

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



REQUEST FOR PROPOSALS:

ATNS/TPQ/RFP28/2025/2026/3D Aerodrome Simulator

**3D AERODROME – TOWER SIMULATORS AND 3D DESKTOP (MINI)
SIMULATORS PROJECT**

**The supply, delivery, commissioning, and support of a 3D aerodrome simulator and 3D mini
simulators.**

VOLUME 3

**PROJECT MANAGEMENT & SYSTEMS ENGINEERING REQUIREMENTS
JANUARY 2025**

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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1. GENERAL INSTRUCTIONS TO BIDDERS

The Bidder shall submit all responses, diagrams, project management documentation, and drawings in accordance with the GENERAL INFORMATION AND INSTRUCTIONS TO BIDDERS document and in the English language.

To assist Bidders, each requirement has been appended with the letters "(M)", "(D)", "(O)", or "(I)" to indicate whether it is Mandatory, Desirable, Optional, or for Information only.

ALL RESPONSES TO THE REQUIREMENTS IN THIS DOCUMENT SHALL BE PROVIDED IN A DEDICATED ATTACHMENT REFERENCED HEREIN.

Bidders shall provide a concise, clear, and comprehensive response to each item. References to supporting documentation (Chapter, Section, Page, Paragraph) must be indicated in the space provided. This information will be the **only response used for evaluation**.

Responses that are not clear, are inadequate, or are absent shall be interpreted as "Not Compliant" even if the compliance column is marked as "Comply." Bidders must ensure their response correctly addresses the specific requirement. Responses not addressing the requirement of the specific paragraph shall be interpreted as "Not Compliant."

Bidders shall declare their compliance to each paragraph of this document in the provided response block. Bids will be evaluated 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 "I" not containing requirements).

For paragraphs declared "PC" or "NC," Bidders **must** include a statement as to the nature of the variation and may supply additional information to demonstrate how the proposal may still meet ATNS's needs.

Paragraphs marked "(M)" are Mandatory. Proposals that do not comply with mandatory requirements shall be disqualified from further evaluation.

2. PROJECT MANAGEMENT REQUIREMENTS

The Contractor shall establish, implement, and maintain comprehensive project management plans for the duration of the contract. All plans must be submitted as living documents that will be refined during the contract development and reporting phases. The Bidder's tender must include the following draft plans and documentation to demonstrate capability.

2.1 Project Management Plan (PMP)

[A] The Bidder shall submit a draft Project Management Plan (PMP) that provides the overarching strategy for project execution. The PMP shall serve as the primary control document and must reference all other project plans and activities. (D)

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

2.2 Master Project Schedule

[A] The Bidder shall submit a draft Master Project Schedule in a format compatible with Microsoft Project®. The schedule must be organised to depict the logical flow of work, task interdependencies, and the interrelationships necessary to achieve program objectives. The schedule shall, at a minimum, incorporate the following ATNS-recognized milestones: **Contract Award, Site Survey, System Design Review, Factory Acceptance Testing, Implementation, Commissioning, Site Acceptance, Period of Beneficial Use, and Maintenance and Support.** (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

2.3 Work Breakdown Structure (WBS)

[A] The Bidder shall include a draft WBS that breaks down the project scope and requirements into manageable activities. The WBS must be structured to at least three (3) levels of detail, with defined work packages that can be managed, monitored, and measured in terms of duration, cost, and resources. The WBS shall, at a minimum, incorporate and decompose the following ATNS-recognized milestones: **Contract Award, Site Survey, System Design Review, Factory Acceptance Testing, Implementation, Commissioning, Site Acceptance, Period of Beneficial Use, and Maintenance and Support.** (D)

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2.4 Change Management Plan

[A] The Bidder shall provide a draft Change Management Plan which shall describe change control process and provide oversight and ensure adequate feedback and review of the change is obtained. It shall also identify who has approval authority for changes to the project, who submits the changes, how they are tracked and monitored. (D)

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2.5 Communication Management Plan

[A] The Bidder shall provide a draft Communications Management Plan that sets the communications framework for this project. It shall serve as a guide for communications throughout the life of the project and will be updated as communication requirements change. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

