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



REQUEST FOR PROPOSALS: RFP: ATNS/TS/RFP018/2024/25/Fibre Optic Replacement

APPOINTMENT OF A SERVICE PROVIDER FOR THE SUPPLY,
DELIVERY, INSTALLATION, AND COMMISSIONING OF A 24 FIBRE
OPTIC CABLE AT FALE, FABL, FAKM, FAUP AND FAGG.
INCLUDING THE ESTABLISHMENT OF A NEW TRENCH AT FAUP
AND FAGG.

VOLUME 3, 4

# PROJECT MANAGEMENT & SYSTEMS ENGINEERING REQUIREMENTS

#### **NOVEMBER 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**

ACSA Airport Company South Africa SOC Ltd

ATC Air Traffic Control

ATNS Air Traffic and Navigation Services SOC LTD

CDRL Contract Data Requirements List

ICAO International Civil Aviation Organization

IEEE Institute of Electrical and Electronics Engineering

PBU Period of Beneficial Use

PMP Project Management Plan

QA Quality Assurance

RFT Request for Tender

SEMP System Engineering Management Plan

TEMP Test and Evaluation Master Plan

WBS Work Breakdown Structure

#### 1. GENERAL INSTRUCTIONS TO BIDDERS

The Bidder shall submit all responses, diagrams, documentation and drawings according to the GENERAL INFORMATION AND INSTRUCTIONS TO BIDDERS document and in the English language.

To assist Bidders only, each paragraph or article has been appended throughout with the letters "(M)", "(D)", "(O)" or "(I)", to indicate whether the requirement is **M**andatory, **D**esirable, **O**ptional or for **I**nformation only.

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

BIDDERS 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 Bidder's offer meets the requirement. Bidder'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".

Bidders shall declare compliance to each and every paragraph of this document, based on the paragraph classification, in the response block provided opposite the column labelled "Compliance". 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 as "I", not containing requirements)

Bidder shall, for paragraphs declared "PC" or "NC", include a statement as to the nature of the variation and may supply additional supporting information in the space provided to demonstrate how the proposal may still meet the needs of ATNS.

**Paragraphs marked "(M)"**, indicates that the requirement is mandatory and proposals that do not comply with the requirement **shall** be disqualified for further evaluation.

**Paragraphs marked "(D)"**, indicates that the requirement is desirable, and the Bidder is expected to declare their level of compliance, provide a formal response and reference supporting documents.

**Paragraphs marked "(I)"**, indicates that the requirement is for information, however the Bidder 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 Bidder may decide how to respond.

#### 2. BIDDER/CONTRACTOR OBLIGATIONS

[A] The Bidder shall provide a compliance statement to each specification to confirm that, if the Bidder is appointed as the Contractor, all requirements and obligations stated in this specification shall be complied with. (D)

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

#### 3. REFERENCE LETTER

[A] The Bidder shall submit at least two (2) contactable reference letters (on company letterhead) from a company or customer that has operationally deployed the fibre optic cable during the past ten (10) years, preferably at the airport. The reference letter shall explicitly reflect when the project was done and state who deployed the fibre optic cable and that the fibre optic network is operational. The reference letter shall include the customer's telephone number and/or email address. (M)

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

#### 4. PROJECT MANAGEMENT

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

[B] The Bidder shall submit draft Project Management plans with the Tender to indicate compliance and these plans will be refined as necessary during the Contract development and reporting phases. (D)

COMPLIANCE (C/PC/NC/Noted)	Only responding C/PC/NC/Noted will not be accepted without proof.		
[THE BIDDER SHALL INSERT FULL RESPONSE FOR EVALUATION HERE]			
[THE BIDDER SHALL 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. (I)

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

[D] 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	Only responding C/PC/NC/Noted will not be	
(C/PC/NC/Noted)	accepted without proof.	
[THE BIDDER MAY INSE	RT A RESPONSE WHERE APPLICABLE]	

