

	Scope for Provision of Professional Services to National Transmission Company South Africa	<b>National Transmission Company South Africa</b>
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## **NATIONAL TRANSMISSION COMPANY SOUTH AFRICA**

### **PROVISION OF PROFESSIONAL ENGINEERING SERVICES TO NTCSA DIVISION**

#### **SCOPE OF SERVICES**

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**A. ABSTRACT**

This document forms part of the New Engineering Contract, Professional Services Contract 3<sup>rd</sup> Edition.

The document defines the Scope of *services* required from the *Service Providers* to perform a variety of services for the Engineering functions for NTCSA.

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## 1. ABBREVIATIONS

This list contains the abbreviations used in this document.

Abbreviation	Description
AAAC	All Aluminium Alloy Conductor
AC	Alternating Current
ACCC	Aluminium Conductor Composite Core
ACSR	Aluminium Conductor Steel Reinforced
ACSS	Aluminium Conductor Steel Supported
ADSS	All Dielectric Self-supporting
AIS	Air Insulated Switchgear
ATP	Accelerated Training Program
BIL	Basic Insulation Level
BEng	Bachelor of Engineering
BSc	Bachelor of Science
B. Tech	Bachelor of Technology
BU Business Unit	BU Business Unit
CAD	Computer-aided Design
CCTV	Closed-circuit Television
CEO	Chief Executive Officer
CFO	Critical Flashover
CDEGS	Current Distribution, Electromagnetic Fields, Grounding and Soil Structure
Analysis	Analysis
CoE	Centre of Excellence
DC	Direct Current
ECSA	Engineering Council of South Africa
EHV	Extra High voltage

EMF	Electric and Magnetic Field
EID	Improvised Explosive Devices
EIA	Environmental Impact Assessment
EMS	Environmental Management Systems
EPMS	Eskom Project Management System
ESDD	Equivalent Salt Deposit Density
FACTS	Flexible AC Transmission System
FMECA	Failure Modes, Effects and Criticality Analysis
FIDIC	Fédération Internationale des Ingénieurs - Conseils
GCC	Government Certificate of Competency
GIT	Graduate in Training
GIS	Gas Insulated Switch gear
HR	Human Resources
HV High Voltage	HV High Voltage
HVDC	HVDC High voltage Direct Current
IEC	International Electrotechnical Commission
IPP Independent Power Producer	Independent Power Producer
ISO	International Organization for Standardization
IT	Information Technology
IWBS	Integrated Work Breakdown Structure
KM	Knowledge Management
KPI	Key Performance Indicators
LES	Line Engineering Services
LV	Low Voltage
MV	Medium Voltage
NDA	Non-Disclosure Agreement

NEC3	ECC New Engineering Contract 3 - Engineering and Construction Contract
NRS	National Regulatory Services
NSDD	Non-soluble Deposit Density
OPGW	Optical Ground Wire
PC	Personal Computer
PCM	Process Control Manual
PDD	Project Development Department
PM	Project Manager
PMBok	Project Management Body of Knowledge
P&ID	Process and Instrumentation Diagrams
PLSCADD	Power Line Systems Computer aided design and drafting
PLCM	Project Life Cycle Model
PDRA	Project Development Readiness Assessments
PSCAD	Power Systems Computer Aided Design
PTM&C	Protection, Telecommunications, Metering, and Commissioning
QITP	Quality Inspection & Test Plan
QRA	Quantitative Risk Analysis
RAM	Reliability, Availability, Maintainability
RBI	Risk Based Inspection

Abbreviation	Description
RF	Radio frequency
SABS	South Africa Bureau of Standards
SAP	Systems, Applications and Products
SC	Supply Contract
SCADA	Supervisory Control and Data Acquisition

SCOPs	Supply Chain Operations procedures
SHE	Health, Safety and Environmental
SHEQ	Health, Safety, Environmental and Quality
SLA	Service Level Agreement
SVL	Sheath Voltage Limiters
TRV	Transient Recovery Voltage
TPD	Transmission Projects Delivery
WBS	Work Breakdown Structure

## 2. DEFINITIONS

Definition	Description
Design Authority	Design Authority - When Eskom acts as the Design Authority on a project/package/plant/system/asset, the reviewer(s) shall review the design documentation to ensure that: the design satisfies the design requirements; all relevant COE design standards, procedures and guidelines have been adhered to; the design is suitable and correct (calculations, philosophy, functionality, etc.); best COE practices were applied; the design is integrated by identifying all interfaces with other packages/plant systems/assets and ensuring that these interfaces are catered for.
Service Provider	Refers to the professional Service Provider team appointed to perform the engineering works required for the project in terms of the selected contract suite. Or the consultant in terms of NEC Professional Service Contract.
Eskom Plant Engineering	Refers to the NTCSA Engineering team who will perform the design review and provide technical assistance for the work performed by the appointed <i>Service Provider</i> .
The Client	The end user will be Eskom who will be represented by PMO Projects Delivery throughout the duration of the Project.
Contractor	Service Provider contracted to provide a specific service to Eskom.
Employer	Eskom, or NTCSA Engineering or delegated <i>Employer's</i> representative.
Expert Service Provider	In respect of a private consulting practice in engineering, means a top practitioner whose expertise and relevant

