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ATHENA

MULTI-PURPOSE VESSEL

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Presentation to: Tender Briefing – Multi Purpose Vessel.

6 March 2023.

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OVERVIEW

- I. BACKGROUND.
 - 2. OBJECTIVES.
 - 3. PROJECT SCOPE.
 - 4. KEY RESOURCES.
 - 5. PRICING NOTES.
 - 6. TECHNICAL EVALUATION CRITERIA (TEC).
 - 7. QUESTIONS.
 - 8. CLOSING.





BACKGROUND

The Port of Cape Town currently has a single Pollution Control Vessel which was built in 1999.

The craft has a design life of 15 years; thus, it has exceeded its design life by 7 years. Due to its age, the vessel is in poor condition and is not fitted with the equipment necessary to implement an effective and quick marine clean-up operation.

This vessel is constantly maintained but breakdowns remain frequent.

In addition to pollution control performed the new vessel will be utilized for assistance with waterside maintenance functions and assist with the dredging functions in the Port.

CLOSING CLOSING QUESTIONS PRICING REY RESOURCE SCOPE

PROJECT OBJECTIVES

Design, build, commission and handover a new Multi-Purpose Vessel.

Train TNPA staff in both Operational and Maintenance activities. Replace existing vessel with a modern new one using latest technology so the port can continue providing satisfactory service to customers **OBJECTIVES BACKGROUND**

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PROJECT SCOPE



Principal	Parameters
Length Overall	20 Meters
Beam Overall	8 Meters
Draught	4 Meters
Bollard Pull	15 Tons ahead
Propulsion	Twin Screw
Gross Tonnage	< 200 Tons
Max. Speed	6 – 9 Knots
Power	<1500 kW

SCOPE BACKGROUND

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KEY RESOURCES

#	RESOURCE	QUALIFICATION
1	Project Manager	 Degree in Project Management. Professional registration with PMI or PMSA will be an advantage.
2	Naval Architect	 Class approved. Professionally registered with recognized organization such as RINA.
3	Risk Manager	Risk Management qualification.
4	Superintendent/ Foreman	 Diploma in Mech. Eng. and/or Chief Engineer's Qualifications (unlimited) will be an advantage. Experience in shipbuilding.
5	Quality Manager	Diploma in quality management.
6	Coded Welders	Class Approved with relevant qualification.
7	Millwright	Experience in ShipbuildingWith trade test certificate
8	Spray painter	Experience in ShipbuildingWith a certificate in spray painting
8	Boilermaker	Experience in Shipbuildingwith a trade test certificate



PRICING NOTES

Pricing instructions: Option A (Activity Schedule)

Item	Description	Unit Cost (ZAR)	Qty	Total Price (ZAR)
1	Hull		1	
2	Wheelhouse & fittings		1	
3	Accommodation & fittings		1	
4	Machinery & compressor plant		1	
5	Main engines & alternators		1	
6	Electrical installations		1	
7	Air conditioning & ventilation		1	
8	Refrigeration		1	
9	Communication & navigational aids		1	
10	Fire fighting		1	
11	Painting		1	
12	Training in maintenance and operating of vessels		1	
13	Other		1	
Total (below)	Cost Excluding VAT (write out in words)			

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PRICING NOTES

Forecast Rate of Invoicing "Guide"

#	Milestone Description	% Payment	Forecasted Payment Date	Amount
1	On the submission of the approved Advance Payment Guarantee	10.00%		
2	On Approval of Design	10.00%		
3	On Start of Steel Cutting	15.00%		
4	On laying of the Keel	5.00%		
5	On Completion of the Hull	7.50%		
6	On Completion of the Superstructure	7.50%		
7	On Completion of Superstructure and Hull Assembly	7.50%		
8	On Successful Testing of Main Engines	7.50%		
9	On Commissioning of Systems (Including Completion of Outfitting):	10.00%		
11	Completion of SATS and HATS:	10.00%		
13	Due and payable on Handover of Completed Vessel (Including submission of deliverables as detailed in clause 2.1.4.1 of the C3)	10.00%		
	Total	100%		

CLOSING

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TECHNICAL EVALUATION CRITERIA

cription Scoring principle Returnable Schedule	
 More than 5 projects submitted of similar vessel previously built and delivered successfully in the past 15 years = 100% 3 < projects submitted of similar vessel previously built and delivered successfully in the past 15 years ≤ 4 = 80% 3 projects submitted of similar vessel previously built and delivered successfully in the past 15 years = 60% 1 < projects submitted of similar vessel previously built and delivered successfully in the past 15 years ≤ 2 = 40% 0 < project submitted of similar vessel previously built and delivered successfully in the past 15 years ≤ 2 = 40% 0 < project submitted of similar vessel previously designed, built and delivered successfully in the past 15 years ≤ 1 = 20% No Response or no project submitted of the similar vessel previously built and delivered successfully or No evidence of designing of similar vessel irrespective of evidence of vessels previously delivered = 0% 	nd /