[B] This plan shall include a communications matrix which maps the communication requirements of this project, and communication conduct for meetings and other forms of communication. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

[C] This plan shall also include the project team directory to provide contact information for all stakeholders directly involved in the project. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

2.6 Financial Management Plan

[A] The Bidder shall submit a draft Financial Management Plan detailing their process for tracking project costs, managing invoices, and reporting on financial progress. The plan must include a cost breakdown aligned with the WBS. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

2.7 Stakeholder Management Plan

[A] The Bidder shall submit a draft Stakeholder Management Plan that identifies all project stakeholders and outlines a strategy for their engagement and communication. The plan shall include a stakeholder analysis with roles, responsibilities, and communication needs. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

2.8 Contract Data Requirements List (CDRL)

[A] The Bidder shall submit a proposed CDRL incorporating all data deliverables required in this RFP (such as Project Management Plan (PMP), Project Schedule, Resource Allocation Plan, Risk Management Plan, Configuration Management Plan, Quality Assurance Plan, System Engineering Management Plan, Software Development Plan, Installation, Transition and Commissioning Plan, Installation Guide, Test and Evaluation Management Plan, System Design Document, FAT Test Booklet, SAT Test Booklet, Technical Manuals, As-Built Documents, Integrated Logistic Support

Programme Plan, Training Plan, Spares Plan, Test Equipment Plan, Package Handling Storage and Transport Plan) and their proposed delivery schedule. (D)

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[B] The Contractor shall be responsible for timely delivery of all CDRL items consistent with the overall project schedule. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

2.9 Project Meetings

[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 via Microsoft Team 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)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

[B] 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)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

[C] 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 to 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)

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

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[E] Any issues, concerns, or updates that arise from informal discussions between team members must be communicated to the Project Manager formally via e-mail. (I)

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3. SYSTEMS ENGINEERING REQUIREMENTS

The Contractor shall be responsible for the total performance of the system and shall ensure all requirements are satisfied throughout the project lifecycle. The Bidder's proposal must demonstrate a robust systems engineering approach.

3.1 System Engineering Management Plan (SEMP)

[A] The Bidder shall submit a draft SEMP that describes their systems engineering process, including the methodology for requirements analysis, design, development, and integration. The SEMP shall demonstrate how the bidder will manage the system lifecycle in accordance with the principles of **ISO/IEC/IEEE 15288** and the guidance from the **INCOSE Systems Engineering Handbook**. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

3.2 Requirements Traceability Matrix (RTM)

[A] The Bidder shall provide a draft Requirements Traceability Matrix (RTM) that maps each functional and performance requirement to the system design, development, and test activities. This RTM is a mandatory deliverable ensuring all requirements are verifiably met. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

3.3 Interface Control Documents (ICDs)

[A] The Bidder shall submit a draft plan for developing Interface Control Documents (ICDs) for all interfaces between the new system and existing ATNS systems. The plan must describe how external interfaces will be identified, documented, and managed to ensure seamless integration.

(D)

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3.4 Site Survey

[A] The Contractor shall perform site surveys to confirm all the required information to implement the project. The Contractor shall provide a site survey report to the company after the survey has been conducted. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

3.5 System Design Review (SDR)

[A] The Contractor shall conduct a System Design Review (SDR) following site surveys and provide a formal report following the completion of the SDR. The report shall detail the proposed system architecture, hardware and software components, and a verification that the design meets all project requirements. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

3.6 System Verification and Validation (V&V) Plan

[A] The Bidder shall provide a draft V&V Plan that details the methodology for ensuring the system is built correctly (Verification) and that the correct system is built (Validation). This plan shall go beyond standard testing and include methods for user acceptance testing, operational readiness assessments, and a comprehensive test matrix. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

3.7 Cybersecurity and Information Assurance Plan

[A] The Bidder shall submit a draft Cybersecurity and Information Assurance Plan that details the approach to securing the system. This plan must address vulnerability management, access control, data protection, and a strategy for managing cyber threats throughout the system's lifecycle. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

3.8 Installation, Transitioning and Commissioning (ITC) Plan

[A] The Bidder shall submit a draft Installation, Transitioning and Commissioning (ITC) Plan that outlines the proposed methodology for the installation of the new system while the existing service remains uninterrupted. The plan shall indicate how the transition from the existing system will be achieved, leading to the commissioning and acceptance of the new system and the eventual decommissioning of the old. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

4. QUALITY MANAGEMENT REQUIREMENTS

The Contractor shall establish a formal quality management system to ensure all deliverables and processes conform to the highest standards.

