

**AIR TRAFFIC AND NAVIGATION SERVICES SOC. LTD
REPUBLIC OF SOUTH AFRICA**



REQUEST FOR PROPOSALS:

**REQUEST FOR PROPOSALS: RFP: ATNS/TPQ/RFP005/24.25/ ATC
RECORDER AND PLAYBACK SYSTEM.**

**APPOINTMENT OF A SERVICE PROVIDER FOR THE
DECOMMISSIONING AND DISPOSAL OF THE EXISTING; AND THE
SUPPLY, DELIVERY, INSTALLATION, COMMISSIONING AND
SUPPORT OF NEW ATC VOICE RECORDER AND PLAYBACK
SYSTEMS AT ATNS SMALLER AND REGIONAL AIRPORTS.**

VOLUME 3

**PROJECT MANAGEMENT & SYSTEMS ENGINEERING
SPECIFICATIONS**

May 2024

The information contained within this document is confidential to ATNS in all respects and it is hereby acknowledged that the information as 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.

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ABBREVIATIONS AND ACRONYMS

ANSP	Air Navigation Service Provider
ATA	Aviation Training Academy
ATC	Air Traffic Controller
ATM	Air Traffic Management
ATNS	Air Traffic and Navigation Services SOC. Ltd.
CD	Compact Disk
CDRL	Contract Data Requirements List
COTS	Commercially Off-The-Shelf
DVD	Digital Versatile Disk
FAT	Factory Acceptance Test
FIFO	First in First Out
HMI	Human Machine Interface
ICAO	International Civil Aviation Organisation
IP	Internet Protocol
LAN	Local Area Network
LRU	Line Replacement Unit
MPEG	Moving Picture Experts Group
MPG	Moving Picture Group
NEMA	National Environmental Management Act
NTP	Network Time Protocol
OEM	Original Equipment Manufacturer
PABX	Private Automatic Branch Exchange
PBU	Period of Beneficial Use
PCUG	Private Close User Group

PMP	Project Management Plan
PSTN	Public Switched Telephone Network
RAM	Reliability, Availability and Maintainability
Rx	Receiver
S&R	Standards and Regulations
SACAA	South African Civil Aviation Authority
SAT	Site Acceptance Test
SLA	Service Level Agreement
SNMP	Simple Network Management Protocol
SPI	Serial Peripheral Interface
TCP/IP	Transmission Control Protocol/ Internet Protocol
Tx	Transmitter
UPS	Uninterrupted Power Supply
USB	Universal Serial Bus
VCS	Voice Communication System
VHF	Very High Frequency
VSAT	Very Small Aperture Terminal
WAV	Waveform Audio
WBS	Work Breakdown Structure

1 GENERAL INSTRUCTIONS TO TENDERERS

The Tenderer shall submit all responses, diagrams, project management documentation and drawings according to the GENERAL INFORMATION AND INSTRUCTIONS TO TENDERERS document and in the English language.

To assist Tenderers only, each paragraph or article has been appended throughout with the letters “(M)”, “(D)”, “(O)” or “(I)”, to indicate whether the requirement is **Mandatory**, **Desirable**, **Optional** or for **Information** only.

ALL RESPONSES TO THE REQUIREMENTS IN THIS DOCUMENT SHALL BE PROVIDED AS FOLLOWS:

TENDERERS SHALL RESPOND IN FULL TO EACH ITEM IN THE FORMAT PROVIDED AND REFERENCES (CHAPTER, SECTION, PAGE NUMBER, PARAGRAPH NUMBER) TO DOCUMENTS AND RELEVANT INFORMATION SUPPORTING THE RESPONSES SHALL BE INDICATED IN THE SPACE PROVIDED. THIS INFORMATION WILL BE THE **ONLY RESPONSE USED FOR THE EVALUATION AND ASSESSMENT**.