	experience is nationally or internationally recognised and who provides advice at a level of specialisation where such advice is recognised as that of an expert.
Senior Service Provider	In respect of a private consulting practice in engineering and/or project management, means all salaried professional staff with adequate expertise and relevant experience performing work of an engineering nature and who carry the direct technical responsibility for one or more specific activities related to a project.
Junior Service Provider	In respect of a private consulting practice in engineering means all other salaried technical staff with adequate expertise and relevant experience performing work of an engineering and/or project management nature with direction and control provided by a senior or expert <i>Service Provider</i> .

### 3. APPLICABLE DOCUMENTS

Applicable documents form an integral part of service delivery associated with Engineering in Eskom, the below documents will be provided upon request and remains the copyright property of Eskom holdings and required Non-Disclosure Agreements (NDA) will be applicable.

#### 3.1 STANDARDS, GUIDELINES, HANDBOOKS AND REGULATIONS

1. ISO 9001 Quality Management Systems
2. ISO14001: Environmental Management System
3. ISO45001: Occupational Health & Safety Management System
4. OHSA - Occupational Health and Safety Act, 85 of 1993 and Regulations
5. 240-53113685 Design Review Procedure
6. 240-53665024 Engineering Quality Manual
7. 240-53114002 Engineering Change Management Procedure
8. 32-1034 Eskom Procurement and Supply Chain Management Procedure
9. Public Finance Management Act
10. 32-727 Safety, Health, Environment and Quality (SHEQ) Policy/Procedure
11. 240-42366126: Process Control Manual for Project Management (Conceptual)
12. 240-99011698: Process Control Manual for Integrated Project Controls Management (Conceptual)



13. 240-96851726: Process Control Manual for Enterprise Risk and Resilience Management
14. 240-42385239: Process Control Manual for Contracts Management (Conceptual)
15. 240-45461812: Process Control Manual for Construction Management (Conceptual)
16. 240-45461809: Process Control Manual for Commissioning (Conceptual)
17. 32-727: SHEQ Policy
18. 240-155373927: Eskom's COVID-19 Health and Safety Policy Statement
19. 240- 62196227: Eskom Life Saving Rules, Directive
20. 240-62946386: Vehicle and Driver Safety Management Procedure
21. 240-84733329: Medical Surveillance Procedure:
22. 32-477: Safety Health and Environment (SHE) Training and Development Procedure
23. 32-37: Substance Abuse
24. 240-120054284: Personal Protection Equipment Standard, 240-120054284
25. 32-95: Occupational Health and Safety Incident Management Procedure
26. 240-131838225: Occupational Health and Safety Incident Management Definitions and Parameters
27. TPDMAN-SP-84: Project specific Health and Safety (H&S) Specification

## 4. EXECUTIVE OVERVIEW

### 4.1 Introduction

This document outlines the Scope of services required from the *Service Providers* for the provision of Specialised Engineering Services to Eskom Transmission Division.

The Scope of Work document is necessary to stipulate the variety of services required from the appointed *Service Providers*.

### 4.2 Employer's Objective

The *Employer's* objective is to appoint engineering services providers that will benefit the Eskom Transmission business by:

- Ensuring quicker appointment of *Service Provider* to address the needs of the business.
- Ensuring greater governance in the appointment of *Service Provider*.
- Ensuring *Service Provider* appointed has the capacity, skills, experience, and qualifications to perform the required services.
- Ensuring greater control of spend on the contract.

### 4.3 Background

The external engineering *Service Providers* are required to augment NTCSA Engineering, resources when the need arises, through the provision of specialised engineering services. The scope of services encompasses the engineering disciplines in areas which lack sufficient specialised skills and capabilities. The *Service Providers* will work with NTCSA resources to support the business when Eskom does not have adequate internal resources with the required skills and competencies. The *Employer* will from time to time depending on services required appoint the *Service Providers* (as and when required).

Resources requisitions will be issued to the *Service Provider* with defined scopes / or expertise/resource required supervised by NTCSA. Once CVs are received, resources will be evaluated on their qualifications, experience, and expertise and if successful be appointed for the services through the issuing of a Task Order (Budget Estimate). For each of the services required, a short description of the service has been included on the listed job profiles (Annexure C: Engineering Profiles) where more details are also provided. Please ensure that each resource is accompanied by a fully signed budget estimate or task order request form, confirming the project, service, and duration required. It's important to note that the provided scope is an estimate only. Services will be rendered on an as-needed basis.

**NB:** The standard place of work is Eskom Megawatt Park, Johannesburg unless otherwise agreed with the *Service Provider*.