4.1 Quality Management System (QMS)

[A] The Bidder shall demonstrate the existence of a formal Quality Management System that is fully documented, implemented, and maintained. The QMS must comply with the ISO 9001 standard. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

[B] The Bidder shall submit with the offer either proof of certification by an accredited ISO body or objective evidence of a documented QMS that complies with the ISO 9001 standard (e.g., details of quality assurance procedures, work instructions). (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

4.2 Quality Assurance (QA) Audits

[A] The Contractor shall prepare audit reports as part of their internal QA procedures and submit them to ATNS, along with details of any corrective actions taken. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

[B] ATNS reserves the right to perform inspections, tests, or audits at the Contractor's premises to ensure supplies and services conform to the specified requirements. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

4.3 Responsibility for Quality

[A] The Contractor is solely responsible for ensuring that the quality of all equipment, software, and installation activities fully conforms to the prescribed requirements. ATNS will undertake a monitoring and audit role, but this does not absolve the Contractor of their responsibility. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

5. LOGISTICS AND LIFE CYCLE MANAGEMENT

The Contractor is responsible for all logistics and for considering the full life cycle of the system.

5.1 Logistics and Supply Chain Management Plan

[A] The Bidder shall submit a draft Logistics and Supply Chain Management Plan that details the processes for procurement, transportation, storage, and inventory management of all project equipment and materials. The plan must also include a robust mechanism for vetting all vendors and subcontractors to ensure their compliance with project requirements. The plan must address international shipping, customs, and import duties. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

5.2 Decommissioning and Disposal Plan

[A] The Contractor shall ensure duty of care during execution of the project and shall be liable for the costs of remedying pollution, environmental degradation and consequent adverse health effects as per the National Environmental Management Act 107 of 1998. All environmental incidents shall be recorded and reported to ATNS. The Bidder shall indicate compliance to this requirement. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

[B] All waste generated during the execution of the scope of work shall be managed in accordance with ATNS' Waste Management Procedure. A Waste Management Plan should be provided as per the principles of the National Environmental Management Act (NEMA): Waste Act (No.59 of 2008 and must be submitted and approved by the Safety, Health and Environment unit to ensure that the existing equipment, and related components, that are replaced are uninstalled, disassembled and disposed of in an environmentally friendly manner and in line with current environmental laws. The Bidder shall indicate compliance with this requirement. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

[C] Records/ Certificates of disposal as well as the authorisation documentation (certificates of registration) for a waste service provider/s appointed by the contractor, shall be kept at sites and sent to ATNS Safety, Health and Environment unit. The Bidder indicate compliance to this requirement. (D)

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[D] An environmental management plan detailing identified environmental aspects and impacts relating to their activities that will be carried out will be managed throughout the project execution. This shall also include employee induction on environmental management prior to commencement of work and records kept. The Bidder shall indicate compliance to this requirement. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

[E] The Bidder shall provide a draft Decommissioning and Disposal Plan outlining the proposed methodology for the safe removal and disposal of the existing systems. The plan must include a strategy for the environmentally compliant handling of hazardous materials and electronic waste.

(D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

5.3 Lifecycle Cost Analysis

[A] The Bidder shall provide a detailed Lifecycle Cost Analysis (LCCA) that estimates the total cost of ownership for the new system over its projected lifespan. The analysis must include costs for installation, maintenance, spare parts, and future upgrades. The submitted LCCA shall align with volume 1C. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

6. PERSONNEL, HEALTH, SAFETY, AND PERMITTING

The Contractor shall provide qualified personnel and adhere to all health, safety, and permitting regulations.

