



NEC3 Term Service Contract (TSC3)

**Between E S K O M HOLDINGS SOC Ltd
(Reg No. 2002/015527/30)**

**and
Reg No.**

**For: Vegetation Management Services for Limlanga
Cluster Mpumalanga**

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CONTRACT No.

PART C1: AGREEMENTS & CONTRACT DATA

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C1.1 Form of Offer & Acceptance

Offer

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of:

Vegetation Management Services Limlanga Cluster Mpumalanga

The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance the tenderer offers to perform all of the obligations and liabilities of the *Contractor* under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the *conditions of contract* identified in the Contract Data.

Options A	The offered total of the Prices exclusive of VAT is	R [•]
	Value Added Tax @ 15% is	R [•]
	The offered total of the amount due inclusive of VAT is ¹	R [•]
	(in words) [•]	

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the *Contractor* in the *conditions of contract* identified in the Contract Data.

Signature(s)

Name(s)

Capacity

**For the
tenderer:**

(Insert name and address of organisation)

Name &
signature of
witness

Date

Tenderer's CIDB registration number:

¹ This total is required by the *Employer* for budgeting purposes only. Actual amounts due will be assessed in terms of the *conditions of contract*.

Acceptance

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the *conditions of contract* identified in the Contract Data. Acceptance of the tenderer's Offer shall form an agreement between the Employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
Part C2	Pricing Data
Part C3	Scope of Work: Service Information

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the *conditions of contract* identified in the Contract Data at, or just after, the date this agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed and signed original copy of this document, including the Schedule of Deviations (if any).

Signature(s)

Name(s)

Capacity

**for the
Employer**

ESKOM HOLDINGS SOC LIMITED

Name &
signature of
witness

Date

Note: If a tenderer wishes to submit alternative tenders, use another copy of this Form of Offer and Acceptance.

Schedule of Deviations to be completed by the *Employer* prior to contract award

No.	Subject	Details
1	NONE LISTED	N/A

By the duly authorized representatives signing this Schedule of Deviations below, the Employer and the tenderer agree to and accept this Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Form shall have any meaning or effect in the contract between the parties arising from this Agreement.

For the tenderer:

For the Employer

Signature

Name

Capacity

On behalf
of

(Insert name and address of organisation)

(Insert name and address of organisation)

Name &
signature
of witness

Date

C1.2 TSC3 Contract Data

Part one - Data provided by the *Employer*

1. Please read the relevant clauses in the conditions of contract before you enter data. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data.
2. Some TSC3 options are always selected by Eskom Holdings SOC Ltd. The remaining TSC3 options are identified by shading in the left hand column. In the event that the option is not required select and delete the whole row. Where the following symbol is used "●" - data is required to be inserted relevant to the specific option selected.]

Completion of this data in full, according to the Options chosen, is essential to create a complete contract.

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option:	
		A: Priced contract with price list
	dispute resolution Option	W1: Dispute resolution procedure
	and secondary Options	
		X1: Price adjustment for inflation
		X2 Changes in the law
		X18: Limitation of liability
		X19: Task Order
		X20: Key performance indicators
		Z: Additional conditions of contract
	of the NEC3 Term Service Contract April 2013 ¹ (TSC3)	

¹ Available from Engineering Contract Strategies Tel 011 803 3008 Fax 086 539 1902 www.ecs.co.za

10.1	The <i>Employer</i> is (name):	Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
	Tel No.	[•]
	Fax No.	[•]
10.1	The <i>Service Manager</i> is (name):	: Lawrens Van Wyngaardt
	Address	: Corner Jellicoe and Watermeyer Street
	Tel	: 27 13 755 2073
	Fax	
	e-mail	: LawrenceVanWyngaardt@eskom.co.za
11.2(2)	The Affected Property is	: Limlanga Cluster Mpumalanga
11.2(13)	The <i>service</i> is	: Vegetation Management
11.2(14)	The following matters will be included in the Risk Register	: N/A
11.2(15)	The Service Information is in	Part 3: Scope of Work and all documents and drawings to which it makes reference.
12.2	The <i>law of the contract</i> is the law of	: the Republic of South Africa
13.1	The <i>language of this contract</i> is	: English
13.3	The <i>period for reply</i> is	1 week
2	The Contractor's main responsibilities	
21.1	The <i>Contractor</i> submits a first plan for acceptance within	: Not Applicable
3	Time	
30.1	The <i>starting date</i> is.	: To be updated
30.1	The <i>service period</i> is	: 60 months
4	Testing and defects	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data
5	Payment	

50.1	The <i>assessment interval</i> is	: W e e k l y .
51.1	The <i>currency of this contract</i> is the	: South African Rand
51.2	The period within which payments are made is	1 Month
51.4	The <i>interest rate</i> is	the publicly quoted prime rate of interest (calculated on a 365 day year) charged by from time to time by the Standard Bank of South Africa Limited (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands and (ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption "Money Rates" in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted <i>mutatis mutandis</i> every 6 months thereafter (and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove.
6	Compensation events	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data
7	Use of Equipment Plant and materials	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data
8	Risks and insurance	
80.1	These are additional <i>Employer's</i> risks	1. N/A
83.1	The <i>Employer</i> provides these insurances from the Insurance Table	as stated for "Format TSC3" available on http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx (See Annexure A for basic guidance).
83.1	The <i>Employer</i> provides these additional insurances	as stated for "Format TSC3" available on http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx

		(See Annexure A for basic guidance)
83.1	The <i>Contractor</i> provides these additional insurances:	: Not Applicable
83.1	The minimum amount of cover for insurance against loss and damage caused by the <i>Contractor</i> to the <i>Employer's</i> property is	the amount of the deductibles relevant to the event described in the "Format TSC3" insurance policy available on http://www.eskom.co.za/Tenders/InsurancePolicies/Procedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx
83.1	The insurance against loss of or damage to the <i>works</i> , Plant and Materials is to include cover for Plant and Materials provided by the <i>Employer</i> for an amount of	[•]
83.1	The minimum amount of cover for insurance in respect of loss of or damage to property (except the <i>Employer's</i> property, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) arising from or in connection with the <i>Contractor's</i> Providing the Service for any one event is:	whatever the <i>Contractor</i> deems necessary in addition to that provided by the <i>Employer</i> .
83.1	The minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract for any one event is:	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 and the <i>Contractor's</i> common law liability for people falling outside the scope of the Act with a limit of Indemnity of not less than R500000 (Five hundred thousand Rands)..
9	Termination	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
10	Data for main Option clause	
A	Priced contract with price list	
20.5	The <i>Contractor</i> prepares forecasts of the final total of the Prices for the whole of the <i>service</i> at intervals no longer than	: 4 weeks.

53.3	The <i>Contractor's</i> share is assessed on (dates)	[•]
11	Data for Option W1	
W1.1	The <i>Adjudicator</i>	the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).
	Address	[•]
	Tel No.	[•]
	Fax No.	[•]
	e-mail	[•]
W1.2(3)	The <i>Adjudicator nominating body</i> is:	the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the Institution of Civil Engineers (London) (see www.ice-sa.org.za) or its successor body.
W1.4(2)	The <i>tribunal</i> is:	arbitration
W1.4(5)	The <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	[•] South Africa
	The person or organisation who will choose an arbitrator.	
	- if the Parties cannot agree a choice or	the Chairman for the time being or his nominee
	- if the arbitration procedure does not state who selects an arbitrator, is	of the Association of Arbitrators (Southern Africa) or its successor body.
12	Data for secondary Option clauses	
X1	Price adjustment for inflation	
X1.1	The <i>base date</i> for indices is	: 1 month prior to tender closing date
	The proportions used to calculate the Price Adjustment Factor are:	Refer to the table below

Formula A						
Index Reference	Proposed portions/Weightings of each index	Description of Index	Full Title of Index as published	Source Publisher of Index	Base Month	Base Price/Base Index Figure
A1	65%	Table C3	Actual Labour Cost	SEIFSA	Month prior to tender closing	
A2	25%	Table L2A	Road Freight Costs	SEIFSA	Month prior to tender closing	
A3						
	10%	Fixed portion not subject to CPA				
Total	100%					

The *base date* for indices is 1 month prior to tender closing date. Labour rates will be adjusted as per SEIFSA TABLE C3, after 16 months, thereafter CPA will apply annually at the anniversary of the contract. Transport rates will be adjusted as per SEIFSA TABLE L1, after 16 months, thereafter CPA will apply annually at the anniversary of the contract.

X2	Changes in the law	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.
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X18	Limitation of liability
X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to R0.0 (zero Rand)
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to the amount of the deductibles relevant to the event described in the "Format TSC3" insurance policy available on http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx
X18.3	The <i>Contractor's</i> liability for Defects due to his design of an item of Equipment is limited to The greater of the total of the Prices at the Contract Date and the amounts excluded and unrecoverable from the <i>Employer's</i> insurance (other than the resulting physical damage to the <i>Employer's</i> property which is not excluded) plus the applicable deductibles in the <i>Employer's</i> assets and works / maintenance policies available on http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx
X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i>, for all matters arising under or in connection with this contract, other than the excluded matters, is limited to : The total of the Prices other than for the additional excluded matters. The <i>Contractor's</i> total liability for the additional excluded matters is not limited. The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for Defects due to his design, plan and specification, Defects due to manufacture and fabrication outside the Affected Property, loss of or damage to property (other than the <i>Employer's</i> property, Plant and Materials), death of or injury to a person and

		infringement of an intellectual property right.
X18.5	The <i>end of liability date</i> is	: 12 months after the end of the service period.
X19	Task Order	
X19.5	The <i>Contractor</i> submits a Task Order programme to the <i>Service Manager</i> within	: 5 days of receiving the Task Order
Z	The additional conditions of contract are	: Z1 to Z11 always apply.

Z1 Cession delegation and assignment

- Z1.1 The *Contractor* does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer*.
- Z1.2 Notwithstanding the above, the *Employer* may on written notice to the *Contractor* cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry.

Z2 Joint ventures

- Z2.1 If the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the *Employer* for the performance of this contract.
- Z2.2 Unless already notified to the *Employer*, the persons or organisations notify the *Service Manager* within two weeks of the Contract Date of the key person who has the authority to bind the *Contractor* on their behalf.
- Z2.3 The *Contractor* does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the *Employer* having been given to the *Contractor* in writing.