## **5. SCOPE OF SERVICES**

The *Service Providers* shall provide a variety of specialised engineering services to Eskom Transmission as detailed in the C3 1 PSC *Employers* Scope. The skills and competencies of the resources provided by the *Service Provider* will be from Junior, Senior to Expert levels (refer to (Annexure C: Engineering Profiles) for the engineering disciplines listed on the description of services and requirements.

### **5.1 QUALITY MANAGEMENT**

#### **5.1.1 SYSTEM REQUIREMENTS**

The *Service Provider* shall have a fully documented, implemented and maintained Quality Management System which complies with the requirements of the ISO 9001, or their quality management system shall carry valid certification from an acceptable QMS Certification body. The *Service Provider* to provide a quality plan within 30 days of contract signing and once accepted will form part of the contract documentation.

Performance evaluation templates will be discussed after contract award by both *Employer* and the *Service Provider*. Performance will be measured twice a year by the *Service Provider* and feedback will be provided to the *Employer*.

A non-conformance report will be issued if the *Service Provider* does not meet *Employer* quality requirements. If there are any defects as per technical specifications, the non-conformance report will be issued and monitored until closure.

### **5.2 HEALTH, SAFETY, ENVIRONMENTAL**

The *Service Provider* shall always comply with the health and safety requirements prescribed by law and the *Employer* as they apply to the services. Failure to comply shall result in the *Employer* suspending the execution of services and removing the *Service Provider* from site until compliance is achieved. The *Employer* may cancel a Task Order and/or terminate the contract depending on the situation and risks to people, plant and equipment, reputation, and the *Employer's* business of electricity supply. The *Service Provider* shall comply with the health and safety requirements contained on the Task Order.

The relevant Site / Project Manager shall require the *Service Provider* to attend SHE Induction training provided by the *Employer*. It is essential that the *Service Provider* is conversant with Eskom safety procedures training prior commencing any work on site.

If the *Service Provider* may be required to work on Eskom premises, where health and safety requirements additional to those prescribed by law apply.

### 5.3 LIFE SAVING RULES

In the interest of promoting a safe and healthy working environment, the Eskom Executive Committee has approved the implementation of life saving rules, to improve safety in the organisation. These rules will also be applicable to all contracting staff.

The business is concerned about the emotional, social as well as economic effect of all these unnecessary incidents, and would like to correct behaviour pro-actively.

These rules are determined beforehand to enable the organisation to clearly communicate the established Life Saving Rules and how to deal with non-compliance to the workforce prior to the implementation of such rules.

Failure by any person or *Service Providers/Contractors* engaged in doing business with Eskom to adhere to these rules, will lead to serious action being taken with serious consequences (including being refused access to site). These actions include termination of service of an individual and even blacklisting of *Service Provider/Contractors* not taking the rules seriously. It is therefore strongly advised that these rules be taken seriously, communicated to all your staff, ensure that they all understand the rules, understand the consequences of violating a rule and sign a document stating that they understand and acknowledge the implications of these rules.

#### **ESKOM LIFE SAVING RULES ARE:**

Rule 1: Open, Isolate, Test, Earth, Bond and/or Insulate before touch (above 1 000 V)

Rule 2: Hook up at heights

Rule 3: Buckle up

Rule 4: Be sober

Rule 5: Ensure that you have a permit to work

## **6. SECONDARY PLANT ENGINEERING AND TECHNOLOGY MANAGEMENT**

The provision of engineering services to be contracted on a time basis to contribute to Eskom's outputs in terms of the disciplines and outputs listed below.

### **6.1 PROTECTION, TELECOMMUNICATIONS, METERING, TELECONTROL, DC, PHYSICAL PERIMETER SECURITY AND PHYSICAL ACCESS CONTROL SYSTEMS APPLICATION DESIGN / PROJECT ENGINEERING**

Application design refers to the engineering activities associated with the design of power network infrastructure: utilising standard developed products which are typically available off Supply Contracts that Eskom has established with third party vendors. Engineering activities and design outputs include:

- Design drawings (to-build and as-built),
- Telecontrol datapoint definitions,
- Substation / IED IEC 61850 CID, SCD, ICD database file design / creation
- Substation IP network design
- Interlocking rule design / definition / creation
- Protection design
- DC system sizing and design
- DC and AC board reticulation design,
- Control Room Layout in terms of panel placement, emergency evacuation requirements, lightning, access and overhead racking load calculations
- Telecommunication specific Voice, Videoconference, IP router, Radio and Fibre Optic Network designs
- CCTV, Volumetric Alarm, Perimeter Intrusion detection and Electric fence designs

Engineering processes and deliverables must comply with statutory regulations and Eskom Transmission governance, philosophies, standards, and accepted practices. They should be delivered to Eskom in a specified format and on designated media for each task order. Additionally, all designs require approval from a competent ECSA registered professional.