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TEC (Continued)

Criterion	Description	Scoring principle	Returnable Schedule
	Project Manager	 More than 7 years experience with a diploma or degree in Engineering or Built Environment or Project Management and professionally registered with PMI or PMSA = 100% 5 < years' experience with a diploma or degree in Engineering or Built Environment or Project Management ≤ 7 = 80% 3 ≤ years' experience with a diploma or degree in Engineering or Built Environment or Project Management ≤ 5 = 60% Less 3 years' experience years with a diploma or degree in Engineering or Built Environment or Project Management = 40% Less than 3 Years' Experience with no diploma or degree in Engineering or Built Environment or Project Management = 20% No response = 0% 	
	Naval Architect registered with a recognized organisation such as RINA (Must be Class Approved)	 Professionally registered Naval Architect with more than 10 years experience = 100% Professionally registered Naval Architect with 7 < ten years experience ≤ 10 = 80% Professionally registered Naval Architect with 5 < years experience ≤ 7 = 60% Professionally registered Naval Architect with 3 ≤ years experience ≤ 5 = 40% Less than three years experience or not Professionally registered = 20% No Response or Naval Architect with no degree in Naval Architecture = 0% 	
Management & CV's of Key Personnel and	Risk Specialist • More than seven years experience Risk Specialist • S < years experience and risk manual	·	1. Qualifications 2. CV's with traceable
Organogram.	Superintendent / Foreman with Shipbuilding Background qualification	 > 7 Years Experience with a Diploma in Mechanical Eng. and Chief Engineer's Qualifications (unlimited)) = 100% 5 < Years Experience ≤ 7 = 80% 3 < Years Experience ≤ 5 = 60% 1 < Years Experience ≤ 3 = 40% Years Experience < 1 = 20% No Response = 0% 	references 3. Certificates
	Quality Manager with experience in steel fabrication or shipbuilding.	 > 7 Years Experience and quality management diploma = 100% 5 < Years Experience and quality management diploma ≤ 7 = 80% 3 < Years Experience and quality management diploma ≤ 5 = 60% 1 < Years Experience ≤ 3 = 40% Years Experience < 1 = 20% No Response = 0% 	
	Coded Welders that are Class Approved with qualification (i.e. Welder's Qualification Test Certificate, Welders Procedure Specification)	 > 7 Years Experience = 100% 5 < Years Experience ≤ 7 = 80% 3 < Years Experience ≤ 5 = 60% 1 < Years Experience ≤ 3 = 40% Years Experience < 1 = 20% No Response or not class approved and/or no qualification = 0% 	

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TEC (Continued)

Criteria	Description	Scoring principle	Returnable Schedule
	Millwright with trade test certificate	 > 7 Years Experience = 100% 5 < Years Experience ≤ 7 = 80% 3 < Years Experience ≤ 5 = 60% 1 < Years Experience ≤ 3 = 40% Years Experience < 1 = 20% No Response or no trade test certificate = 0% 	
Management	Spray painter with a certificate in spray painting	 > 7 Years Experience = 100% 5 < Years Experience ≤ 7 = 80% 3 < Years Experience ≤ 5 = 60% 1 < Years Experience ≤ 3 = 40% Years Experience < 1 = 20% No Response or no certificate = 0% 	1. Qualifications 2. CV's with traceable references 3. Certificates
& CV's of Key Personnel and		 > 7 Years Experience = 100% 5 < Years Experience ≤ 7 = 80% 3 < Years Experience ≤ 5 = 60% 1 < Years Experience ≤ 3 = 40% Years Experience < 1 = 20% No Response or no trade test certificate = 0% 	
	Organogram that is Project Specific	 All key people included with attached CV and qualification = 100% Missing 1 key person = 80% Missing 2 key people = 60% Missing 3 key people = 40% Missing 4 key people = 20% Missing 5 key people or No response or Not project specific= 0% 	Project Specific Organogram

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TEC (Continued)