# 4.2. Project Management Plan

[A] The Bidder 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)	Only responding C/PC/NC/Noted will not be accepted without proof.		
[THE BIDDER SHALL INSERT FULL RESPONSE FOR EVALUATION HERE]			
[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]			

#### 4.2.1 Project Scope

[A] The Bidder shall provide a project scope. This detail should include what the project does and does not include. (D)

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

# 4.2.2 Project Milestone

[A] The Bidder shall include the draft milestones for this project, along with their estimated completion timeframe. (D)

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

# 4.2.3 Contract Data Requirements List

[A] Bidders shall submit a proposed Contract Data Requirements List (CDRL) which incorporates all data requirements stated in this RFT, together with a delivery schedule. (D)

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

#### 4.2.4 Work Breakdown Structure

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

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

# 4.2.5 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)

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

# 4.2.6 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)

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

# 4.2.7 Risk Management Plan

[A] The Contractor shall prepare a Risk Management Plan. Bidders 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 Period of Beneficial Use (PBU). (D)

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

# 4.2.8 Quality Management Plan

[A] The Bidders 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)	Only responding C/PC/NC/Noted will not be accepted without proof.	
[THE BIDDER SHALL INSERT FULL RESPONSE FOR EVALUATION HERE]		
[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

[B] The Company reserves the right to perform any inspections, tests or audits at the Contractor'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)	Only responding C/PC/NC/Noted will not be accepted without proof.	
[THE BIDDER SHALL INSERT FULL RESPONSE FOR EVALUATION HERE]		
[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

#### 4.2.9 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 Contractor's 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)

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

[B] 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)

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

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

COMPLIANCE	Only responding C/PC/NC/Noted will not be	
(C/PC/NC/Noted)	accepted without proof.	
[THE BIDDER MAY INSERT A RESPONSE WHERE APPLICABLE]		

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

COMPLIANCE	Only responding C/PC/NC/Noted will not be	
(C/PC/NC/Noted)	accepted without proof.	
[THE BIDDER MAY INSERT A RESPONSE WHERE APPLICABLE]		

#### 5. MASTER PROJECT SCHEDULE

[A] The Bidder shall provide a Programme Management schedule in the Microsoft Project® format. The Company requires the project to be implemented within 12 months (all five stations) from the contract signature to SAT of the last site, followed by the 12-month PBU period. (D)

COMPLIANCE	Only responding C/PC/NC/Noted will not be	
(C/PC/NC/Noted)	accepted without proof.	
[THE BIDDER MAY INSERT A RESPONSE WHERE APPLICABLE]		

[B] The Bidder should submit a Programme Management schedule that includes individual Project Management schedule for each of the five (5) sites. (D)

COMPLIANCE	Only responding C/PC/NC/Noted will not be	
(C/PC/NC/Noted)	accepted without proof.	
[THE BIDDER MAY INSERT A RESPONSE WHERE APPLICABLE]		

- [C] The project duration for each site shall not exceed the durations stated below. (D)
- FALE 6 months
- FABL 6 months
- FAKM 6 months
- FAUP 9 months
- FAGG 9 months

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

[D] The PBU shall start once the implementation of each station is finalised. (D)

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

[E] The Bidder shall submit a draft Master Programme Schedule with the proposal response. 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)	Only responding C/PC/NC/Noted will not be accepted without proof.	
[THE BIDDER SHALL INSERT FULL RESPONSE FOR EVALUATION HERE]		
[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

#### 6. RESOURCE ALLOCATION PLAN

[A] Bidders 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. The Plan shall clearly identify all work proposed to be undertaken through subcontracts. (D)

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

[B] The Bidder 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)	Only responding C/PC/NC/Noted will not be accepted without proof.	
[THE BIDDER SHALL INSERT FULL RESPONSE FOR EVALUATION HERE]		
[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

[C] 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)

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

[D] The organization structure shall reflect resources for all five (5) sites. (D)