## Secondary Plant:

PROTECTION, TELECOMMUNICATIONS, METERING, TELECONTROL, DC, PHYSICAL PERIMETER SECURITY, PHYSICAL ACCESS CONTROL SYSTEMS AND ASSOCIATED CYBER SECURITY TECHNOLOGY MANAGEMENT / ENGINEERING

Technology management refers to engineering activities to establish technology direction / goals, planning to achieve these goals, concept, basic and detailed designs for the establishment of new technologies, sourcing strategies and mechanisms, new technology change management, support activities to sustain and achieve best value from technologies and end of life planning. Engineering activities and design outputs include:

- Compilation of user requirements, philosophies, specifications and / or technical input to commercial documentation against which tenders can be issued for the design, development, manufacture, testing and subsequent supply.
- NEC ECC and SC project and contract management.
- Technology change management including the development of Settings, Maintenance and Operating Documentation.
- Development / Population of Configuration Management Systems and PC based Product Configuration Tools.
- Compilation of Engineering Instructions and / or associated product configurations for changes to the installed design base.
- Development and / or presentation of training courses associated with the introduction of new technology, maintenance and operating thereof.
- Cybersecurity risk, penetration, and vulnerability assessment as well as architecture standards and frameworks development and / or design reviews
- Incident investigations
- Specialised studies / analysis relating to existing infrastructure or to facilitate the creation of new infrastructure.

Engineering processes and deliverables must comply with statutory regulations and Eskom Transmission governance, philosophies, standards, and accepted practices. They should be delivered to Eskom in a specified format and on designated media for each task order. Additionally, all designs require approval from a competent ECSA registered professional.

## **7. POWERLINE ENGINEERING**

The design scope is covered in the sections below. There may be other specialised studies not mentioned here that will be needed at times for specialised and complex projects. All designs will follow the Eskom governance process with respect to the formal line design process.

### **ELECTRICAL**

- Conductor Optimization:
- Insulator selection:
- Earthing design:
- Line performance studies:
- Ground wire selection
- Telecommunications designs

### **STRUCTURAL**

- Tower selection
- Tower loading analysis (wind and weight spans)
- Telecommunication tower and related infrastructure design, analysis, detailing, testing if needed, and prototyping.
- Tower design

### **HARDWARE SELECTION**

- Selection and design of relevant hardware for the selected tower, conductor, and insulator combination.
- Development of outline drawings for selected hardware
- Drawings for new hardware designs

### **FOUNDATIONS**

- Geotechnical studies
- Foundation designs
- Soil nominations and analysis of nominations
- Foundations refurbishment methods

## **LINE PROFILING**

- Tower spotting and line optimisation on PLSCADD
- Creation and review of method 1 and method 4 seed files
- Preliminary and detailed visual inspections (ground and aerial)

## **ENVIRONMENTAL CONSIDERATIONS**

- Electromagnetic interference (fences, water pipes, Telkom lines etc)
- Lightning prevalence analysis
- Prevalent pollution levels
- Optimal routing of the line and land/ servitude use

## **CORROSION PROTECTION**

- Steel poles
- Hardware
- Phase conductor and Earthwire
- Identification of corrosion levels on components

## **SPECIALISED STUDIES AND SERVICES (NOT LIMITED TO)**

- Corona measurements
- Wayleave application analysis (Not limited to design related impacts emanating from landowner, environmental and community issues)
- Line impedance measurements
- Insulation coordination
- Ferranti and voltage unbalance studies
- Uprating and upgrading of existing lines
- Electromagnetic field measurements and analysis (Desktop and field)
- Tower detailing (Draughting)
- Coupling studies (fences – electrified and non-electrified, railway lines, other powerlines,



pipelines etc.)

- Cathodic protection studies (pipelines and railway lines)
- Specialised geotechnical studies (undermining, landfill etc.)
- Surveying (including, but not limited to digitizing and spatial information analysis)
- Engineering quality assurance at construction sites
- Project lead designer skills

## **8. SUBSTATION ENGINEERING**

### **8.1 ELECTRICAL**

- Produce electrical designs (AIS/GIS/HVDC) on Transmission projects for Concept, Definition & Execution Phases on varying projects.
- Technical specifications reviews
- Application and adherence to Eskom Design Standards, Specifications, best practises, NRS standards, SABS and IEC standards, Occupation Health, and Safety (OHS) act, Construction regulations, etc.
- Knowledge and application of different Technologies used for design
- Knowledge and application of the different busbar philosophies
- Produced CAD based design drawings (Microstation)
- Participation in Project life cycle technical hold points such as:
  - o Substation design reviews,
  - o PDRA (Project Development Readiness Assessments) and
  - o Stakeholder and site meetings
  - o Technical Tender Evaluations
- Specialized studies
  - o Earthing studies in CDEGS
  - o Insulation co-ordination
  - o Lightning protection studies
  - o Harmonic studies
  - o NER optimization studies
  - o Floodlights and security lighting studies
  - o Life cycle costing
  - o Heating/ventilation and air conditioning
  - o Lighting studies using Relux