Criterion	Description	Scoring principle	Returnab e Schedul
	Starting date and completion date are stated and the schedule does not exceed 14 months.	 Starting date and completion is less than 13 months = 100% Starting date and completion date between 13 and 14 months = 80% Starting date and completion date between 14 and 15 months = 60% Starting date and completion date between 15 and 16 months = 40% Starting date and completion date exceeds 16 months = 20% No Response or Starting date and completion date not shown = 0% 	
	Detailed Level 4 Programme with supportive Information on how durations were estimated. Major milestones are all shown and all project requirements, timing and deliverables will be met.	 Exceeds expectations, showing important issues with supportive information clearly indicating and defining the deliverables, detailed major milestones and the schedule is sufficiently flexible to accommodate changes that may occur. Activities are broken down into level 4 detail = 100% Meets expectations, showing important issues with supportive information clearly indicating and defining the deliverables, detailed major milestones and the schedule is sufficiently flexible to accommodate changes that may occur. Activities are broken down into level 4 detail = 80% Meets expectations partially meet the stipulated criteria with sparse supportive information/details on how the durations were estimated however evidence is given that the project requirements, timing and deliverables will be met = 60% Does not meet requirements of the stipulated criteria with no supportive information on how the durations were estimated. The sequencing of the key project deliverables is inconsistent and illogical interrelationships of activities with an insufficient breakdown of tasks/activities = 40% Programme is not acceptable as it will not satisfy project objectives or requirements. The Tenderer has misunderstood the scope of services and does not deal with the critical aspects of the project = 20% No response = 0% 	Programm
	All activities as per level 4 detail to be logically tied using critical path method (CPM).	 The schedule is complete and detailed (level 4) with all activities properly linked using CPM and no open ends in between and basis of schedule to substantiate the linking of activities = 100% The schedule is complete and detailed (level 4) with all activities properly linked using CPM and no open ends in between = 80% The schedule is complete and detailed (level 4) with major activities properly linked using CPM and no open ends in between = 60% The schedule is partially complete and detailed (level 4 or level 3) with major activities properly linked using CPM with no open ends in between = 40% The schedule is partially complete and detailed (level 4 or level 3) with major activities properly linked using CPM with no open ends in between = 40% The schedule is partially complete and detailed (level 4 or level 4) with major activities properly linked using CPM with no open ends in between = 20% No response or schedule does not link activities using CPM or submission is Level 1 or level 2) = 0% 	d by basis schedule.
	All activity durations to be realistic and based on quantities and activities that can be measured in days. The calendar on the schedule should represent the actual work week/month used. E.g. weekends as nonworking periods.	 No response of schedule does not link activities using CFW of submission is Level 1 of level 2 = 0% All activities are broken down into days and weekends, public holidays and builders' breaks are marked as non-working days with time risk allowances shown = 100% All activities are broken down into days and weekends, public holidays and builders break are marked as non-working days = 80% Major activities are broken down into days and weekends, public holidays and builders break are marked as non-working days = 80% Major activities are broken down into days and weekends, public holidays and builders break are marked as non-working days = 80% Activities are broken down into days and weekends and public holidays are marked as non-working days = 40% Activities are broken down into weeks and weekends and public holidays are marked as non-working days = 20% No response = 0% 	
	Programme submission Format (Software)	 Programme submitted was compiled in MS Project or Primavera with the predecessor, successor, resource loading and cost-loaded columns shown, and the Basis of schedule submitted = 100% Programme submitted was compiled in MS Project or Primavera with predecessor and successor columns shown and the Basis of schedule submitted = 80% Programme submitted was compiled in MS Project or Primavera and the basis of schedule submitted = 60% Programme submitted was compiled in MS Project or Primavera but no basis of schedule = 40% Programme submitted compiled in MS Project or Primavera but no basis of schedule = 20% No response = 0% 	

TEC (Continued)

	Criterion	Description	Scoring principle	Returnable Schedule	
GLOSING	SHERQ	Documented Integrated SHERQ Policy and the Procedure Documents (i.e., Valid Letter of Good Standing, Signed SHE Policy, SHE Plan, SHE Risk Assessments, Environmental Management Plan).	 4 of the 5 requested documents submitted, and documents submitted are project specific – 80% 	 Valid Letter of Good Standing, Signed SHE Policy, SHE Plan, SHE Risk Assessments, Environmental Management Plan 	

TEC (Continued)