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

[E] 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. Bidders shall submit with their tender a description of all elements of their proposal, which will require the involvement of Company personnel or other resources. (D)

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

# 6.1. Resumes of Key Personnel

[A] The Bidder shall submit the resume/cv for the Professional Construction Project Manager which shall also be reflected in the provided Resource Allocation Plan. T. (D)

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

[B] The Bidder shall submit a certified registration certificate copy of the South African Council for the Project and Construction Management Professions (SACPCMP) for the Professional Construction Project Manager. (D)

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

[C] The Bidder shall submit the resume/cv for the Site Supervisors, which shall also be reflected in the provided Resource Allocation Plan. The Site Supervisor shall have a minimum of 5 years' site supervisory experience. (D)

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

[D] The Bidder shall submit the resume/cv for the certified fiber optic Technician, which shall also be reflected in the provided Resource Allocation Plan. The Fiber Technician shall have a minimum of 5 years in fibre optic installation and testing.
(D)

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

[E] The Bidder shall submit a certified copy of qualifications or certification for the fiber technician. (D)

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

[F] The Bidder shall submit the resume/CV for a trade-tested artisan Electrician and Plumber, which shall also be reflected in the provided Resource Allocation Plan. The Artisan shall have a minimum of 3 years in their respective jobs. (D)

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

[G] The Contractor shall have a trade-tested artisan Electrician and Plumber on standby should an incident occur on site. (D)

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

[H] The Bidder shall submit the resume/cv for the Health and Safety Officer, which shall also be reflected in the provided Resource Allocation Plan. The Health and Safety Officer shall have a minimum of 5 years in construction. (D)

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

[I] The Bidder shall submit relevant resume/cv and certified qualification certificates for all the other roles deemed critical in the design and implementation of the project. (D)

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

[J] The Bidder shall confirm that during the contract phase, the appointed Bidder shall not replace the key design and implementation personnel offered in this Resource Allocation Plan without the prior written approval of ATNS. (D)

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

#### 7. HEALTH AND SAFETY MANAGEMENT PLAN

- [A] The Bidder shall ensure that an environmental management programme is developed and documented and shall detail how identified environmental aspects will be managed throughout the project execution, to which the contractor will be expected to adhere to all the conditions included in the project reporting. The environmental management programme shall address, without limitations, the following: (D)
  - Removal of vegetation should only be limited to the project site and minimise unnecessary impacts outside working areas. Invasive species should be removed and spread through the movement of equipment minimised
  - Topsoil stockpiling (place within demarcated areas and covered to prevent loss
    of soil and invasive species growth, for the reuse at rehabilitation phase and
    should not be higher than 2,5m to prevent compaction)
  - Dust control
  - Hazardous substances management, inclusive of handling as per each chemicals' Safety Data Sheets
  - Water pollution during the cleaning of the manholes
  - Incident management (including oil spills and encounters with fauna/ animals, especially burrowing anuals, should be reported and not killed)
  - Waste management, including storage and management of reuseable/ recycle materials
  - Site rehabilitation process to ensure the affected area is re-instated to a similar or better condition than before the project implementation, with only indigenous plants being used
  - Minimise visual impact and related complaints
  - Compliance to the National Environmental Management Act, specifically the prevention of site degradation as per the section 28 Duty of Care provisions and ACSA safety, health and environmental requirements
  - Training and awareness to all key site staff on environmental management

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

[B] The Contractor shall review the Waste Management Plan in adherence to the ATNS Waste Management Policy. (D)

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

[C] The manufacturing process of fibre optic cables is resource-intensive. Therefore, the supplier should demonstrate the manufacturer's management of the manufacturing process while considering environmental issues (raw material extraction, water and energy consumption, waste, etc.). (D)

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

[D] The Bidder shall provide a letter of good standing. (D)

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

[E] The Bidder shall provide a baseline risk assessment. (D)