- o Design verification (Field measurements)
  - o Corona and Radio Interference
- Field measurements
  - o Electric & Magnetic field measurements
  - o Audible noise measurements
  - o Soil Resistivity Measurements
  - o Grid Resistance Measurements
  - o Earthing Continuity Measurements
  - o Lighting (lux) measurements
  - o Earthing systems
  - o Grid Resistance Measurements
  - o Earthing Continuity Measurements
  - o Lighting measurements
- Site Assurance/Investigations/Inspections during construction
- Post-construction
  - o Design verifications (Designed vs As built)
  - o Drawing mark-ups
  - o Audits
- Insulators
- Hardware
- Conductors
- HV cable systems
  - o Electrical Design
  - o HV cable selection and specification (Conductor, Sheath, outer layer, Insulation, etc.).
  - o HV Cable systems design.
  - o Construction, maintenance, and related activities

## **8.2 CIVIL AND STRUCTURAL**

Civil designs for project development on transmission schemes associated with the network integration of power from Power Stations, IPP projects, network strengthening, expansion schemes and refurbishment projects

- Site Plan/Terrace
  - o Cut & Fill
  - o Application of the geotechnical report
  - o Drainage
  - o Foundation
  - o Steel Works (Structural)

- o Concrete Works (Foundations, Roofs, Plinths and Trenches)
  - o Embankments
  - o Infrastructure tunnel designs
  - o Passive and Active Fire Protection
  - o Construction Regulations
  - o Architectural design
  - o Roads (Site access roads and terrace roads)
  - o Fencing
  - o Buildings e.g., Control Room, Switch Rooms, Access Control Building, Cladded Stores, Workshops, Consumable Stores etc.
  - o Substation Security
- Produce required Civil design Drawings.
- Participate in:
  - o Substation design reviews
  - o Technical specifications reviews
  - o Technical Tender Evaluations
- Civil Investigations and Studies
- Specialized studies
  - o Geotechnical Studies
  - o Structural analysis and design
  - o Concrete design
  - o Life cycle costing
  - o Internal Arc pressure and other pressure related calculations for buildings
  - o Compaction design
  - o Road and river crossing designs
  - o HV, MV and LV tunnel design
- Site Assurance/Investigations/Inspections during construction
- Post-construction design verifications (as-designed vs as-built)
- Post-construction design drawing mark-ups
- Audits
  - o Structures
  - o Foundations
- Quantity surveying services
- Construction Regulations
- Development of RAM
- Hydrological Studies

## **9. INTEGRATION ENGINEERING**

Fulfil the roles below for project development on transmission schemes associated with the network integration of power from Power Stations, IPP projects, network strengthening, expansion schemes and refurbishment projects.

- Customer Interface for Engineering work requests.
- Representation and liaison with Project Departments
- Co-ordinate a multidisciplinary design team to produce integrated designs.
- Negotiate and contract with all stakeholders including internal and external departments.
- Manage handshake documents between Engineering disciplines.
- Track, manage and report on progress including time, cost and quality related to all project portfolios.
- Technical governance approval for major project schemes.
- Manage and co-ordinate workflow / design process
- Manage / report design changes during construction.

## **10. DESIGN DRAUGHTING**

- Provide Engineering Drafting (Substations: Electrical and Civil, PTM&C, Line Engineering) using Bentley Microstation
- Create drawing master files
- Produce project design drawings (Electrical, Secondary plant and Civil)
- Update marked up drawings
- Check in/out drawings using Eskom approved configuration management systems
- Print drawings as per requirements
- Prepare hard copies of drawings for issue
- All soft copies to be in Microstation V8i format
- Steel detailing

## 11. HARDWARE/SOFTWARE/TOOLS

Ref to Annexure A

## 12. MANAGEMENT OF WORK DONE USING TASK ORDER

Refer to Addendum B for the format of a Task Order which shall be used by the *Employer* as the means of instructing the *Service Provider* to deliver *services*. No work shall be carried out without a signed Task Order issued by the *Employer* and a subsequent approved and fully signed budget estimate and a purchase order for each service request.

The Task Order shall specify the scope of *services*, *deliverables*, *starting and completion dates* and the cost allocation. The *Service Provider* shall deliver *services* within the constraints stipulated on the Task Order and engage the *Employer* as soon as the *Service Provider* becomes aware of any risk in this regard. Any work executed outside the parameters stipulated on the Task Order, including cost, shall be for the *Service Provider's* account notwithstanding delivery and acceptance of *services* that may be made by the *Employer* or people in the *Employer's* organisation.

