	2		
<b>6.4 WINCH</b>					
6.4.1	Mechanically Descale Affected Areas	m²	4		
6.4.2	Apply Primer As Per Paint Spec (Red, Grey)	m²	4		
6.4.3	Apply Top Coat As Per Paint Spec (2 Coats Green)	m²	4		
<b>SUBTOTAL 5</b>					

Item no	Description	Unit	Qty	Rate	Amount
7.1	<b>MISCELLANEOUS WORK</b>				
7.1.1	Budget R100 000 For Unplanned Work Identified After Inspection	Prov. Sum	1	R 100 000.00	R 100 000.00
7.1.2	Budget For Skilled Labour	hrs.	20		
7.1.3	Budget For Semi-Skilled Labour	hrs.	20		
7.1.4	Budget For Machine Shop Cost	hrs.	20		
7.1.5	Assist CME0 And Voith Technician With Voith Health Check For 4hrs Per Day	Days	2		
7.1.6	Signage And Stickers To Be Replaced After Painting Completed	No.	100		
7.1.7	Budget For Skilled Labour Overtime For 3 Saturdays And 3 Sundays for 4hrs Per Day	Days	6		
7.1.8	Scaffolding	Days	14		
7.1.9	She File, She Plan And Risk Assessment	Prov. Sum	1		
7.2	<b>GENERAL CLEANING</b>				
7.2.1	Provide Semi Skilled Labour 8 Hrs For Cleaning And Assisting TNPA Engine Room Staff	Days	10		
7.3	<b>METAL WORK</b>				
7.3.1	Metal For Repairs	Ton	0.5		
8	<b>SUNDRIES</b>				
8.1	<b>DISBURSEMENTS</b>				
8.1.1	Travelling Expenses	Days	31		
8.1.2	Accommodation	Days	31		
8.1.3	Other Disbursements	Days	31		
SUBTOTAL 6					

NB: SUBTOTALS AT THE BOTTOM OF EACH PAGE TO BE CARRIED OVER TO PRICING SUMMARY

TASK 2 PRICING SUMMARY	
Subtotal 1	
Subtotal 2	
Subtotal 3	
Subtotal 4	
Subtotal 5	
Subtotal 6	
Total excl VAT	

NB: TASK 1 AND TASK 2 PRICING SUMMARY TOTALS TO BE CARRIED OVER TO FINAL PRICING SUMMARY

FINAL PRICING SUMMARY	
Task 1 Summary (Ex VAT) :	
Task 2 Summary (Ex VAT) :	
15% VAT :	
Total (incl. VAT) :	