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

[F] The Bidder shall provide a SHE plan and SHE policy. (D)

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

[G] The Bidder shall provide a competence certificate (including First Aider, Health and Safety representative and incident investigator). (D)

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

[H] The Bidder shall provide an emergency preparedness plan. (D)

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

[I] The Contractor shall comply with the requirements of the OHS specification as stipulated in Annexure A and include any costs related to it as part of the cost proposal. (D)

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

[J] The Contractor shall conduct an initial Environmental assessment for all sites to identify any environmental aspects that may results in negative impacts and determine if a listed activity will be triggered as per the National Environmental Management Act Environmental Impact Assessment (EIA) Regulations 2014, before trenching and other related construction activities can commence. (D)

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

[K] The contractor shall develop and submit a safety file to ACSA to obtain the necessary work permit for commencing operations on site. The contractor shall coordinate with the ACSA safety officer to ensure all additional safety file requirements are met. (I)

#### 8. SYSTEM ENGINEERING

# 8.1. 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	Only responding C/PC/NC/Noted will not be	
(C/PC/NC/Noted)	accepted without proof.	
[THE BIDDER MAY INSERT FULL RESPONSE FOR EVALUATION HERE]		

[B] The Contractor shall be responsible for the total performance of the system. The Bidder 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)	Only responding C/PC/NC/Noted will not be accepted without proof.	
[THE BIDDER SHALL INSERT FULL RESPONSE FOR EVALUATION HERE]		
[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

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

COMPLIANCE	Only responding C/PC/NC/Noted will not be	
(C/PC/NC/Noted)	accepted without proof.	

[THE BIDDER SHALL INSERT FULL RESPONSE FOR EVALUATION HERE]

[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

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

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

# 8.1.1 Site Survey

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

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

# 8.1.2 System Design Review

[A] The Contractor after producing the site survey report will conduct a system design review and produce a report. (D)

COMPLIANCE	Only responding C/PC/NC/Noted will not be	
(C/PC/NC/Noted)	accepted without proof.	

[THE BIDDER SHALL INSERT FULL RESPONSE FOR EVALUATION HERE]

[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

#### 8.1.3 Site Establishment

- [A] The contractor shall set up a site office which will have at least the following for site establishment. (D)
  - i. Mobile Toilet
  - ii. BCEA Poster
  - iii. Container
  - iv. Water Tanker
  - v. Desk
  - vi. Chairs
- vii. Fence

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

[B] Upon completion of the project, the contractor shall demobilize, remove all siterelated installations and equipment, and ensure that the site is restored to its original condition. (D)

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

#### 8.1.4 Test and Evaluation Master Plan

[A] The Bidder shall prepare, implement and maintain a Test and Evaluation Master Plan (TEMP) that describes the Bidder'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 Bidder, to demonstrate compliance. A draft Test and Evaluation Master Plan shall be submitted with the tender. (D)

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

[B] The Bidder shall provide a list of machines/devices used for tests. (D)

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

- [C] The specific testing and evaluation procedures for the Acceptance Tests shall be defined and detailed in the Test and Evaluation Master plan for each project deliverable. The minimum test documentation templates required are the following:
  (D)
  - [a] Factory Acceptance Test
  - [b] Hardware Inspection Test
  - [c] Site Acceptance Test

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

[D] Tests shall be conducted once all the equipment have been connected to the new Fibre network. (D)

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

# 8.1.5 Installation, Transition and Commissioning (ITC) Plans

[A] The Bidder shall provide an Installation, Transitioning and Commissioning Plan to indicate the proposed methodology for the installation of the new systems, while the service being provided by the existing system continues uninterrupted. At all times the services connected to the fibre network should always be working. (D)

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

[C] ATNS personnel will move the equipment from the current fibre patch panels to the new patch panels. The contractor shall conduct tests of the fibre cable before the equipment have been connected to the new fibre cable patch panels. (D)

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

[D] The Plan shall include how the project works will be broken down into daily and weekly activities. (D)

COMPLIANCE	Only responding C/PC/NC/Noted will not be	
(C/PC/NC/Noted)	accepted without proof.	