Responses, provided in the space allowed, that are not clear or inadequate or the lack thereof shall be interpreted as **“Not Compliant”** even though the compliance column is declared as “Comply” and/or the Tenderer’s offer meets the requirement. Tenderer’s shall ensure that each response correctly addresses the requirement stated. Responses not addressing the requirement of the specific paragraph shall be interpreted as **“Not Compliant”**.

Tenderer’s shall declare compliance to each and every paragraph of this document in the column labelled “Compliance” as follows:

C:	fully compliant	=	2 points;
PC:	partly compliant	=	1 point;
NC:	not compliant	=	0 points.

Noted: Noted and accepted (applicable to paragraphs marked as “I”, not containing requirements)

Tenderer’s shall, for paragraphs declared “PC” or “NC”, include a statement as to the nature of the variation and may additionally supply supporting information in the space provided to demonstrate how the proposal meets the needs of ATNS.

Paragraphs marked “(M)”, indicates that the requirement is mandatory and proposals not compliant with the requirement shall be disqualified for further evaluation.

Paragraphs marked “(D)”, indicates that the requirement is desirable, and the tenderer is expected to declare their level of compliance, formal response and reference supporting documents.

Paragraphs marked “(I)”, indicates that the requirement is for information, however the tenderer is still expected to respond and provide information if requested. Any information gathered herein may form part of the contractual terms.

Paragraphs marked “(O)”, indicates that the requirement is optional, and the tenderer may decide how to respond.

2 COMPANY EXPERIENCE

- [A] Tenderers shall provide at least three (3) contactable references (description of project, name of company and contact person, email and telephone number) for installations performed by the Tenderer of similar systems within the past five (5) years. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

3 PROJECT MANAGEMENT

3.1 General

- [A] The Contractor shall establish, implement, and maintain extensive and comprehensive Project Management plans throughout the period of any Contract arising from this RFT. These Plans will be submitted to the Company for information and reporting purposes. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

- [B] Draft Project Management plans shall be submitted with the Tender to indicate compliance and will be refined as necessary during the Contract development and reporting phases. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

- [C] The Project Management of the Project is the responsibility of the Contractor. Submitting the Project Management Plans to and their

acceptance by the Company do not imply approval or concurrence by the Company nor does it absolve the Contractor from the Project Management role and responsibilities. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

- [D] The Contractor shall divide the plans into activities, which can be managed, monitored, and measured in terms of duration, cost, risk, and resources. These activities shall be organised into logical networks. Such networks shall be used by the Contractor as the main framework for planning, budgeting, controlling, and reporting to the Company throughout the period of the Contract. These networks shall be closely linked to the various System Engineering Plans and activities to ensure the rapid and accurate reflection of any System Engineering decision. A draft framework of measuring project activities shall be submitted as part of the tender. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

- [E] The Tenderer shall present ATNS with a Project Management schedule in the Microsoft Project® format for integration into the ATNS Enterprise Project Management (EPM) system. The Company estimated project duration is 24 months from contract signature. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

- [F] Project Management shall encompass the management of all the various facets of the project as defined in the Contract. These including design, development, production, supply of ancillary equipment, resource allocation and control, management of sub-contractors, on-site installation, testing, transitioning, commissioning, transportation, all Integrated Logistic Support activities, staff movements and subsistence, etc. The Tenderer shall clearly demonstrate these aspects in the requirements described in the following parts of the document. (I).