All Expenses shall be paid for by the *Service Provider* and reimbursed at cost after assessment. The *Service Provider* shall include itemised estimated expenses in all proposals in response to Requests for Proposals issued by the *Employer*. Forecasts of estimated Expenses shall be submitted to the *Employer's* Requesting Manager for acceptance at the Assessment meeting. Expenses that are incurred without the *Employer's* prior acceptance in writing shall not be reimbursed by the *Employer*.

### 12.1 Review and Acceptance of Deliverables

Deliverables generally follow the process outlined in Table 1.

**Table 1: Process for Requests for Proposal**

Note: No work shall be carried out without a signed Task Order issued by the *Employer*.

Ref.	Task	Responsibility
A	Requisition form fully signed by the Portfolio submitted to the PMO Contracts Management team	Requesting Manager

B	Approved Requisitions get checked and submitted to the <i>Service Provider</i>	PMO Contracts Management team
C	The <i>Service Provider</i> submits the CVs, qualifications, and the corresponding Interview Summary Sheets (ISS) of the shortlisted candidates to the Requesting Manager	PMO Contracts Management team
D	Review CVs of the shortlisted candidates and make your selection and/or request further interviews of the shortlisted candidates or request more CVs if not satisfied with the shortlisted ones	Requesting Manager
E	Sign the Interview Summary Sheets ( <i>Requesting Manager, Programme Manager and Employer's representative</i> ) of the preferred candidates and submit the to the <i>Service Provider</i>	PMO Contracts Management team
F	<i>Service Provider</i> to submit budget estimate of rates and Expenses	PMO Contracts Management team
G	<i>Employer (Requesting Manager and Employer's representative)</i> reviews the submitted budget estimate (BE), approves, and submit it to the <i>Service Provider</i>	PMO Contracts Management team
H	<i>Employer</i> raises Purchase Order for the Resources for the approved BEs	Portfolios Appointed Assistant Project Officer/ Coordinators
I	<i>Service Provider</i> conducts criminal checks	<i>Service Provider</i>
J	<i>Employer</i> submits person job specification	Requesting Manager
K	<i>The resource does medical surveillance</i>	Service Provider
L	<i>Service Provider</i> submits the medical fitness certificate to the <i>Employer</i>	Requesting Manager
M	<i>The Employer</i> communicates the deployment of the resource to site to the <i>Service Provider</i>	Requesting Manager
N	<i>Employer</i> receives all the documents required to create the Unique Number for the office-based resources	Requesting Manager
O	<i>Employer</i> forwards documents to the HR Shared Services	Requesting Manager
P	<i>Employer</i> completes the access request form	PMO Contracts Management

**Table 2: Process for Review and Acceptance of Task Order Deliverables**

Note: No work shall be carried out without a signed Task Order issued by the *Employer*.

Ref.	Task	Responsibility
A	Employer prepares Task Specification Sheet	Employer
B	Service Provider reviews Task Specification Sheet and prepares the cost estimate and proposed timelines	Service Provider
C	Employer approves the Task Specification Sheet with cost estimate and proposed timelines	Employer
D	Employer raises Purchase Order for the Task	Employer

E	Task Completed in accordance with internal quality assurance procedures	Service Provider
F	Authorized person within Service Provider organization approves deliverable	Service Provider
G	Service Provider submits the deliverable to the Employer	Service Provider
H	Employer reviews the deliverable using the requirements set out in this document as the basis for the review	Employer
I	Employer forwards review comments to the Service Provider	Employer
J	Review meeting is held to discuss the Employer's comments	Employer and Service Provider
K	Service Provider updates the deliverable as per review meeting	Service Provider
L	Authorized person within Service Provider organization approves the updated deliverable	Service Provider
M	Service Provider submits updated deliverable to the Employer for acceptance	Service Provider
N	Employer accepts deliverable documents in writing, provided that comments have been incorporated as per agreement between the parties	Employer
O	An authorized person within Service Provider organization approves the revised deliverables	Service Provider
P	Employer accepts the deliverables	Employer
Q	Employer confirms acceptance of deliverables in writing	Employer

### 13. CONSTRAINTS ON HOW THE SERVICE PROVIDER PROVIDES THE SERVICES

- a) The *Service Provider* and the *Employer* will review the Deliverables in meetings organized and scheduled by the *Employer*.
- b) The *Service Providers* ensure that all follow-up actions are carried out within the time stipulated.
- c) The *Employer* may, in addition to the scheduled review meetings indicated, request additional reviews.
- d) The *Employer* may involve independent third parties in any of the review meetings.
- e) The requesting manager will assess the performance of their resources based on the duration of the assignment. Assignment over 6 months resource to be assessed for performance on a bi-annual basis and below 6 months the Managers will use their discretion.