[THE BIDDER SHALL INSERT FULL RESPONSE FOR EVALUATION HERE]

[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

#### 9. ACSA PERMITS

- [A] All Contractor's staff that will be working at the different airports will require a Personal Permit valid for the period envisaged for the works at the designated airport. Personal Permit application entails, but is not limited to (D):
  - [a] Written Exam
  - [b] Necessary application form to be completed.
  - [c] Valid certified copy of ID or passport to be attached to application forms.
  - [d] ACSA will conduct a police clearance on the applicant.
  - [e] Applicant to indicate request to carry cell phone supported by necessary support documentation.

	Only responding C/PC/NC/Noted will not be accepted without proof.	
[THE BIDDER SHALL IN	SERT FULL RESPONSE FOR EVALUATION H	ERE]
[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]		

[B] The Contractor shall have a driver who will obtain an Airside Vehicle Operators Permit (AVOP) in order to drive airside. The driver will go through relevant training.(D)

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

[C] The Contractor shall have a vehicle to transport their tools and employees daily when working airside. (D)

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

[D] The Contractor shall obtain vehicle permits for all vehicles that will be used airside.(D)

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

[E] The Contractor shall register his company details with ACSA as all permit costs shall be for the account of the successful Bidder (D)

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

[F] The Bidder shall submit a detailed process of how they will acquire ACSA permits for FALE, FABL, FAKM, FAGG and FAUP. The Bidders are urged to contact the ACSA Permit Offices (OR Tambo: 010-207-2899, FAUP: 054-337-7928, FAGG: 044-803-7701, FALE: 032-436-6506, FABL: 051-407-2255 and FAKM: 053-830-7148) for more information. (D)

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

[G] The Contractor shall provide PPE including a reflector jacket for all employees working airside. (D)

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

[H] The Contractor shall provide proof of liability insurance for the vehicles they will use airside as part of ACSA Insurance requirement and for damages that may occur during the implementation of the project(D).

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

# --- END OF VOLUME 3 ---

# 10. LOGISTICS SUPPORT (VOLUME 4)

# 10.1. Supply, Delivery and Installation

[A] The Contractor shall supply, deliver and install the fibre optic cables and associated components as defined herein at FALE, FABL, FAKM, FAUP and FAGG. (D)

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

[B] A formal Site Acceptance Test (SAT) will be required at each airport. (D)

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

# 10.2. Documentation

[A] The Contractor shall provide the following documents in English. (D)

- i. As built document
- ii. Logistics support plan

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

[B] The Contractor shall provide the above-mentioned documents to ATNS prior to SAT. (D)

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

[C] The as built document shall incorporate the conceptual design (including drawings, surveyed route including KMZ files) of the fibre optic layout, equipment cabinets, associated components and the employed cable management system. (D)

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

#### 10.3. Period of Beneficial Use

[A] The Contractor shall provide a one-year PBU for the workmanship, materials, equipment, associated components, and cable management system employed.(D)

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

[B] The PBU shall start after a successful SAT. (D)

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

[C] The PBU shall cover the repair or replacement of any faults or errors in either the fibre optic cables or equipment cabinets, supporting infrastructure, associated components or the employed cable management system, that were undetected during SAT. (D)

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

## 10.1. Maintenance and Support

- [A] The bidder shall propose an ad hoc support and maintenance plan should ATNS need onsite support. The following shall be included at a minimum: (D)
  - Hourly rate and associated costs.
  - Response time: 4 hours after the call has been reported.
  - Arrival time on site: 24 hours after the call.
  - Available 7 days a week throughout the year, including public holidays.

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

[THE BIDDER SHALL INSERT REFERENCE TO ADDITIONAL INFORMATION HERE]

[B] The proposal shall be for the duration (10 years) of the fibre cable at each station (D).