Z3 Change of Broad Based Black Economic Empowerment (B-BBEE) status

- Z3.1 Where a change in the *Contractor's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor's* B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change.
- Z3.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Service Manager* within thirty days of the notification or as otherwise instructed by the *Service Manager*.
- Z3.3 Where, as a result, the *Contractor's* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor's*

obligation to Provide the Service.

- Z3.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are P1, P2 and P4 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

Z4 Confidentiality

- Z4.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to Others in terms of clause 25.1, the *Contractor* ensures that the provisions of this clause are complied with by the recipient.
- Z4.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Service Manager*.
- Z4.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
- Z4.4 The taking of images (whether photographs, video footage or otherwise) of the Affected Property or any portion thereof, in the course of Providing the Service and after the end of the *service period*, requires the prior written consent of the *Service Manager*. All rights in and to all such images vests exclusively in the *Employer*.
- Z4.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

Z5 Waiver and estoppel: Add to core clause 12.3:

- Z5.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *Service Manager* or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z6 Health, safety and the environment: Add to core clause 27.4

- Z6.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *service*. Without limitation the *Contractor*:
accepts that the *Employer* may appoint him as the "Principal Contractor" (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Affected Property; warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of the *service*; and
undertakes, in and about the execution of the *service*, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his

Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

- Z6.2 The *Contractor*, in and about the execution of the *service*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

Z7 Provision of a Tax Invoice and interest. Add to core clause 51

- Z7.1 Within one week of receiving a payment certificate from the *Service Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer's* procedures stated in the Service Information, showing the amount due for payment equal to that stated in the payment certificate.
- Z7.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.
- Z7.3 The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer's* VAT number 4740101508 on each invoice he submits for payment.

Z8 Notifying compensation events

- Z8.1 Delete the last paragraph of core clause 61.3 and replace with:

If the *Contractor* does not notify a compensation event within eight weeks of becoming aware of the event, he is not entitled to a change in the Prices.

Z9 Employer's limitation of liability

- Z9.1 The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00 (zero Rand)
- Z9.2 The *Contractor's* entitlement under the indemnity in 82.1 is provided for in 60.1(12) and the *Employer's* liability under the indemnity is limited to compensation as provided for in core clause 63 and X19.11 if Option X19 Task Order applies to this contract.

Z10 Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":

- Z10.1 or had a business rescue order granted against it.

Z11 Ethics

For the purposes of this Z-clause, the following definitions apply:

Affected Party	means, as the context requires, any party, irrespective of whether it is the <i>Contractor</i> or a third party, such party's employees, agents, or Subcontractors or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,
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- Coercive Action** means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally,
- Collusive Action** means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,
- Committing Party** means, as the context requires, the *Contractor*, or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractors or the Subcontractor's employees,
- Corrupt Action** means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,
- Fraudulent Action** means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,
- Obstructive Action** means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action and
- Prohibited Action** means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action.
- Z 11.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.
- Z 11.2 The *Employer* may terminate the *Contractor's* obligation to Provide the Service if a Committing Party has taken such Prohibited Action and the *Contractor* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Employer* has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the *Employer* can terminate the *Contractor's* obligation to Provide the Service for this reason.
- Z 11.3 If the *Employer* terminates the *Contractor's* obligation to Provide the Service for this reason, the procedures and amounts due on termination are respectively P1, P2, P3 and P4, and A1 and A3.
- Z 11.4 A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Employer* does not have a contractual bond with the Committing Party, the *Contractor* ensures that the Committing Party co-operates fully with an investigation.

Annexure A: Insurance provided by the Employer

These notes are provided as guidance to tendering contractors and the Contractor about the insurance provided by the Employer. The Contractor must obtain its own advice. Details of the insurance itself are available from the internet web link given below.

1. Services provided in a TSC3 contract could include some element of construction or refurbishment as well as a continuous maintenance or operational service activity. If an event occurs which causes loss or damage, a claim could be made either against the *Employer's* "works" type policy which may be in place for the *Employer's* portion of the Affected Property concerned or against the *Employer's* assets policy which may be in place for the *Employer's* portion of the Affected Property concerned, or both.
2. The cover provided and the deductibles under the works policy are different to those under the assets policy. Each policy has a range of applicable deductibles depending on the location of the Affected Property and the nature of the insurable event.
3. The *Contractor* is required in terms of Contract Data for clause 83 to provide cover for the deductibles in the insurance provided by the *Employer*. This can be provided from his own resources on a 'self insured' basis or obtained by him from his own insurers. In order to assess the extent of this cover, tendering contractors and their brokers should consult the internet web link given below and scroll to '**Format TSC3**' to establish both the cover and the deductibles in relation to the *service* provided in terms of this contract.
4. Tendering contractors should note that cover provided by the *Employer* is only per the policies available on the internet web link listed below and may not be the cover required by the tendering contractor or as intended by each of the listed insurances in the left hand column of the Insurance Table in clause 83.2. In terms of clause 83.1 "the *Contractor* provides the insurances stated in the Insurance Table except any insurance which the *Employer* is to provide". Hence the *Contractor* provides insurance which the *Employer* does not provide and in cases where the *Employer* does provide insurance the *Contractor* insures for the difference between what the Insurance Table requires and what the *Employer* provides.
5. If Marine Insurance is required the *Contractor* needs to obtain a copy of the latest edition of Eskom's Marine Policies Procedures found at internet website given below.
6. Further information and full details of all Eskom provided policies and procedures may be obtained from:

[http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_
From_1_April_2014_To_31_March_2015.aspx](http://www.eskom.co.za/Tenders/InsurancePoliciesProcedures/Pages/EIMS_Policies_From_1_April_2014_To_31_March_2015.aspx)

C1.2 Contract Data

Part two - Data provided by the *Contractor*

Notes to a tendering contractor:

1. Please read both the both the NEC3 Term Service Contract April 2013 and the relevant parts of its Guidance Notes (TSC3-GN)¹ in order to understand the implications of this Data which the tenderer is required to complete.
2. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data.
3. Where a form field like this [] appears, data is required to be inserted relevant to the option selected. Click on the form field **once** and type in the data. Otherwise complete by hand and in ink.

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

Clause	Statement	Data
10.1	The <i>Contractor</i> is (Name): Address Tel No. Fax No.	
11.2(8)	The <i>direct fee percentage</i> is The <i>subcontracted fee percentage</i> is	: None : None
11.2(14)	The following matters will be included in the Risk Register	: None
11.2(15)	The Service Information for the <i>Contractor's</i> plan is in:	: AS PER TASK ORDER
21.1	The plan identified in the Contract Data is contained in:	: AS PER TASK ORDER
24.1	The key people are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job Responsibilities:	

¹ Available from Engineering Contract Strategies Tel 011 803 3008 Fax 086 5391902 or www.ecs.co.za

Qualifications:

Experience:

CV's (and further key person's data including CVs) are in _____ .

A	Priced contract with price list	
11.2(12)	The <i>price list</i> is in _____	: Attached
11.2(19)	The tendered total of the Prices is _____	: Rate based

PART 2: PRICING DATA
TSC3 Option A

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option A	2
C2.2	The <i>price list</i>	[•]

C2.1 Pricing assumptions: Option A

1. How work is priced and assessed for payment

Clause 11 in NEC3 Term Service Contract (TSC3) core clauses and Option A states:

Identified and defined terms 11
11.2

(12) The Price List is the *price list* unless later changed in accordance with this contract.

(17) The Price for Services Provided to Date is the total of

the Price for each lump sum item in the Price List which the *Contractor* has completed and where a quantity is stated for an item in the Price List, an amount calculated by multiplying the quantity which the *Contractor* has completed by the rate.

(19) The Prices are the amounts stated in the Price column of the Price List. Where a quantity is stated for an item in the Price List, the Price is calculated by multiplying the quantity by the rate.

This confirms that Option A is a priced contract where the Prices are derived from a list of items of service which can be priced as lump sums or as expected quantities of service multiplied by a rate or a mix of both.

2. Function of the Price List

Clause 54.1 in Option A states: "Information in the Price List is not Service Information". This confirms that instructions to do work or how it is to be done are not included in the Price List but in the Service Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Service in accordance with the Service Information". Hence the *Contractor* does **not** Provide the Service in accordance with the Price List. The Price List is only a pricing document.

3. Link to the *Contractor's* plan

Clause 21.4 states "The *Contractor* provides information which shows how each item description on the Price List relates to the operations on each plan which he submits for acceptance". Hence when compiling the *price list*, the tendering contractor needs to develop his first clause 21.2 plan in such a way that operations shown on it can be priced in the *price list* and result in a satisfactory cash flow in terms of clause 11.2(17).

4. Preparing the *price list*

Before preparing the *price list*, both the *Employer* and tendering contractors should read the TSC3 Guidance Notes pages 14 and 15. In an Option A contract, either Party may have entered items into the *price list* either as a process of offer and acceptance (tendering) or by negotiation depending on the nature of the service to be provided. Alternatively the *Employer*, in his Instructions to Tenderers or in a Tender Schedule, may have listed some items that he requires the *Contractor* to include in the *price list* to be prepared and priced by him.

It is assumed that in preparing or finalising the *price list* the *Contractor*:

Has taken account of the guidance given in the TSC3 Guidance Notes relevant to Option A;
Understands the function of the Price List and how work is priced and paid for;
Is aware of the need to link operations shown in his plan to items shown in the Price List;
Has listed and priced items in the *price list* which are inclusive of everything necessary and incidental to Providing the Service in accordance with the Service Information, as it was at the time of tender, as well as correct any Defects not caused by an *Employer's* risk;
Has priced work he decides not to show as a separate item within the Prices or rates of other listed items in order to fulfil the obligation to complete the *service* for the tendered total of the Prices.
Understands there is no adjustment to items priced as lump sums if the amount, or quantity, of work within that item later turns out to be different to that which the *Contractor* estimated at time of tender. The only basis for a change to the (lump sum) Prices is as a result of a compensation event.

4.1. Format of the *price list*

(From the example given in an Appendix within the TSC3 Guidance Notes)

Entries in the first four columns in the *price list* in section C2.2 are made either by the *Employer* or the tendering contractor.

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tendering contractor enters the amount in the Price column only, the Unit, Expected Quantity and Rate columns being left blank.

If the *Contractor* is to be paid an amount for an item of work which is the rate for the work multiplied by the quantity completed, the tendering contractor enters the rate which is then multiplied by the Expected Quantity to produce the Price, which is also entered.

