



INVITATION TO BID

AIR TRAFFIC AND NAVIGATION SERVICES SOC LTD REPUBLIC OF SOUTH AFRICA



REQUEST FOR PROPOSALS: ATNS/TPQ/RFP049/FY23.24/ATFM REPLACEMENT SYSTEM

APPOINTMENT OF A SERVICE PROVIDER FOR THE SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF AN AIR TRAFFIC FLOW MANAGEMENT (ATFM) SYSTEM TO BE DEPLOYED IN THE MAIN ATC CENTRE AT THE O. R. TAMBO INTERNATIONAL AIRPORT (JOHANNESBURG). THE PROJECT WILL FURTHERMORE ESTABLISH A DISASTER RECOVERY PLATFORM (TO BE DEPLOYED IN THE FAOR SSS BUILDING) AND A TRAINING SIMULATION PLATFORM (AT THE ATNS ATA (ATNS AVIATION TRAINING ACADEMY).

VOLUME 1 A

APPENDIX B – ELEMENT WEIGHTINGS

FEBRUARY 2024

The information contained within this document is confidential to ATNS in all respects and it is hereby acknowledged that the information provided shall only be used for the preparation of a response to this document. The information furnished will not be used for any other purpose than stated and that the information will not directly or indirectly, by agent, employee or representative, be disclosed either in whole or in part, to any other third party without the express written consent by the Company or its representative.

APPENDIX A – ELEMENT WEIGHTINGS

ELEMENT No.	Paragraph	ELEMENT Name	Weighting (%)
		Volume 2 – TECHNICAL SPECIFICATIONS	100%
	1	GENERAL INSTRUCTIONS TO BIDDERS	
E1	2	REFERENCES	2.00%
E2	3	INTRODUCTION	
E2.1	3.1	Scope of Work Overview	1.00%
	3.2	Intended Use Overview	0.00%
E2.2	3.3	Basic ATFM System Elements	1.00%
E2.3	3.4	Project Overview	1.00%
E2.4	3.5	Aviation System Block Upgrades (ASBU)	1.00%
E2.5	3.6	System Wide Information Management (SWIM)	1.00%
E3	4	ATFM SYSTEM FUNCTIONAL CAPABILITIES	
E3.1	4.1	ATFM Key Performance Indicators (KPI)	1.25%
E3.2	4.2	Airport	1.25%
E3.3	4.3	Approach	1.25%
E3.4	4.4	En-route	1.25%
E3.5	4.5	Regional	1.00%
E3.6	4.6	Long-Range ATFM (LR-ATFM)	1.00%
E3.7	4.7	Unmanned Traffic Flow Management (UTFM)	1.00%
E4	5	ATFM SYSTEM INTERFACES	
E4.1	5.1	Interfaces to/from other systems	1.00%
E4.2	5.2	Provision of Interfaces	1.00%
E4.3	5.3	Interface Community	1.00%
E4.4	5.4	ATFM Main System Interface Requirements	3.00%
E5	6	ATFM SYSTEM SOFTWARE APPLICATION MODELS	
E5.1	6.1	The Generic Data Gateway (GDG) Function	2.50%
E5.2	6.2	Flight Data Processor (FDP) Function	3.00%
E5.3	6.3	Flight Plan Conflict Function (FPCF)	2.50%
E5.4	6.4	Temporary Segregated Airspace/Area (TSA) Function	2.50%
E5.5	6.5	Flexible Use of Airspace (FUA) Function	2.50%
E5.6	6.6	Segregated Airspace Probe (SAP) Function	2.50%
E5.7	6.7	Airports Flow Tool (AFT) Function	4.00%
E5.8	6.8	Capacity Management and Monitoring	4.00%
E5.9	6.9	Electronic Mail (Email)	2.50%
E5.10	6.1	NTP synchronization requirement	2.50%
E5.11	6.11	NOTAM Function	2.50%
E6	7	GENERAL REQUIREMENTS	
E6.1	7.1	IT Requirements	2.00%
E6.2	7.2	Security Management	2.00%
E6.3	7.3	Reports	3.00%
E7	8	SUPPORTING SYSTEM REQUIREMENTS	
E7.1	8.1	ATFM System Platforms	1.25%

E7.2	8.2	ATFM Main System	1.25%
E7.3	8.3	ATFM Disaster and Recovery (DR) System	1.25%
E7.4	8.4	ATFM ATA Training System	1.25%
E7.5	8.5	Mains Power and Backup Power Supply	1.25%
E7.6	8.6	Software Licenses	1.25%
E7.7	8.7	Environmental Conditions	1.25%
E7.8	8.8	General Requirements	1.25%
E8	9	HARDWARE REQUIREMENTS	
E8.1	9.1	General	1.25%
E8.2	9.2	Computer Specifications	1.25%
E8.3	9.3	Workstations Screens Specifications	1.25%
E8.4	9.4	HDMI Wi-Fi Specifications	1.25%
E8.5	9.5	Televisions (TV)	1.25%
E8.6	9.6	Network and Firewall Specifications	1.25%
E8.7	9.7	Equipment Racks Deployment	1.25%
E8.8	9.8	Consoles and Furniture	1.25%
	9.9	Air Conditioning System	0.00%
E9	10	SYSTEMS MANAGEMENT, SUPPORT AND MAINTENANCE	
E9.1	10.1	Technical System Control, Monitoring and Supervision (CMS)	1.50%
E9.2	10.2	Control	1.50%
E9.3	10.3	Network Monitoring and Management	1.50%
E9.4	10.4	CWS Data Recording and Replay	1.50%
E9.5	10.5	User Events Recording	1.50%
E9.6	10.6	Connections and Links Monitoring	1.50%
E9.7	10.7	System Backup	1.50%
E9.8	10.8	Fault and Error Handling	1.50%
E9.9	10.9	Server Management and Redundancy	1.50%
E9.10	10.1	Database Management	1.50%
E9.11	10.11	Computer HDD Clone/Re-build Tool	1.50%
E10	11	ENVIRONMENTAL AND SUSTAINABILITY REQUIREMENTS	
E10.1	11.1	Product Safety	1.50%
E10.2	11.2	Waste handling and disposal	1.50%
E10.3	11.3	Energy Efficiency	1.50%