Criterion	Description	Scoring principle	Returnable Schedule
	Bollard Pull ≥ 15 tonnes (see Clause 2.1.2.4 of the C3)	 Bollard pull ahead exceeding 15.5 tons = 100% 15 < Bollard pull ahead ≤ 15.5 tons = 80% Bollard pull ahead of 15 tons = 60% 14.5 < Bollard pull ahead < 15 tons = 40% 14 ≤ Bollard pull ahead ≤ 14.5 tons = 20% No response or Bollard pull ahead < 14 tons = 0% 	1. Clause by Clause Compliance to C3. 2. Completed Compliance Sheet.
Method Statement.	Below the deck accommodation with two berths of 2.1×0.9 m with ceiling and walls completely lined (see Clause 9.5.1 of the C3)	 Below the deck accommodation with more than three berths of 2.1 x 0.9 m with ceiling and walls completely lined = 100% Below the deck accommodation with three berths of 2.1 x 0.9 m with ceiling and walls completely lined = 80% Below the deck accommodation with two berths of 2.1 x 0.9 m with ceiling and walls completely lined = 60% Below the deck accommodation with two berths of 2.1 x 0.9 m without ceiling and walls completely lined = 40% Below the deck accommodation with one berth smaller than 2.1 x 0.9 m without ceiling and walls completely lined = 20% No response or No accommodation provided = 0% 	
	Compliance to noise levels in engine room (Maximum = 100 dB(A) measured at 80% power of main engine) (see clause 9.1.1 of the C3)	• Below 95 dB(A) = 100% • 95 < dB(A) \leq 99 = 80% • 100 dB(A) = 60% • 101 < dB(A) \leq 102 = 40% • 102 < dB(A) \leq 103 = 20% • more than 103 dB(A) = 0%	

CLOSING UESTIONS

TEC (Continued)

Criterion	Description	Scoring principle	Returnable Schedule
	Critical spares shall be delivered with the vessel (See clause 1.12 of the C3); • 1 X Propeller Shaft, • 1 set of Propeller shaft bearings, • 1 X Fixed-pitch propeller. • 1 set of engine spares as recommended by OEM.	 Two or more spares in addition to the Four above to be provided = 100% One more spare in addition to the four above to be provided = 80% All four as stated above to be provided = 60% Only three of the above to be provided = 40% Only two of the above to be provided = 20% No response or less than two of the above is provided = 0% (0) 	1. Clause by Clause Compliance to C3. 2. Completed Compliance
	All Classification Society Spares are included as per clause 1.12 of the C3.	 More than 105% of the total number of Classification Society Spares included = 100% 105% of the total number of Classification Society Spares included = 80% 100% of the total number of Classification Society Spares included = 60% 95% of the total number of Classification Society Spares included = 40% Less than 95% of the total number of Classification Society Spares included = 20% No response or less than 90% of the total number of Classification Society Spares included = 0% 	Compliance Sheet.
Method Statement.	Method Statement includes all specifications as per the C3 - Goods Information and demonstrates a clear understanding of the Goods Information	 The methodology approach deals with ALL critical characteristics of the project. Besides meeting the "80" rating, the important issues are approached in an innovative and efficient way, indicating that the tenderer has outstanding knowledge of state-of-the-art approaches. The methodology approach details ways to improve the project outcomes and the quality of the outputs = 100% The methodology approach deals with most characteristics of the project. The methodology/approach is specifically tailored to address the specific project objectives and methodology and is sufficiently flexible to accommodate changes that may occur during execution. The methodology/approach to manage activities is specifically tailored to the critical characteristics of the project. Satisfactory response/solution to the particular aspect of the requirement and evidence given that the stated employer's requirements will be met = 60% The methodology approach deals with only minimal characteristics of the project. The methodology/approach is generic and not tailored to address the specific project objectives and methodology = 20% The methodology approach and work alignment to the project schedule is poorly presented, generic and not tailored to address the specific project objectives and methodology = 20% 	Method Statement

CLOSING

TEC (Continued)

Criterion	Description	Scoring principle	Returnable Schedule	
	Project Specific Quality Plan (PSQP) for the project	 PSQP covers all and above the project quality requirements of the project scope = 100% PSQP shows above average understanding of the project quality requirements = 80% PSQP shows adequate understanding of project quality requirements = 60% PSQP is project specific but inadequate to cover project scope = 40% PSQP is too general and not project specifics = 20% No Response = 0% 	Project specific	
Quality Expectations.	Project specific Quality Control Plan (QCP) (For each task).	 QCP covers all and above the project quality requirements of the project scope = 100% QCP shows above average understanding of the project quality requirements = 80% QCP shows adequate understanding of project quality requirements = 60% QCP is project specific but inadequate to cover project scope = 40% QCPs are not project specific = 20% No Response - No Information provided = 0% 	Quality Control Pla	
	Project specific Quality data book index.	 Quality Data book index covers all and above the project quality requirements of the project scope = 100% Quality Data book index shows above average understanding of the project quality requirements = 80% Quality Data book index shows adequate understanding of project quality requirements = 60% Quality Data book index is project specific but inadequate to cover project scope = 40% Quality Data book index is not project specific = 20% No Response = 0% 	Quality data book index.	

CLOSING