If the *Contractor* is to be paid a Price for an item proportional to the length of time for which a service is provided, a unit of time is stated in the Unit column and the expected length of time (as a quantity of the stated units of time) is stated in the Expected Quantity column.

C2.2 the *price list*

The provision of vegetation management and bush clearing for Mpumalanga Operating Unit

Tender no: E1971DXMP

Request for Quote Issued to:		Request is Submitted To:	
Contractor:		Employer:	Eskom
Contact Person:		Contact Person:	
Address:		Address:	
Tel No:		Tel No:	
Cell No:		E-mail:	
Fax No:		Fax No:	
FS Area:		Line Name:	
COW:		Estimate Length	

No	Description	Unit	Rate
A1	Vegetation Biomes (Cycle1)		
1	Grassland	m ²	
2	Savanna	m ²	
3	Reeds Cut and Stacking	m ²	
4	Reeds Cut and removal	m ²	
5	Herbicide Application (Substation only)	m ²	
6	Substation Grass Cutting	m ²	
7	Pure Grass Cutting (Lines)	m ²	
8	Pure Grass Removal	m ²	
9	Substation Weeding	m ²	
A2	Vegetation Biomes (Cycle2)		
1	Grassland	m ²	
2	Savanna	m ²	
3	Reeds Cut and Stacking	m ²	
4	Reeds Cut and removal	m ²	
5	Herbicide Application (Substation only)	m ²	
6	Substation Grass Cutting	m ²	
7	Pure Grass Cutting (Lines)	m ²	

8	Pure Grass Removal	m ²	
9	Substation Weeding	m ²	
A3	Vegetation Biomes (Cycle3)		
	Herbicides application(Lines)	m2	
	Total Biomes		
B	Modifiers		
1	Single tree Event >400mm	Each	
2	Call Out for Fallen Tree >400mm (Monday - Sat) R0 x 1,5	Each	
3	Call Out for Fallen Tree >400mm (Sunday + Public Holiday)	Each	
4	Single tree Event <400mm diameter	Each	
5	Call Out for Fallen Tree <400mm (Monday - Sat)	Each	
6	Call Out for Fallen Tree <400mm (Sunday + Public Holiday)	Each	
7	Hedges	m ²	
8	Fruit Trees (orchards) Trimming per tree	m ²	
9	Trimming trees in Town & Wind Breaks	Each	
10	Invader species Modifier	m ²	
11	Daily Rate. Used where less than 235,000m2 of bushclearing is issued (approximately 12 spans.) Also used for isolated areas on a once off task order.	Per day	
	Total Modifiers		
	Total Biomes + Modifiers		
C	Occupational Health and Safety Requirements (32 -136) - Inclusive of COVID -19 (3.5% for safety and .5% for COVID-19)	4%	
C1	Personal Protective Equipment appropriate to the task to be performed shall be provided by the Principal Contractor. -Inclusive of COVID-19	1%	

Additional services

The rates and Prices entered for each item includes for all work and other things necessary to complete the item.

ANY ADDITIONAL SERVICES REQUIRED PER JOB SITE, E.G. USE OF AERIAL PLATFORMS, POLE GRABBERS, CRANES, ETC., SHALL BE AGREED UPON BETWEEN THE CONTRACTOR AND THE ESKOM REPRESENTATIVE. QUOTES FROM THE SUPPLIER FOR THE ABOVE ABNORMAL EQUIPMENT SHALL BE SUBMITTED BY THE CONTRACTOR AND WILL BE APPROVED / NOT APPROVED BY ESKOM BEFORE WORK MAY COMMENCE

ACCEPTANCE OF THE ABOVE RATES

.....
PRINT NAME

.....
SIGNATURE

.....
DATE

Document reference	Title	No of pages
C3.1	This cover page <i>Employer's Service Information</i>	1
C3.2	<i>Contractor's Service Information</i>	
Total number of pages		

C3.1: EMPLOYER'S SERVICE INFORMATION

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1 Description of the service

1.1 Executive overview

The services rendered on this contract shall in general conform to the requirements of the **“Contract Specification for vegetation Management Services on Eskom Networks (Unique Identifier 240-52456757,)”**, unless otherwise agreed in writing between Eskom and the Contractor.

The objective of Power Line route and Substation Vegetation Maintenance is to ensure the safe mechanical and electrical operation of the Power Line and High Voltage Apparatus and to meet Eskom’s legal, business, social and environmental obligations.

1.2 Employer’s requirements for the service

Vegetation Control Standards outside Plantations

Normative Reference: EPC 32-247 – Environmental Procedure, Procedure for vegetation clearance and maintenance within overhead power line servitudes and on Eskom owned land:

- a) Trees growing to a height in excess of the horizontal distance of that tree from the nearest conductor which are identified as a risk to safe operation of the power line shall be treated and prevented from growing in such a manner as to endanger the line should they fall. (See corridor specification below for clarity)
- b) All vegetation posing a risk to the line or preventing access for maintenance purposes shall be managed.
- c) Various species of indigenous vegetation are protected by law in terms of which is necessary to obtain a permit from the relevant authority, in order to cut them. The list of “H protected tree species under the national forest act, 1998 (Act No 84 of 1998)” Gazetted by the department of Agriculture, Forestry and Fisheries from time to time: will be sourced and referenced by the contractor in lieu of the specific requirements in terms of protected species. No protected vegetation as per above act shall be cut without the required permits or licences
- d) Where there is any doubt as to whether a plant species is protected or not, the Department of Agriculture, Forestry and Fisheries (DAFF) or the local Eskom environmental practitioner in that Business Unit shall be consulted.
- e) Alien vegetation in servitude shall be managed in terms of the Regulation GNR.1048 of 25 May 1984 (as amended) issued in terms of the Conservation of Agricultural Resources Act, Act 43 of 1983. In Terms of these regulations, Eskom shall “control” i.e. to combat category 1, 2 and 3 plants to the extent necessary to prevent or to contain the occurrence, establishment, growth, multiplication, propagation, regeneration and spreading such plants within servitude areas or land owned by Eskom.
- f) On sites owned by Eskom, all vegetation proclaimed in terms of the Regulation shall be subject to control in terms of legislation.
- g) Control programs should be included as part on the Environmental Management Plans, and will need to be area and species specific. Due to the nature of alien vegetation, this programmer implementation may need to be more frequent than the three year interval recommended for indigenous vegetation. Alien vegetation can grow at rates significantly faster than 1 (one) meter per year.
- h) Care must be taken to ensure alien vegetation is not spread as a result of vegetation management processes through the transport of seeds or other vegetative material from one site to another.
- i) The responsibility for obtaining the appropriate permit/s from the relevant authority will be that of Eskom.
- j) Indigenous vegetation which does not interfere with the safe operation of the power line should be left undisturbed.
- k) Vegetation should be trimmed where it is likely that it intrudes on the minimum vegetation clearance distance, (MVCD) or will intrude on this distance before the next scheduled clearance.

Vegetation Control Standards In plantations or forests

Normative Reference: 0029E – maintenance and management agreement in forest plantation areas and servitude areas: The following clause in Eskom’s Standard Servitude / Wayleave Agreement shall be adhered to:

- a) No tree shall be allowed to grow to a height in excess of the horizontal distance of that tree from the nearest conductor of any power line or to grow in such a manner as to endanger the line should it fall or be cut down."
- b) Where the Servitude/Wayleave Agreement makes reference to a specific width within which no trees may be deliberately grown, then this restriction width will apply.
- c) Acceptable vegetation that does not grow high enough to cause interference with overhead power lines, or cause a fire hazard to any plantation, should not be cut or trimmed, unless it is growing in the road access area and then only at the discretion of Eskom, provided that this shall not preclude the preparation of fire belts as contemplated in this agreement.
- d) Where clearing for access purposes is essential, the width to be cleared shall be to a maximum of 8 meters.
- e) Deep valleys and sensitive areas that do not allow vehicle access, or legally protected areas are not to be cleared of acceptable vegetation provided the acceptable vegetation poses no threat to the operation and reliability of the power line.
- f) Clearing of acceptable vegetation for tower positions shall be the minimum required for the specific tower, regard being had for the provisions of clause 4.8, and the costs shall be for Eskom's account.
- g) Where power line servitudes enter plantations from non timber farmlands or on either side of a road or river, if the natural vegetation is such that a visual barrier cannot be left, the planting of suitable indigenous vegetation may be considered to provide aesthetic screening.
- h) Trees, shrubs, grass, natural features and topsoil which are not removed shall be protected from damage during operations. Scalping of the earth or any unnecessary disturbance shall not be allowed in any clearing operation.
- i) Specifications for necessary re vegetation of an area shall be determined jointly by Eskom and the Grower, and implemented on an area specific basis by Eskom in consultation with the Grower.
- j) Rivers, water courses and other water bodies shall be kept clear of felled trees, bush cuttings and debris. Where possible, the integrity of riverbanks shall be maintained and shall be dealt with in accordance with the provisions of clause 4.11 if they are disturbed or damaged.
- k) The Grower shall have the right to retain cut vegetation, in which case it shall attend to its removal. If not, the cut vegetation shall be removed by Eskom in a manner that is mutually acceptable.
- l) Neither party shall undertake controlled burning or the making of open fires within or near servitudes unless agreed upon in writing by both parties in this instance.

Weeding and Herbicide Application in Substations:

Cycle 1

- a) Hand pull of weeds and remove to legal dumping site
- b) Apply approved granular sterilent herbicide

Cycle 2

- a) Hand pull of weeds and remove to legal dumping site (regrowth)
- b) Apply approved granular sterilent herbicide

Corridor Specification

Vegetation will be cleared and managed to provide for access, safety clearance, and prevention of fires in accordance with paragraph 4.3 and line clearance in accordance with paragraph 4.3.1 below.

Vegetation Clearance for access purposes (inspection, repair and maintenance), safety clearance, and prevention of fires in Servitudes and Wayleaves

NOTE: Where there is a specific risk to operations as a result of equipment design or environmental condition - the Operating Unit will manage vegetation on merit. The justification for this shall only be in exceptional circumstances and shall be open to scrutiny and review.