### 13.1 Progress Meetings

- a) Regular meetings are held between the *Employer* and *Service Providers* to review progress according to the Accepted Programme and to discuss early warnings.
- b) The frequency and venue of progress meetings are agreed upon by the *Service Providers* and the *Employer*.
- c) A schedule for progress meetings is agreed upon between the *Service Providers* and the *Employer*.
- d) Minutes of these meetings are maintained by the *Employer*.
- e) NB: Communication mandated by the contract follows the Conditions of the Contract.
- f) Regular meetings of a general nature may be convened and chaired by the *Employer* as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
Overall contract progress and feedback to Steering Committee	Quarterly	Eskom Megawatt Park or other venue as advised	The Employer and Service Provider representatives and any other members as specified in terms of reference
Overall task order progress and feedback to applicable business unit, to be managed within contractual and process limitations	Monthly	Eskom Megawatt Park or other venue as advised	Eskom Section representatives and <i>Service Provider</i> representatives
Overall task order progress and feedback to applicable business unit, to be managed within contractual and process limitations	Weekly or as and when required	Eskom Megawatt Park or other venue as advised	Eskom Section representatives and <i>Service Provider</i> representatives



Attendees shall have the necessary delegated authority to make decisions in respect of matters discussed at such meetings and this is to be managed within contractual and process limitations.

The Meetings of a specialist nature may be convened as specified elsewhere in this Scope or if not so specified by persons and at times and locations to suit the Parties, the nature, and the progress of the services. Records of these meetings shall be submitted to the *Employer* by the person convening the meeting within five days of the meeting.

All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the conditions of contract to carry out such actions or instructions.

### **13.2 *Service Provider's* key persons**

An organogram from the *Service Provider* showing key persons and their lines of authority / communication shall be submitted to the *Employer* within 4 (four) weeks of the Contract Date. The *Service Provider* shall be required to notify the *Employer* of the contact details, leave and alternative where applicable in respect of each key person. Any changes in this regard shall be notified in writing in advance or within 1 (one) week of occurring and measures taken to avoid negative impacts on the *Service Provider's* ability to deliver the services.

## **14. DELIVERABLES**

### **14.1 SCHEDULE OF DELIVERABLES**

The *Employer* will develop a schedule of deliverables, based on the scope of services required at Task Order issue. The deliverables are reviewed and discussed during scheduled review sessions.

### **14.2 SCHEDULE OF REVIEW MEETINGS**

Review meetings for all deliverables will be scheduled as and when required during course of the assignment.

## 15. RECEIVABLES

### 15.1 DOCUMENTS AND DRAWINGS

The *Employer* shall provide other documents as required per Task Order.

### 15.2 ADDITIONAL INFORMATION REQUIRED

The *Service Provider* identifies any additional information required from the *Employer* and indicates it accordingly as part of the Programme.

### 15.3 CHANGES TO *EMPLOYER* FURNISHED INFORMATION

The *Service Provider* does not alter the content of any *Employer* furnished information or data for design purposes without the written authorization of the *Employer*. Should the *Service Providers* have any doubt about the design suitability or correctness of any *Employer* furnished information or data, or has proposals for changes, it advises the *Employer* accordingly at the earliest opportunity. The *Service Providers* ensure that the design of Deliverables, using *Employer* furnished information or data, is in accordance with the specific requirements of such Deliverables.

## 16. INVOICING AND PAYMENT

The Consultants will invoice a month in arrears; however, the Consultants will submit invoices to the relevant Engineering representative five (5) working days before submitting final Tax invoices to Accounts Payable Services (APS) to allow Goods receipt (GR's) to be done timeously and avoid invoices being parked in the system. The process can be amended as required from time to time per mutual agreement between both parties. The invoice should be accompanied by relevant supporting documents and calculations supporting the amount invoiced. The Consultant shall address the tax invoice to Eskom Holdings SOC Limited and include on it the following information:

- Name and address of the Consultants and the *Employer*.
- The contract number and title.
- Consultant's VAT registration number.
- The *Employer's* VAT registration number 4710303126.
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT.

- Date of the invoice
- Task Order number.
- Description of the services and quantities
- Period invoiced
- Name of the employee and project/site
- Purchase Order number

## **17. WORKING ON THE EMPLOYER'S PROPERTY**

### **17.1 *Employer's entry and security control, permits, and site regulations***

The *Service Providers* shall comply with all the *Employer's* site entry requirements and obtain at his cost all the necessary permits.

### **17.2 People restrictions, hours of work, conduct and records**

The *Service Providers* shall keep detailed records of their people working on the Employer's property, including those of his Subcontractor. The *Employer* shall have access to these records at any time.

### **17.3 Employer's purpose for the material**

All rights to material belong to *Employer* for purposes stated in the Scope.

### **17.4 Restrictions on the *Service Provider's* use of the material for other work**

As per the Task Order.

### **17.5 Transfer of rights if Option X9 applies**

The *Employer* owns the *Service Provider's* rights over material prepared for this contract by the *Service Providers*. The *Service Provider* provides to the *Employer* the documents which transfer these rights to the *Employer*.