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

- [G] The Contractor shall prepare for, actively participate in, and respond to the Project Meetings, prepare and present comprehensive reports, and produce adequate documentation as described in the following parts of this document. (I)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

3.2 Project Management Plan

- [A] Tenderer shall submit a draft Project Management Plan (PMP) with the tender. The Project Management Plan will be a formally accepted and approved document used to manage and control project execution throughout the project life-cycle phases. The PMP will detail all the activities necessary to successfully complete the project and shall refer to the other plans developed under the project. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
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[INSERT FULL RESPONSE FOR EVALUATION HERE]
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

3.3 Project Status Reports

3.3.1 General

[A] The Contractor shall provide to the Company at two-weekly intervals (or at other mutually agreed intervals) Project Status Reports, which will capture the project performance to date and makes recommendations for future implementation and changes. Project status shall be presented relative to schedule critical path and cost and shall also include a Risk Report. The Risk Report shall identify risks and the measures taken either to manage or avoid the risks. Project status shall also include the Master Project Schedule and Schedule Analysis. The Contractor shall promptly submit to the Company the Master Project Schedule which, when updated, shows a negative float or indicates a significant change to the delivery schedule. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

3.3.2 Master Project Schedule

[A] The Contractor shall develop, maintain, and track progress against a Master Project Schedule. The Project Schedule shall be organized to depict the flow of work, the task interdependencies and the interrelationships necessary to accomplish the program objectives from Contract Award to completion of the contract. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

- [B] The Contractor shall ensure that the Project Schedule includes all contractually specified milestones, identifies the critical path, and is linked to the WBS. The Master Project Schedule shall be broken down to a level of detail which includes as a minimum, all technical tasks and critical and/ or contractually specified milestones with target dates. The schedule shall also address the Logistic Support Programme. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

3.3.3 Activity Dictionary

- [A] The Contractor shall provide the Company with an Activity Dictionary. Each activity definition shall be brief and concise. The activity dictionary shall define at least the following attributes: (D)

- state the work to be accomplished;
- target start/target finish;
- actual start/actual finish (if applicable);
- minimum, maximum and most likely duration of each activity;
- manpower required to complete activity; and
- any other resource associated with the activity.

Note: Once the Company is in possession of an approved and comprehensive dictionary, exception reporting only is required in the Project Status Report (i.e.: new activities or a change in an activity). This however does not exclude the requirement to report on the risks monthly.

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

- [B] The Contractor shall provide the Company with a Schedule Analysis as part of the Project Status Report. This shall be a written analysis of project performance, future predictions and recommendations against time and cost objectives. The analysis shall also contain a statement of current resources applied to the project including materials, plant, space occupied on Company premises, costs, and manpower. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

3.4 Data Management

- [A] The Contractor shall establish and operate a data management system as part of the overall project management scheme. The plan shall define the methods for identification, preparation, tracking and updating of all relevant data. A draft plan shall be submitted with the tender. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

3.5 Progress Review Meetings

3.5.1 Requirements

- [A] The Contractor shall attend Progress Review Meetings at monthly intervals (or at other mutually agreed intervals) to present a Project Status Report. The regular Progress Review meetings shall be held in South Africa at either the Contractors premises or at the Company's Office, or at other mutually agreed locations. A copy of the Contractor's written Project Status Report and meeting presentation material shall be

submitted to the Company at least one week prior to the Progress Review Meeting. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

3.5.2 Matters for Consideration

[A] The Contractor shall make a presentation on the progress of the project to date, a projection of the effects of variations from the previous schedule, and any action taken or recommendations for action to rectify existing or anticipated problems. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

[B] The Contractor shall present all aspects of the project status. The Contractor shall present a detailed, accurate summary of the accomplishments of the Contractor and subcontractors to date. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

[C] The presentation shall include a forecast of trends in terms of technical, cost and schedule performance through to completion of the Contract. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		

[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]

[D] The presentation shall focus attention upon, and provide insight into, the interrelationships among the project elements including subcontractors.