Nominal voltage	Servitude building restriction widths (measured from the centre line of the power line) *	Maximum Vegetation Clearance
11 kV	9 m	4m on either side of the centre line will be cleared. Grass and scrubs will be managed in accordance with Annex B which is biome and land use dependant
22 kV	11 m	4m on either side of the centre line will be cleared. Grass and scrubs will be managed in accordance with Annex B which is biome and land use dependant
88 kV	11 m	5 m on either side of the centre line will be cleared. Grass and scrubs will be managed in accordance with Annex B which is biome and land use dependant
132 kV	15,5 m	8 m on either side of the centre line will be cleared. Grass and scrubs will be managed in accordance with Annex B which is biome and land use dependant
220 to 765 kV	22 m to 40 m	Clear from the centre of the power line up to the outer conductor, plus an additional 10 meters on either side. Grass and scrubs will be managed in accordance with Annex B which is biome and land use dependant.
533 kV DC	15 m	8 m either side of the centre line will be cleared. Grass and scrubs will be managed to a width of 15 meter either side of the centre of the line

Vegetation Clearance for Power Lines

- Vegetation will be managed to maintain clearance to all conductors on the line. This Minimum Vegetation Clearance Distance (MVCD) shall be the sum of "A – Minimum Vegetation clearance" and "B – the Expected Growth Rate in three (3) years".
- High Risk Trees outside the corridor: Trees growing to a height in excess of the horizontal distance of that tree from the nearest conductor which are identified as a risk to safe operation of the power line shall be treated and prevented from growing in such a manner as to endanger the line should they fall.
- Minimum Vegetation Clearance
- A minimum vegetation clearance in accordance with Columns 6 and 8, Table E1 "Minimum Clearance for Powerlines": SANS10280 will be maintained at all times

Minimum Clearance Table: Vegetation to Power Line

System nominal r.m.s. voltage kV	Minimum vertical clearances (m)	Minimum horizontal Clearances (m)
>1 up to and including 44	3	3
66	3.2	3
88	3.4	3
132	3.8	3