## **18. OTHER CONSTRAINTS**

The following additional constraints regarding the task orders apply:

- The *Employer* has the right to instruct the *Service Provider* to remove any employee due to non-performance's *Employer* must provide reasons to the *Service Provider* for

his/her instruction to remove an employee. The *Service Provider* is required to arrange that, after one day, the employee has been removed from site.

- For early termination of the task order (prior to the due date) that is not performance related, a calendar month notice will be provided by the *Employer*.
- No notice from the *Employer* is required where the term of the task order / purchase order /budget estimate is not changed.

#### **18.1.1 The *Employer's* entry and security control, permits, and site regulations**

The Employer's sites are classified as National Key Points and access is controlled and regulated by law. Sites such as Koeberg Nuclear Power Station have very strict entrance requirements and allowances for security clearance checks and processes of about two hours need to be made by Service Providers requiring access at the sites. The taking of photographs is prohibited at all sites and special permission shall be required, if necessary, for the provision of Services. Persons under the influence of intoxicating substances and alcohol are strictly not permitted to enter the Employer's premises. All persons entering or leaving the Employer's premises may be subjected to physical security checks including alcohol tests.

In addition to the above there may be other restrictions applicable on sites and Service Providers shall always be required to comply. Temporary Access Permits may be arranged for a limited number of the Service Provider's Key Persons who require frequent access to the Employer's premises for purposes of delivering the Services which may include the attendance of regular meetings.

#### **18.1.2 People restrictions, hours of work, conduct and records**

It is very important that the Service Providers keeps records of their people working on the Employer's property, including those of his Subcontractors. The Employer shall have access to these records at any time. These records may be needed when assessing compensation events. The restrictions on hours worked shall be specified on the Task Order.

### **19. PROVISIONS BY THE EMPLOYER**

- Refer to Annexure A

### **20. REQUIREMENTS FOR NON-SOUTH AFRICANS**

- To employ a foreign national in South Africa, the *Service Providers* need to adhere to the following requirements and procedures:

**20.1 Work Visa:**

The foreign national must obtain a valid work visa before entering South Africa for employment purposes. The work visa application should be made at the South African embassy or consulate in the applicant's home country. The specific type of work visa required will depend on the nature of the employment, such as critical skills, general work, intra-company transfer, or corporate visa.

**20.2 Job Advertisement:**

Before hiring a foreign national, the *Service Providers* must demonstrate that they have made efforts to find a suitable South African candidate for the position. This typically involves advertising the job vacancy in local newspapers or on various job portals for a specific period. The Department of Home Affairs may require evidence of the job advertisement. Proof that the applicant falls within the critical skills category by specifically indicating the occupation/critical skill for which the application is being made as it appears on the critical skills list.

**20.3 Verification of Qualifications:**

The foreign national's qualifications and professional registration, if applicable, must be verified by the South African Qualifications Authority (SAQA) or a relevant professional body. This is necessary to ensure that the foreign national meets the required standards and qualifications for the specific job according to the Section 19(4) of the Immigration Act of 2002.

**20.4 Offer of Employment:**

Once the foreign national has been selected for the position, the *Service Providers* need to provide them with a written offer of employment. The offer should include details such as job description, salary, working conditions, and any other relevant terms and conditions. A written undertaking by the *Employer* accepting responsibility for the costs related to the deportation of the applicant and his or her dependent family members, should it become necessary (all renewals must be accompanied by an offer of employment or *Employer* contact. no renewal without employment contract except for the occupations listed under the category of life and earth sciences and academics and researchers).

**20.5 Medical and Radiological Reports:**

The foreign national must undergo a medical examination and obtain a radiological report from a designated medical practitioner. These

reports are required to ensure that the individual does not have any contagious diseases or conditions that may pose a health risk to others. A yellow fever vaccination certificate if that person travelled or intends travelling from or transiting through a yellow fever endemic area: (Provided that the certificate shall not be required where that person travelled or intends travelling in direct transit through such area).

**20.6 Police Clearance Certificate:**

The foreign national must also provide a police clearance certificate from their home country or any other country where they have resided for more than 12 months since the age of 18. This certificate is necessary to verify their criminal record, which certificate shall not be older than three months at the time of its submission: (provided that the certificate shall not be required from a foreign country in the case of renewal or extension of a visa within the republic).

**20.7 Submission of Documentation:**

All the required documents, including the work visa application, job offer, medical and radiological reports, and police clearance certificate, must be submitted to the Department of Home Affairs along with the prescribed application fees.

**20.8 Processing and Approval:**

The Department of Home Affairs will review the application and supporting documents. Processing times may vary, but it is advisable to submit the application well in advance. Once approved, the foreign national will be issued a work visa, allowing them to legally work in South Africa.

**Note:** The specific requirements and procedures may vary depending on the type of work visa and individual circumstances. It's advisable to consult with an immigration lawyer or a registered immigration practitioner to ensure compliance with the current regulations and requirements.