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

--- END OF VOLUME 4 ---

#### Annexure A

#### Roles and Responsibilities

## 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;
- Shall keep a record of all employees including the sub- contractor employees, including date of induction, relevant skills and licenses and be able to produce this list at the request of the ATNS Project Manager.
- Ensure that all their appointees are made aware of their accountabilities and responsibilities in terms of their appointment and that they advice 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.
- The appointed principal contractor must provide the project manager with a certified copy of his/her Compensation Commissioner's valid letter of good standing before the commencement of work and any future renewal letters obtained during the project for record-keeping purposes. The letter of good standing shall reflect the name of the contractor's company. The nature of business reflected on the issued Logs must be in line with the issued scope of work. Similarly, the appointed contractor must provide the ATNS project manager with all the valid letters of good standing from their sub- contractors.
- Appoint competent staff to perform the project work and ensure that all
  employees are trained in the health and safety aspects relating to such
  work and that the employees understand the hazards associated with all
  other work being carried out on the project.
- Ensure that all employees are conversant with all relevant work procedures and that they adhere to such procedures. Similarly (without removing the appointed principal contractors' responsibilities), ensure that their sub- contractors and their employees are conversant with all relevant work procedures and that they adhere to such procedures.
- Stop his /her employees and any sub- contractors 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.

- Only appoint contractors to do work, if satisfied that the contractor has the necessary competencies and resources to perform the work safely.
- 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 full-time safety officer as per project risk.
- Not victimise or dismiss employees, by virtue of the employees divulging health and safety information or suspecting such information has been divulged, in the interests of health and safety requirements;
- Follow a process of disciplinary action if any of their employees or their sub- contractor employees have transgressed any of the requirements of the health and safety specification, safety and health plans, site rules or any other requirements.
- 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.
- Take prime responsibility for all aspects of environmental management associated with the project activity for which they are responsible.
- Principal contractors are required to approve sub- contractor's health and safety plans if they meet all the requirements.
- Ensure that pre-employment, periodic and exit medicals are carried out on their employees. Medical assessments must be conducted by a registered Occupational Health Practitioner. During the pre-employment medical, where employees will be required to work at heights, they will also be required to undergo the required employee physical and psychological fitness examinations.

**Note 3:** should the appointed contractor or his/her sub- contractors entertain visitors on site, they will be held responsible for the provision and wearing PPE.

- Where performing work with the environment, ensure that minimal damage is done and that where an Environment Management Plan is in place, then adhere to the plan.
- 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 equipment and tools used comply with OHS Act requirements with respect to condition, use, care, storage, maintenance, and the management of these;
- Ensure that all incidents are reported and investigated timeously by competent incident investigators.
- Be involved in all of their sub- contractor's investigations.

- Establish health and safety committees, hold such committee meetings on all sites, 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.
- When appointing contractors, advise the ATNS project manager/contract manager in writing timeously and obtain his/her approval prior to them commencing work.
- Shall keep a record of all employees including the sub- contractor's employees, including date of induction, relevant skills and licenses and be able to produce this list at the request of the ATNS Project Manager.

## Site Managers

- Assist the contractor and/or the safety officer in conducting site induction training for new staff and site visitors.
- Communicate to all employees under their control on any hazardous and related work procedures, before any work commences and thereafter, at such times as may be determined by a risk assessment.
- Ensure that the minimum legislative and ATNS SHE requirements are complied with on all work sites.
- Stop any work that is not in accordance with the safety and health plan or if such
  work poses a threat to the safety and health of persons or a risk of degradation
  to the environment.
- Ensure that risk-based personal protective equipment (PPE) has been issued and employees wear/use the PPE as instructed.
- Inspect such PPE on a regular basis and record the inspections.
- Ensure that all incidents are reported to the client and are investigated.
- Be involved in all investigations that occur within their area of responsibility.
- Carry out audits and or inspections on their sub- contractors on instructions of their contractor.
- Ensure that employees under their control are conversant with all relevant work procedures and that they adhere to such procedures.
- Ensure that daily or 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. Ensure that the team are involved in the abovementioned risk assessments.
- Hold tool box talks at the start of each day/ task to discuss health and safety issues as well as confirming the requirements of the daily risk assessments.