6.1 Resumes of Key Personnel

[A] The Bidder shall submit a resume for key project personnel. The resumes shall include but not limited to the following key personnel list: the Project Manager, Professional Engineer, Software Specialist and IT Specialist roles. Each resume must demonstrate a minimum of five (5) years of relevant experience in similar projects. (D)

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[THE BIDDER SHALL INSERT FULL RESPONSE FOR EVALUATION HERE]		
[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

[B] The Bidder shall provide certified copies of all required qualifications, including a recognized Project Management certification (e.g., PMP, Prince2) for the Project Manager and a professional registration certificate for the Professional Engineer. (D)

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[THE BIDDER SHALL INSERT FULL RESPONSE FOR EVALUATION HERE]		
[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

6.2 Resource Allocation Plan

[A] The Bidder shall submit with their tender a Resource Allocation Plan which identifies all resources, including subcontractor resources, plant and equipment, and facilities to be applied to each element of the project. The Plan shall clearly identify all work proposed to be undertaken through subcontracts. (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

[B] Bidders shall provide full details of their proposed internal organization for this project. The full project organization structure shall be presented, including relevant names, positions and responsibilities (D)

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<i>[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]</i>		

6.3 Health, Safety, and Environment (HSE) Management Plan

[A] The Bidder shall submit a draft HSE Management Plan specific to the project scope. The plan shall detail the contractor's safety, health, and environmental policies and procedures, including a description of how all employees and subcontractors will comply with all legal requirements and ATNS specifications. The submitted draft plan shall be converted into a safety file compliant to ATNS specification as attached under APPENDIX A. A safety file shall be submitted by a contractor for each site prior to commencement on work. (D)

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

6.4 Risk Management Plan

[A] The Bidder shall prepare a Risk Management Plan that outlines the policy and methodology for risk identification, assessment, and mitigation in accordance with **ISO 31000**. The plan must include a risk register identifying potential project, safety, and environmental risks, along with proposed risk reduction strategies. (D)

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

6.5 ACSA Permits

[A] The Bidder shall submit a detailed process of how they will acquire all necessary permits from Airport Company South Africa (ACSA) for all project locations. The Bidder is responsible for all costs associated with these permits. (D)

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

7. ANNEXURE A

HEALTH AND SAFETY SPECIFICATION/REQUIREMENTS

Only the successful bidder shall be required to comply with the following requirements:

Appointed principal contractors and sub- contractors

Note 1: Most of the roles and responsibilities listed apply to both appointed principal contractors and any sub- contractors. Where some of the listed do not apply to both, then the specific responsibilities will be listed and titled. The contractors shall:

- Carry out all duties as listed in section 8, 9 and 10, the various other regulations that form part of the OHS Act.
- Carry accountability and responsibility for the safety and health of their employees and their sub- contractors within their working area, as contemplated by section 37(2) of the OHS Act;
- Ensure that all their appointees are made aware of their accountabilities and responsibilities in terms of their appointment and that they advise and assist these appointees in the execution of their duties.
- Ensure that the minimum legislative, regulatory and ATNS SHE requirements are complied with on all work sites.
- Compile a SHE (Safety, health and environmental) file where all relevant health and safety records must be kept for each work site.
- Ensure that all employees are conversant with all relevant work procedures and that they adhere to such procedures.
- Stop his /her employees if project work is not in accordance with the safety health and environmental plan or if such work poses a threat to the health and safety of persons or a risk of degradation to the environment.
- Appoint full-time competent employees in writing to supervise the performance of all specified work throughout the contract period.

Note 2: No work may commence and or continue without the presence of the project manager or project supervisor during performance of the contracted work.

- Appoint a part-time safety officer as per project risk.
- Ensure that pre-task risk assessments are conducted and documented daily and prior to the starting of any new task, irrespective of whether it is a repetitive task or not.
- Must have a substance abuse program which must be in line with the requirements of the OHS Act.
- Ensure that no alcohol or other intoxicating substances are brought on to or remains on the work sites.
- Ensure that all incidents are reported and investigated timeously by competent incident investigators.

- Establish health and safety committees, hold such committee meeting on site, and ensure that sub- contractors participate in their health and safety meetings.
- Chair their own health and safety committee meetings and record such meetings.
- Appoint sufficient number of health and safety representatives in terms of legislative requirements and ensure that the sub- contractors appoint health and safety representatives for their work sites.