(D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
<i>[[INSERT FULL RESPONSE FOR EVALUATION HERE]]</i>		
<i>[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]</i>		

[E] The presentation shall focus attention upon Design and Management problems. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
<i>[[INSERT FULL RESPONSE FOR EVALUATION HERE]]</i>		
<i>[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]</i>		

[F] Significant slippages, obstacles, or discrepancies between planned, actual and forecast project progress shall be addressed through a narrative analysis of cause, effect and proposed or completed corrective action. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
<i>[[INSERT FULL RESPONSE FOR EVALUATION HERE]]</i>		
<i>[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]</i>		

[G] The Contractor shall present, at the request of the Company, any data for proposed work constituting a variation to the Contract or Engineering Change Proposals. The Contractor shall be prepared to provide supporting data on assumptions made and methodologies used in arriving at specific conclusions, recommendations and alternatives to the design approach. There shall be a free and unlimited exchange of

information between the Contractor and the Company to establish progress of the project, to identify problems and to agree on the method of timely resolution. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

3.5.3 Participants in Progress Review Meetings

- [A] The Contractor shall be represented by appropriate key personnel in each significant area to be considered during the meeting to enable effective discussion of Agenda items and the Progress Report. The Project Manager and relevant specialists, including logistic support personnel shall represent the Company. The Project Manager will chair the Progress Review Meetings. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

3.5.4 Documentation

- [A] The Contractor shall submit a draft Agenda for Company concurrence at least two weeks prior to a scheduled Progress Review Meeting. The Company may submit items for inclusion in the Agenda. The Contractor shall provide administrative support for the meeting and prepare and distribute a draft record of the minutes of the meeting within one week of the meeting. The minutes are to include an Action Item List. The Company and the Contractor shall submit any updates of the Action Item List during the meeting. The Company and the Contractor prior to the

next meeting shall review the draft minutes for accuracy prior to the next meeting. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

[B] The Contractor shall prepare appropriate presentation material and make presentations at the Meeting to address all items required in the Progress Report. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

3.5.5 Costs

[A] The Contractor and the Company will each meet their own costs associated with attending Progress Review Meetings. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

3.6 Work Breakdown Structure

[A] The Work Breakdown Structure is an important tool, which will enable the Company to maintain visibility of the project elements. The WBS shall be developed to the level where work is to be managed, monitored, and evaluated. The WBS shall describe the work that will be accomplished and shall facilitate management data collection and reporting. The

Contractor shall use a single, program WBS as the basis for all project activities. (I)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

[B] The Tenderer shall include a draft WBS addressing the key elements of the project scope and requirements in the response to the RFP. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

3.7 Project Resources

3.7.1 Resumes of Key Personnel

[A] Tenderers shall submit resumes of key personnel, suitably qualified and experienced to execute the envisaged works to be dedicated to the project. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

3.7.2 Resource Allocation Plan

[A] Tenderers shall submit with their tender a Resource Allocation Plan, which identifies all the resources, including subcontract resources, plant and equipment and facilities to be applied to each element of the project

as detailed in 3.3.3. The Plan shall clearly identify all work proposed to be undertaken through subcontracts. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

- [B] The Tenderer shall ensure that only appropriately qualified and experienced personnel will be employed on the tasks. The Company shall retain the right to direct the Contractor to remove from the project any personnel considered by the Company to be inappropriately qualified or experienced, or unacceptable to the Company. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

- [C] Tenderers shall give full details of their proposed internal organization for this project. The full project organization structure shall be presented, including relevant names and resumes of personnel responsible for and to the Project Manager. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

- [D] The Project involves close liaison with the Company and there are elements of the project installation and commissioning which may require the Contractor to utilise Company staff. Tenderers shall submit with their

tender a description of all elements of their proposal, which will require involvement of Company personnel or other resources. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

4 SYSTEM ENGINEERING

4.1 System Engineering Master Plan

- [A] For the purposes of this project, the Systems Engineering process is defined as an integral set of activities, documentation control procedures and standards that enable and assist in the management of this project to progress through its various stages, including analysis of requirement, design, installation, setting to work, testing, operational evaluation, commissioning and maintenance, and establishment of logistic support for the whole life cycle of the project (I)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

- [B] The Contractor shall be responsible for the total performance of the system. The tenderer shall indicate in their proposal how aspects of quality and performance will be managed and assured throughout the project lifecycle. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