ELEMENT No.	Paragraph	ELEMENT Name	Weighting (%)
		Volume 3 – PROJECT MANAGEMENT SPECIFICATIONS	100%
	1	GENERAL INSTRUCTIONS TO BIDDERS	
	2	BIDDER/CONTRACTOR OBLIGATIONS	
E1	3	REFERENCE LETTER	20.00%
E2	4	PROJECT MANAGEMENT	
E2.1	4.1	General	0.50%
E2.2	4.2	Project Management Plan	5.00%
E2.3	4.2.1	Project Scope	0.50%
E2.3.1	4.2.2	Project Milestone	1.00%

E2.3.2	4.2.3	Contract Data Requirements List	1.00%
E2.3.3	4.2.4	Work Breakdown Structure	2.00%
E2.3.4	4.2.5	Change Management Plan	1.00%
E2.3.5	4.2.6	Communication Management Plan	0.50%
E2.3.6	4.2.6.1	Meetings	1.00%
E2.3.7	4.2.7	Master Project Schedule	4.00%
E2.4	4.3	Resource Allocation Plan	5.00%
E2.5	4.4	Resumes of Key Personnel	10.00%
E2.6	4.5	Health and Safety Management Plan	1.00%
E2.7	4.6	Risk Management Plan	
E2.7.1	4.6.1	Risk Analysis	2.00%
E2.8	4.7	Environmental Management Programme	1.00%
E2.9	4.8	Quality Management Plan	
E2.9.1	4.8.1	Quality Assurance Programs	2.00%
E2.9.2	4.8.2	Quality Assurance Audits	1.00%
E2.9.3	4.8.3	Responsibility for Quality Assurance	1.00%
E3	5	SYSTEM ENGINEERING	
E3.1	5.1	System Engineering Master Plan	6.00%
E3.1.1	5.1.1	Site Survey	4.00%
E3.1.2	5.1.2	System Design Review	8.00%
E3.2	5.2	Test and Evaluation Master Plan	11.00%
E3.3	5.3	Installation, Transition and Commissioning (ITC) Plans	11.00%
E4	6	ACSA Permits	

ELEMENT No.	Paragraph	ELEMENT Name	Weighting (%)
		Volume 4 – LOGISTIC SUPPORT SPECIFICATIONS	100%
	1	INTRODUCTION	
	2	ATNS MAINTENANCE AND SUPPORT CONCEPT	
	3	GENERAL INSTRUCTIONS TO BIDDERS	
	4	BIDDER/CONTRACTOR OBLIGATIONS	
E1	5	PHASE 1: DEVELOPMENT PHASE	
E1.1	5.1.	System Performance Requirements	10.00%
E2	6	SUPPORT CONCEPT	
E2.1	6.1	Support Concept Proposal	2.00%
E2.2	6.2	(LSIP) Logistics Support Implementation Plan	2.00%
E2.3	6.3	Logistics Support Plan (LSP)	4.00%
E2.4	6.4	Reliability, Availability and Maintainability Plan (RAMP)	6.00%
E2.5	6.5	Training Plan (TP) (Including provision of training)	6.00%
E2.6	6.6	Spares Plan (SP)	6.00%
E2.7	6.7	Test Equipment Plan (TEP)	5.00%
E2.8	6.8	Documentation Plan (DP)	6.00%
E2.9	6.9	Package Handling Storage and Transport Plan (PHS&TP)	5.00%
E2.10	6.1	Configuration Management Plan (CMP)	6.00%
E2.11	6.11	Total Estimated LRU Repair Costs (over the System Lifespan)	3.00%

E2.12	6.12	System Lifespan	2.00%
E2.13	6.13	Interface Control Document (ICD) and Application Program Interface (API)	2.00%
	7	PHASE 2: IMPLEMENTATION PHASE	
E3	8	PHASE 3 - VALIDATION PHASE	
E3.1	8.1	PBU	11.00%
E3.2	8.2	Verification	6.00%
E3.3	8.3	Updates	2.00%
	9	PHASE 4: APPLICATION PHASE	
E4	10	CONTRACT DATA REQUIREMENTS LIST	
E5	11	SYSTEM FAILURE DEFINITION AND RELATED CORRECTION SERVICE LEVELS	2.00%
E6	12	MAINTENANCE AND SUPPORT CONTRACT REQUIREMENTS	14.00%