Contractor site supervisor

Must:

- Be competent to perform the required supervisory tasks; have attended a supervision or legal liability competent training from SAQA approved training provider.
- Ensure their employees comply with the required statutory and ATNS requirements.
- Conduct site Inspections for compliance to SHE requirements and compiles the relevant inspection reports.
- Ensure that their own employees are competent to perform the tasks assigned.
- Issue site instructions on behalf of the appointed contractor
- Assist the appointed contractor with the handing over process, in particular the SHE file and relevant documentation.

Contractor Health and Safety officer

- The Safety officer must be suitably qualified with recognised safety qualification.
- Must be part time on site as per project risk.
- The contractor's safety officer shall assist in the control of all health and safety-related matters on the sites.
- Be involved in the developing the project SHE plan and SHE policy.
- Conduct inspections of all work sites for the duration of the project.
- Be involved in the organisations incident investigations when required.
- Conduct organisational, site and visitor induction training.
- Stop any employee from performing work which is not in accordance with the appointed contractor's health and safety plan which poses a threat to the health and safety of persons.

Section 37(2) (Legal) Agreement

A section 37(2) agreement must be signed between ATNS Contract Manager/Project Manager and the appointed principal contractor at the time of awarding the contract. The appointed contractor must ensure that a section 37(2) agreement is compiled between the appointed contractor and all their sub-contractors for the contract. This agreement must be submitted as part of the safety file package.

Site Access requirements

The Safety file package must be submitted to the SHE unit **2 weeks** before the agreed project commencement date.

- Before the successful Contractor commences with any work, the ATNS Project Manager/Contract Manager shall ensure that:
- A copy of the SHE Specification document is in the possession of the responsible person of the contracting company.
- The responsible person of the contracting company and the ATNS project manager/contract manager have signed the ATNS section 37 (2) agreement.
- The appointment of the appointed principal contractor has been concluded and signed by the Contractor and appointed project manager. A task specific baseline risk assessment must be part of the SHE Plan and accompanied by a risk assessment procedure applied. A monitoring and review plan must form part of the baseline risk assessment.
- Where a Subcontractor(s) is appointed by the Appointed principal Contractor, the Contractor supplies the applicable ATNS SHE specifications to the Subcontractor(s).
- The SHE unit shall assess and give written feedback to the appointed principal contractor. The safety file shall be approved in a form of a written letter from the SHE department.

Costing for SHE within the Project

The SHE costing must be itemised and must take into consideration the scope of work. The appointed principal contractor must make sure that he/she made adequate provision for the cost of health and safety measures during tendering process.

Risk assessment (refer sec 8 & 9 of the OHS Act)

The appointed principal contractor shall develop a Risk Assessment in line with Section 8 (2)(d) of the OHS Act. Emerging risks and hazards must be managed during the duration of the contract. This means that if there are significant changes to a process or activity, or any new process, then these should also be subjected to risk assessment.

All risks must be rated. Activity- based risk assessments shall be conducted by a competent person of the appointed contractor.

Housekeeping and Order

- The appointed principal contractor shall maintain a high standard of housekeeping for the duration of the project.
- Prompt disposal of waste materials, scrap and rubbish is essential.
- Nails protruding through timber shall be bent over or removed so as not to cause injury.
- All packaging material including boxes, pallets, crates, etc. to be removed from the work area immediately.

- On completion of his / her work, the appointed principal contractor is responsible for clearing his / her work area of all materials, scrap, temporary buildings and building bases to the satisfaction of the client/agent.

Tools and Equipment

- The appointed principal contractor shall ensure that all tools and equipment are identified, safe to be used and is maintained in a good condition.
- Contractor shall ensure that all tools and equipment are listed on an inventory list, be regularly inspected at least monthly or as required by legislation and risk assessments.
- The equipment should be numbered or tagged so that it can be properly monitored and inspected.
- All tools that emit noise shall be clearly marked with the emitted noise levels.
- Where defective tools and equipment's are identified, such tools and equipment shall be removed out of site immediately, locked away to prevent further use until such time as the tool or piece of equipment has been repaired.
- The appointed principal contractor shall ensure that the appropriate records are kept for all tools and equipment used on the project. Such tools and equipment's shall be subjected to regular inspections.