- [C] Tenderers shall ensure that every subsystem and its interfaces will comply with all the requirements allocated to that subsystem. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

- [D] Tenderers shall submit as part of the tender a draft project specific engineering plan, where applicable, for the design, manufacture, integration and verification of the systems. Tenderers shall indicate the standard to which their plan has been aligned. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

- [E] Tenderers shall clearly indicate what will be expected as customer furnished information or equipment. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

- [F] The interfaces and/or infrastructure to be provided by or required from the Company shall also be indicated in the system definition. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

- [G] Tenderers shall submit as part of the tender a draft specification tree of the system. Tenderers shall indicate the standard to which their plan has been aligned. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

- [H] Tenderers shall submit as part of the tender a system breakdown structure of the systems. Tenderers shall indicate the standard to which their plan has been aligned. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

- [I] Tenderers shall submit as part of the tender a high-level description of the integration of the system engineering effort. Tenderers shall indicate the standard to which their plan has been aligned. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

- [J] The Contractor shall perform the System Engineering activities necessary to implement the requirements of any contract placed as a result of this RFP. Any System Engineering Management Plan (SEMP) proposed is to be designed to ensure, inter alia: (D)
- [a] that the elements of the WBS and associated technical tasks are identified and controlled;
 - [b] the application and maintenance of the various standards and plans; and
 - [c] appropriate and adequate configuration management procedures are established for all elements of the project.

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

- [K] Specific testing and evaluation procedures for the various Acceptance Tests (e.g. Site Acceptance Testing, Physical Inspections, Final Acceptance, etc.) will be defined in the Test and Evaluation plan for each deliverable. A draft Test and Evaluation Plan or sample shall be submitted as part of the tender. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

- [L] The Contractor shall prepare, implement, and maintain a Test and Evaluation Master Plan (TEMP) that describes the Contractor's plan for all Tests and Evaluations to be undertaken in demonstrating compliance with the technical, operational, contractual and performance requirements of the project. The Plan shall include an Acceptance matrix, which identifies all deliverables and methods of testing proposed by the A draft TEMP specific to the project scope shall be submitted with the tender (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

4.2 Installation, Transition and Commissioning (ITC) Plans

- [A] The Contractor shall prepare an Installation, Transitioning and Commissioning Plan to clearly indicate the proposed methodology for the installation of the new systems, while the service being provided by the existing system continues uninterrupted. (I)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		

[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]

[B] The Plan shall indicate how the transition from the existing installation will be achieved, leading to the commissioning and acceptance of the new system. The Plans are required to indicate how the Contractor will plan and manage the installation and transition, including the cutover and commissioning procedures and the decommissioning and withdrawal from service of existing services. The Tenderer shall submit a draft ITC plan that is specific to the project requirements and scope as part of the tender response. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
<i>[[INSERT FULL RESPONSE FOR EVALUATION HERE]]</i>		
<i>[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]</i>		

4.3 Health and Safety Management Plan

[A] The Contractor shall prepare a Safety Management Plan for the implementation of the project covering all envisaged risks related to the supply, delivery, installation, and commissioning of the offered systems. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
<i>[[INSERT FULL RESPONSE FOR EVALUATION HERE]]</i>		
<i>[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]</i>		

[B] The Tenderer shall submit a draft Health and Safety Management plan specific to the project scope and requirements as part of the tender response. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
<i>[[INSERT FULL RESPONSE FOR EVALUATION HERE]]</i>		

[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

4.4 Risk Management Plan

4.4.1 Risk Analysis

[A] The Contractor shall prepare a Risk Management Plan. Tenderers shall submit with their tender an outline of their policy and methodology for risk identification, assessment and abatement for all activities to be executed under this project, this shall encompass all phases of the project including the PBU period. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
<i>[INSERT FULL RESPONSE FOR EVALUATION HERE]</i>		
<i>[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

[B] The Contractor shall maintain throughout the execution of the contract a risk register which identifies risks and opportunities, estimated level of risk and the consequences and risk reduction strategies associated with:
(D)
[a] program objectives;
[b] technology involved;
[c] system performance; and
[d] program schedules.