- Ensure that all appropriate precautions are taken to protect persons (visitors, members of the public, and other contractors) present at work or in the vicinity of a project site against all risks that may arise from such site.
- Ensure that no alcohol or other intoxicating substances are brought on to, or remains on, the premises / work sites and that no employee remains on site if he/she is under the influence. Furthermore, report such instances to contract management.
- Ensure that all equipment and tools used on site comply with OHS Act requirements with respect to condition, use, care, storage, maintenance, and the management of these.
- Not victimise their employees by virtue of their employees divulging health and safety information or suspecting such information has been divulged, in the interests of health and safety requirements (reference – section 26 of the OHS Act).
- Where any work is performed which involves the environment, ensure that minimal damage is done to the environment and that where an Environment Management Plan is in place, then the plan adhere to the plan.
- Stop any employee or contractor from performing work which is not in accordance with the appointed principal contractor's and or sub- contractors' health and safety plan which poses a threat to the health and safety of persons.

## **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 and all sub- contractors comply with the required statutory and ATNS requirements.
- Ensuring a Safe working environment is established and maintained by the contractor for the elimination of unsafe acts by all people whilst on the project site
- Conduct site Inspections for compliance to SHE requirements and compiles the relevant inspection reports.
- Participate in all sub- contractor incident investigations.
- Participate in the appointed contractor's emergency preparedness planning.
- Ensure that their own employees and those of any sub- contractor are competent to perform the tasks assigned.
- Issue site instructions on behalf of the appointed contractor where and when the sub- contractors deviate from safety requirements.

 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 full time on site as per project risk.
- Promote a SHE culture within the organisations involved in the project / contract.
- The contractor's safety officer shall assist in the control of all health and safetyrelated matters on the sites.
- Be involved in the developing the project SHE plan and SHE policy.
- Ensure that this SHE specification is adhered to by his/her appointed contractor and is submitted to any sub- contractors.
- 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 or contractor from performing work which is not in accordance with the appointed contractor's and or sub-contractors' 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.

#### Construction Professional Registration

The appointed principal contractor and all his/her appointed contractors shall be registered in their respective levels as professionals in terms of the requirements of the SACPCMP.

The SACPCMP web address is http://www.sacpcmp.org.za

- SHE professionals (which include Construction Safety Officers) are required to register as professionals with the SACPCMP.
- Construction Managers are required to register as professionals with the SACPCMP.
- Construction agents are required to register as a professional with the SACPCMP.

#### **Notification of Construction Work**

Unless otherwise contractually agreed upon, the appointed principal contractor must notify the relevant provincial director of the Department of Employment and labour of the intention of carrying out any construction work as defined in Construction Regulation 4 of the Act. The notification form of construction work is listed as an annexure to the construction regulations of the OHS Act. A copy of the notification letter sent to the DoE shall be forwarded to the Project Manager on the same day as sent to the DoE. A copy of the letter and their approval must be kept in the SHE file. When the DoE provide a letter of approval, a copy of the approval must be sent to the ATNS Project Manager and a copy filed in the SHE file.

#### Site Access requirements

The Safety file package must be submitted to the SHE department **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 Sub Contractor(s).
  - The SHE department 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.
- Materials/objects shall not be left unsecured in elevated areas –falling objects may cause serious injuries/fatalities.
- 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 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 applicable, tools and equipment must have the necessary approved test or calibration documentation prior to being brought onto the project and the records shall form part of the SHE plan. Maintenance calibration shall be undertaken in terms of the manufacturer's requirements.
- 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.
- 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.
- Tools with sharp points in tool boxes must be protected with a cover.