Hand tools

- All hand tools (hammers, chisels, spanners, etc.) must be recorded on a register and inspected by the supervisor on a monthly basis as well as by users prior to use.

Medicals

Note: ATNS will only accept medical surveillances conducted by an Occupational Health Practitioner who holds a qualification in occupational health.

- Appointed principal contractor must ensure that his/her employees have a medical surveillance program whereby employees undergo entry, periodic and exit medical fitness examinations.
- Medical fitness certificates shall be renewed annually for employees who are working on site. This shall be maintained until completion of the contract.
- The appointed contractor must ensure that his / her employees have undergone pre-entry medical examination before starting work on the contract.

Personal Protective Equipment Requirements

- Appointed principal contractor shall comply with the requirements of GSR 2 of the OHS Act.
- The risk-based PPE matrix must be compiled detailing the types of PPE that is required to be issued to employees performing the respective tasks.

- Where there are unusual instances where particular activities require additional type of PPE, then a risk assessment must be conducted where such PPE requirements will be identified, and the issuing be carried out.
- Appointed contractor shall ensure that his/her visitors wear and use the correct PPE whilst on worksites.
- Where PPE is required and visitors are not in possession of, then it is the individual contractor's responsibility to provide the PPE.
- All PPE purchased and used by all principal contractor employees including visitors must comply with the relevant SANS standards.
- Where deemed as a requirement, then high visibility vests shall be worn.

Incident Investigation

- All incidents shall be investigated in terms of OHS Act General Administrative Regulations 8 and 9, using ATNS OHS incident management procedure as a reference, and where injuries as contemplated in sections 24 and 25 have been sustained, be reported to the Department of Employment and Labour.
- Appointed principal contractor must develop their own incident management procedure.
- The appointed Contractor shall use the standard General Administrative Regulation Annexure 1 "Recording of an Incident" form for all incident investigation reports.
- The objective of incident investigation should not only be a legal requirement but should establish why and how the incident occurred and find out the real root cause of the incident and to decide on precautionary measures that are required to address the root cause to prevent any further recurrences of the same or similar incidents.

Emergency Management

- The appointed contractor must develop his/her own emergency management procedure detailing the possible emergencies that could arise due to the activities that he/she conducts at ATNS premises and how he/she will evacuate the area in case of any emergency.
- Periodic emergency drills must be undertaken to test the effectiveness of the plan. This must be recorded and provided on request.

Non-Conformance and Compliance

- Any non-compliance to any health and safety requirement in this SHE specification is subject to discipline.
- Should the contractor fail to provide adequate PPE to their employees for the tasks being performed and/or to visitors; failure to enforce the wearing of such PPE will be viewed as a transgression of the legislative and ATNS requirements.

COID

The appointed principal contractor shall be registered with an appropriate employment compensation

commissioner and have available a valid letter of good standing (LoG) from such commissioner. The obligation lies with the contractors to ensure that the LoG remain valid throughout the contract period. A copy of the LoG must be filed in the contractor SHE files.

Statutory Appointments

For the duration of the contract, the appointed principal contractor shall appoint competent employees who will meet the requirements of the OHS Act. Where appointments are made, contractor shall ensure that the appointees have been suitably trained and or informed of their responsibilities before getting them to accept such appointment. The relevant statutory appointments shall be made in accordance with the requirements of the OHS Act which includes the requirement of a competent person being appointed in the relevant roles.

SHE Communication Systems

The appointed principal contractor must develop a communication strategy/plan outlining how he/she intends to communicate SHE issues to his/her staff, the mediums he/she will employ and how he/she will measure the effectiveness of the SHE communication.

Site establishment

- The appointed principal contractor's site facilities should be managed at all times.
- Where, working in the field and material is stored at the work sites, then proper stacking and storage shall be carried out.
- When compiling the site plan, cognisance must be taken to the establishment of the site camp, ablution facilities and dining area in relation to one another and away from stacking and storage areas.
- The appointed principal contractor together with the client (ATNS) must conduct a Risk assessment for site establishment.
- ATNS does not guarantee the provision of a storage to accommodate the service principal contractor's tools and equipment.
- If such site establishment/storage is not be available, the appointed principal contractor will be responsible for establishing and disestablishing its own storage facility, the location of which must be agreed with ATNS (if established within ATNS premises).
- The principal contractor may not make use of the site for residential purposes, and no workers will be permitted to set up sleeping quarters on ATNS premises.
- The principal contractor shall clear up all site establishment after use, and reinstate the same to the state prior to occupation, at the service provider's cost.