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
<i>[INSERT FULL RESPONSE FOR EVALUATION HERE]</i>		
<i>[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

- [C] The Contractor shall provide a Risk Report to each Progress Review Meeting to indicate the status and action associated with identified risk items. The format of the Risk Report shall be mutually agreed. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

4.5 Technical Reviews and Meetings

- [A] The Contractor shall conduct technical system review meetings with Company personnel. It is preferred that these reviews be held concurrently with Progress Review Meetings. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

- [B] The technical reviews and meetings shall consist of at least the following:
[a] System Requirements Review. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

- [b] Preliminary Design Review. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

- [c] Critical Design Review. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

- [C] The above requirements are representative requirements and Tenderers may offer alternative plans, which must list and describe the Technical Reviews and Meetings they would propose for this project. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

- [D] The Contractor shall be required to provide appropriate and adequate documentation in support of these reviews at least 1 month in advance. Tenderers shall include in their tender a description of the level and extent of documentation to be provided at the Technical Reviews and Meetings. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

5 ENVIRONMENTAL MANAGEMENT PROGRAMME

- [A] The Contractor shall develop an Environmental Management Programme (EMPr) based on identified activities which may have potential or actual environmental impacts before the commencement of work in accordance to the National Environmental Management Act (No. 107 of 1998) and

associated environmental legislation as well as ATNS' environmental specifications (I)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

- [B] The Tenderer shall provide a Draft Environmental Management Programme (EMPr) specific to the project scope, as defined in the Request for Tender. (D) The environmental management programme shall address, without limitations, the following: (D)
- [a] Energy efficiency pertaining to all aspects of the project;
 - [b] The use of Environmentally sustainable materials and products;
 - [c] Waste management;
 - [d] Air quality management i.e. dust suppression; and
 - [e] Visual and aural impacts.

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

- [C] The Tenderer shall provide a suitable qualified environmental officer or service provider to render the services required as per EMPr activities associated with this project. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

6 QUALITY ASSURANCE

6.1 Quality Assurance Programs

- [A] The Tenderers shall demonstrate the existence of a formal quality management system that is fully documented, implemented maintained and complies with the ISO 9001 standard. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

- [B] The Tenderer shall include with the offer, proof of certification by an accredited ISO body, or objective evidence of documented QMS that is not certified but complies with ISO9001 (i.e. details of quality assurance procedures, work instruction, methods etc.). (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

- [C] Tenderers must indicate the Quality Assurance (QA) measures and standards that were used for the development of the systems offered and those that are applicable for the successful delivery of Project. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[INSERT FULL RESPONSE FOR EVALUATION HERE]		
[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

6.2 Quality Assurance Audits

- [A] Audit reports in respect of the project as prepared by the Contractor as part of his internal QA procedures, and details of any corrective action

reports and corrective action taken, shall be submitted to the Company.

(D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

- [B] The Company reserves the right to perform any inspections, tests or audits at the Tenderer's or major sub-contractor's premises at any time when such tests are deemed necessary to ensure Supplies and Services conform to specified requirements. Such inspections may also be conducted by the Company during the shortlisting phase of this tender.

(D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

6.3 Responsibility for Quality Assurance

- [A] The Contractor shall be responsible for ensuring that the quality of equipment and software supplied in accordance with the terms of the Contract, and any installation activity performed, fully conforms to the prescribed requirements. The Company will undertake a monitoring and audit role in relation to the Contractors Quality Management Plan and program to determine whether equipment, software or installation deliverables meet the contractual requirements. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

6.4 Contract Data Requirements List

- [A] A copy of the ATNS standard CDRL is provided below **for information purposes**. Tenderers shall submit a proposed Contract Data Requirements List (CDRL) which incorporates all data requirements stated in this RFT, together with a delivery schedule. (D).