#### 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 and sub- contractor employees have a medical surveillance program whereby employees under go 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 and subcontractor 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 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 manual as a reference, and where injuries as contemplated in sections 24 and 25 have been sustained, be reported to the Department of 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 and all his/her appointed sub-contractors 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 and all appointed contractors 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

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.

# Safety requirements specific to the supply, delivery and installation fibre optic network cable

All employees performing excavation 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, hazardous atmospheres, and hazards from using heavy equipment.
- 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, heavy equipment, 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 of the optic network cable activities.
- The service provider must adhere to the Occupational Health and Safety Act, Disaster Management Act, other relevant legislations

- including the ATNS occupational health and safety policy and Environmental Policy and Waste Management Procedure
- Where applicable, the principal contractor shall provide suitable notice boards that will be mounted outside the works area when they begin work.
- Such signboards shall indicate the service provider's name, contact details of the responsible site agent, the name/number of the building they are

working on, and a short description of the works that are being performed there.

- In addition, warning notices and other barricade will be erected to keep
  the public away from the locations where there is work being
  performed. It is the service provider's responsibility to ensure that all
  persons are informed of the hazards associated with the works and to
  keep persons outside of the working areas from a health and safety
  perspective.
- Warning notices shall be made of non-corrodible non-deteriorating material, preferably plastic.
- The principal contractor shall only utilize equipment that is safe and in good serviceable order. No work will be undertaken without using the appropriate and correct tools for the purpose.
- Old equipment that is removed from site shall be disposed of safely, and in an environmentally safe and responsible manner as per ATNS waste procedure.

## **Construction vehicle safety**

- It is the responsibility of the driver to ensure:
- Their passengers wear seat belts whilst the vehicle is in motion.
- Comply with all traffic road rules, safety, direction and speed signs.
- Ensure that vehicle loads are properly secured prior to moving off.
- Ensure that vehicles are not overloaded.
- No drivers or operators may text, talk on cell phones or two way radios whilst driving, unless a hands free kit is used.
- All drivers of construction vehicles are to have valid medical fitness certificates.
- Each Project site that is enclosed by demarcation will have system/ process to manage vehicle access to site.
- Contractor must maintain their vehicles in a roadworthy condition and a vehicle license must be valid at all times.
- Drivers of light vehicles must avoid stopping or parking in the vicinity of machines. At least 30 (thirty) meters must be left clear between such a vehicle and such a machine

- Contractor vehicles can be subject to inspections by the Client/Agent's representative. Vehicles which are not roadworthy will not be permitted to be used on the project.
- Drivers/operators shall be responsible for the travel-worthiness of all loads conveyed by them. Precautions shall be taken to secure all loads properly. Loads projecting from vehicles shall be securely loaded and in daytime a red flag and during darkness a red light or red reflective material shall be attached to the extreme end of such projecting material.

#### Site establishment

- Principal contractor's site facilities should be managed at all times.
- Prior to establishing a project site, a site plan is required to be drawn listing position of all buildings, amenities, storage and stacking areas. The appropriate colour coding and demarcation of storage and stacking areas must be carried out.
- 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 principal contractor together with the client 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 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 may display discrete signage to indicate the ownership of plant or equipment only and as required in order to comply with health and safety requirements.
- 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.

#### SHE file

- A SHE file means a file or other record in permanent form, containing
  the information about the safety and health management system during
  construction and all information relating to the post-construction phase
  after handover to the client, so that the client can maintain the works in
  a healthy and safe way.
- The 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 principal contractor on his/her construction 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.
- On completion of the work/project, the principal contractor must hand over a consolidated health and safety file to the project manager. The principal contractor must also hand over all drawings, designs, lists of materials used, and other applicable information about the completed structure, as well as the list of subcontractors, the agreement, and the type of work completed.
- 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.