All employees performing excavation (installation of electrical cables) work must comply with the following:

- All work involving excavations must comply with the requirements of the Occupational Health and Safety Act, Act 85 of 1993 and all relevant regulations, including the Construction Regulations 2014 (CR14) and the General Safety Regulations 2003 (GSR 2003).
- Excavation and trenching are amongst the most dangerous operations in the construction industry. Dangers can include cave-ins, falling loads and hazardous atmospheres.
- Regular pre-work inspections can reduce hazards and serious risk of injury. Safety inspections should check for the type of excavation being conducted, support and warning systems in place, access areas, weather conditions and PPE.
- Excavation work must be done under supervision of a competent person who has been appointed in writing for that purpose.
- The appointed contractor must submit method statements/work instructions indicating how the excavation work will be done safely.
- A detailed baseline risk assessment pertaining to excavation work and the installation of the optic network cable shall form part of the safety file package. (this is a detailed document indicating all the associated activities and identifying hazards and associated risks)
- Part of the baseline risk assessment must detail the control measures to be implemented as per the hierarchy of controls, the risk assessment procedure must have a monitoring and review plan.
- All risk assessments must be compiled by competent person, who has a certificate of competency for Risk Assessment from SAQA approved training provider.
- A task specific risk assessment must be conducted for all excavation and the installation electrical cable activities.

SHE file

- The appointed principal contractor is required to keep a SHE file on every project site. If there is more than one site per project, a file per site shall be kept at that site. Principal contractor may keep additional files at his/her head office as additional records. The SHE file shall be maintained by the appointed principal contractor on his/her project sites and shall be available on request for audit and inspection purposes.
- The SHE file shall consist of the requirements in terms of the project's safety specification, the principal contractor's safety and health plans.
- The sequence of filing the documentation must be kept in the same sequence as listed in this SHE specification and the SHE plan.
- Each record shall be separated by partitions to afford easy identification and access. Each partition must be labelled.
- In case where the project is extended, should the documentation in the SHE files become cumbersome, the older documentation must be archived in boxes which shall be correctly

labelled and be available for auditing purposes. The archived documentation must be handed over at the completion of the project.

Environmental Sustainability Requirements

- Duty of care shall be prioritised, as per National Environmental Management Act No. 107 of 1998. Section 28, to ensure responsible project implementation during execution and the ATNS shall not be liable for the costs of remedying pollution, environmental degradation and consequent adverse health effects as per and the Polluter Pays Principle contained in the National Environmental Management Act No. 107 of 1998.
- The service provider shall ensure alignment with ATNS environmental commitments i.e. comply with ATNS' environmental policies, ISO 14001:2015 Environmental Management System standard and procedures.
- An Environmental Management Programme detailing the approach to be taken for minimising negative environmental impacts through the project phases shall be provided and must be approved by ATNS before project implementation. The programme must include all the aspects and impacts relating to the activity and aim for continuous improvement.
- Hazardous substance management: all chemical containing products shall have filed Safety Data Sheets, where applicable
- All waste generated during the execution of the scope of work shall be managed in accordance with ATNS' Waste Management Procedure. A Waste Management Plan should be provided as per the principles of the National Environmental Management Act (NEMA): Waste Act (No.59 of 2008).
 - Waste generated deemed for disposal shall be separated at source and collected, transported and treated by a licensed waste management Service Provider – service provider to provide permit
 - The facility where the waste is being treated/ disposed shall be a licensed facility – service provider to provide licence/accreditation of the facility receiving waste collected
 - A certificate of disposal shall be issued by the waste management service provider
- An environmental incident reporting process must be in place to manage all incidents and non-conformances.
- The following documentation shall be provided:
 - Environmental Policy
 - Environmental management plan (relevant to the scope of work)
 - Waste Management Plan