Project Management Requirements		
Contract Data Requirements List		
Document	Section	Delivery Timeframe
Administration and Coordination	1	
General Correspondence	1.1	
Project Review Meeting Minutes	1.2	
Project Review Meeting Agenda	1.2.1	
Project Status Reports	1.2.2	
Risk Report	1.2.3	
Quality Assurance Audit Report	1.3	
Systems Engineering Definition	2	
Project Management Plan	2.1	
Activity Dictionary	2.1.1	
Resource Allocation Plan	2.1.2	
Work Breakdown Structure	2.1.3	
Risk Management Plan	2.2	
Hardware development Plan	2.3	
Software Development Plan	2.4	
Systems Engineering Management Plan	2.5	
Installation Management Plan	2.6	
Quality Plan	2.7	
System Design Document	2.8	
Testing & Commissioning	3	
Installation Transition & Commissioning Plan	3.1	
Test & Evaluation Master Plan	3.2	
Acceptance Test Procedures	3.3	
Acceptance Certificates	3.4	
Quality Report	3.5	

Site	4	
Shelter Specifications	4.1	
Counterpoise Specifications	4.2	
Fence Specifications	4.3	
Site Earth	4.4	
Miscellaneous Specifications	4.5	
Site Survey Reports	4.6	
Equipment Installation Drawings	4.7	
Environmental Impact Issues	4.8	
Occupational Health & Safety Plan	4.9	
RCMMS Specifications & Development	4.10	
Site Handover	4.11	
Civil & Electrical Works	4.12	
Project Schedule	5	
Master Project Schedule	5.1	
Schedule Review Reports	5.2	
Finance	6	
Payment Schedule	6.1	
Invoices	6.2	
Orders	6.3	
Variation Orders	6.4	
Request for Change	6.4.1	
Logistics	7	
Integrate Logistics Support Plan	7.1	
Configuration Management Plan	7.2	
System Technical & Operator Handbook	7.3	
As-Built Documents	7.4	
PBU Reference Guide	7.5	
Logistics Support Analysis Plan	7.6	
Logistics Support Analysis Report	7.7	
Life Cycle Costing Programme Plan	7.8	
Maintenance Plan	7.9	

Software Support Plan	7.10	
Maintenance Contract (HW & SW)	7.11	
Period of Beneficial Use	8	
PBU Logistic Correspondence	8.1	
PBU Agenda & Minutes	8.2	
PBU Reports ATNS	8.3	
PBU Reports Contractor	8.4	
Failure Reports	8.5	
PCR's	8.6	
RAM Statistics	8.7	

COMPLIANCE (C/PC/NC/NOTED)	
<i>[INSERT FULL RESPONSE FOR EVALUATION HERE]</i>	
<i>[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>	

[B] Tenderers shall also identify any additional data or documentation that they consider shall be included in the CDRL, together with a description of the item and the reason for inclusion, for the purpose of operating and maintaining the System. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
<i>[INSERT FULL RESPONSE FOR EVALUATION HERE]</i>		
<i>[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

[C] The CDRL shall identify the status of the CDRL item, i.e. draft, final. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
<i>[INSERT FULL RESPONSE FOR EVALUATION HERE]</i>		
<i>[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

- [D] All CDRL items shall be delivered to the Company in draft format for Company concurrence prior to final delivery. The Contractor shall be responsible for timely delivery of all CDRL items consistent with the overall project schedule. (D)

COMPLIANCE (C/PC/NC/Noted)	<i>Only responding C/PC/NC/Noted will not be accepted without proof.</i>	
[[INSERT FULL RESPONSE FOR EVALUATION HERE]]		
[[INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]]		

----- **END OF VOLUME 3** -----