220	4.4	3
275	4.9	3
400	5.6	3.2
765	8.5	5.5

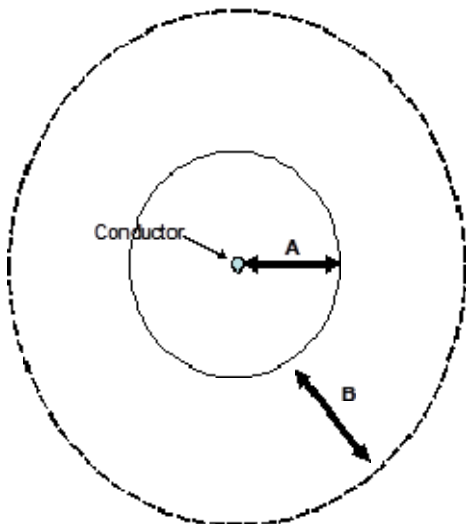


Figure 1: Minimum Vegetation Clearance Distance $MVCD = A + B$

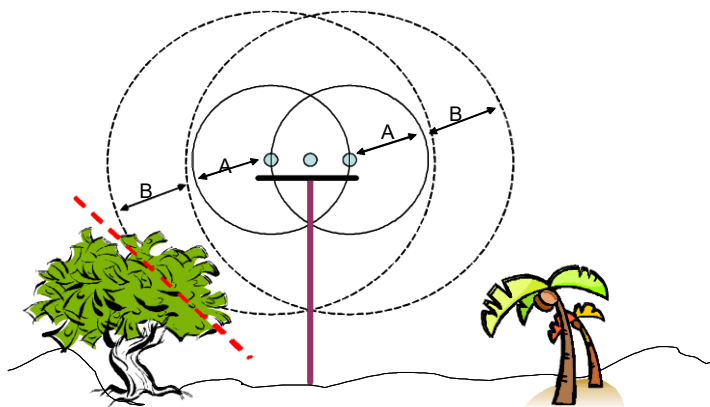


Figure 2: Low Voltage Lines

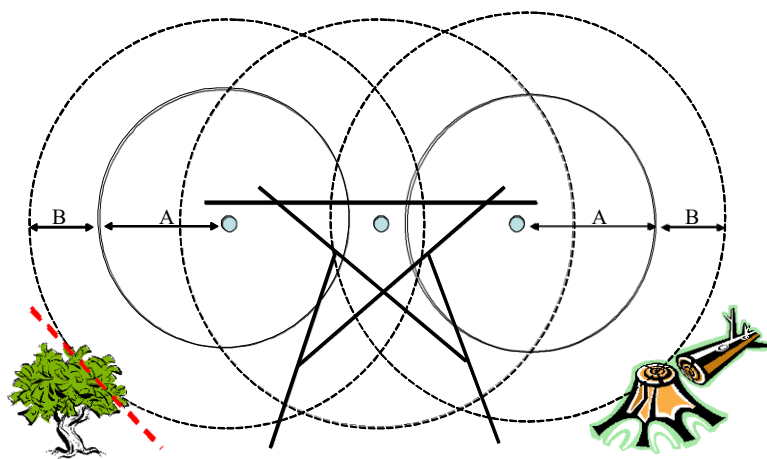


Figure 3: Lines with Nominal Voltage greater than 1 000 Volt

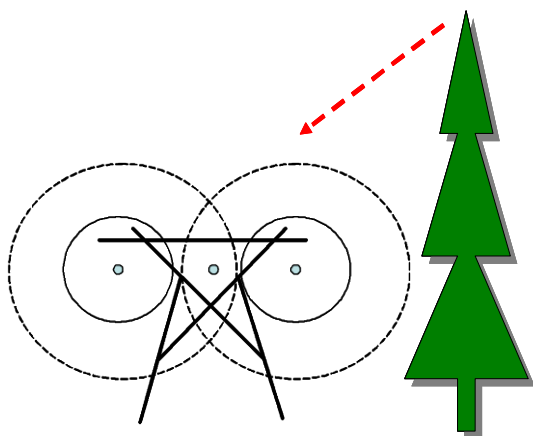


Figure 4: Projected growth before next cutting

Herbicides

This contract is based on the fact that the contractor has a Pest Control Operator License and that he is an expert on the use of herbicides to destroy vegetation. If the Employers Agent observes that the re-growth is outside the acceptable norm, the contractor will be instructed to cut all of the stumps again and apply an herbicide of the Employers choice. If this happens on numerous lines it will be accepted that the contractor is not supplying an acceptable standard of work and this will lead to the termination of the contract.

The contractor will guarantee the effectiveness of the herbicides used at all times.

At all times the herbicides must be mixed and applied strictly according to the manufacturer's instructions. If the herbicides are not applied within the time period specified by the manufacturer the Eskom Representative will give an instruction that all work must stop. The contractor will then re-cut the stumps and apply herbicides. If this is not possible the Eskom Representative will make a note of this and the contractor will either cut this portion again or receive no payment for that portion.

The correct herbicides treatment is an integral part of this contract. This includes correct herbicide selection, mixing and application as soon as possible. It is suggested that each team use 2 staff members to apply herbicides.

Restrictions and Limitations to Vegetation Management Operations

Restriction of activity by the contractor

Where trees have to be felled or trimmed in close proximity to power lines and / or other services and it cannot be done safely, these services must be suspended and removed in order for such dangerous trees to be felled. This entails in extreme cases:

- a) Arranging power outages and in some cases removing line components for the felling to proceed: and/or
- b) Collaborating with other service providers to make their services and assets safe or removing where possible their services temporarily so that felling can proceed.

NOTE: It must be considered that these trees pose a danger to assets, services and the health and safety of the public at large as well as to the persons felling trees. These other risks must be given due attention and priority.

Safety of Eskom/Contractor Personnel

Normative Reference: 34-190 – Access to farms (includes strategy on dealing with game farms):

No person must endanger his/her life or the life of another staff member by entering a property where there is a reasonable suspicion that dangerous animals such as lions, tigers, leopards, rhinoceroses, buffaloes, etc., are present.

Staff should seek to enter such properties accompanied by security staff from the game farm. It is also advised that staff working in and around game farms be trained on how to identify problem animals and how to behave to ensure the safety of his/her life as well as that of another employee.

Whenever any person employed by Eskom or its mandatories gain knowledge of the introduction of dangerous animals in an area where Eskom infrastructure exists, such knowledge shall be conveyed to Land Development for mapping, investigation and/or measuring and to the responsible manager in conjunction with the Customer Services Area Manager to engage the land- owner.

Vegetation Control Standards outside Plantations

Normative Reference: EPC 32-247 – Environmental Procedure, Procedure for vegetation clearance and maintenance within overhead power line servitudes and on Eskom owned land:

- a) Trees growing to a height in excess of the horizontal distance of that tree from the nearest conductor which are identified as a risk to safe operation of the power line shall be treated and prevented from growing in such a manner as to endanger the line should they fall. (See corridor specification for clarity)
- b) All vegetation posing a risk to the line or preventing access for maintenance purposes shall be managed.
- c) Various species of indigenous vegetation are protected by law in terms of which is necessary to obtain a permit from the relevant authority, in order to cut them. The list of “H protected tree species under the national forest act, 1998 (Act No 84 of 1998)” Gazetted by the department of Agriculture, Forestry and Fisheries from time to time: will be sourced and referenced by the contractor in lieu of the specific requirements in terms of protected species. No protected vegetation as per above act shall be cut without the required permits or licences.
- d) Where there is any doubt as to whether a plant species is protected or not, the Department of Agriculture, Forestry and Fisheries (DAFF) or the local Eskom environmental practitioner in that Business Unit shall be consulted.
- e) Alien vegetation in servitude shall be managed in terms of the Regulation GNR.1048 of 25 May 1984 (as amended) issued in terms of the Conservation of Agricultural Resources Act, Act 43 of 1983. In Terms of these regulations, Eskom shall “control” i.e. to combat category 1, 2 and 3 plants to the extent necessary to prevent or to contain the occurrence, establishment, growth, multiplication, propagation, regeneration and spreading such plants within servitude areas or land owned by Eskom.
- f) On sites owned by Eskom, all vegetation proclaimed in terms of the Regulation shall be subject to control in terms of legislation.
- g) Control programs should be included as part on the Environmental Management Plans, and will need to be area and species specific. Due to the nature of alien vegetation, this programmer implementation may need to be more frequent than the three year interval recommended for indigenous vegetation. Alien vegetation can grow at rates significantly faster than 1 (one) meter per year.
- h) Care must be taken to ensure alien vegetation is not spread as a result of vegetation management processes through the transport of seeds or other vegetative material from one site to another.
- i) The responsibility for obtaining the appropriate permit/s from the relevant authority will be that of Eskom.

- j) Indigenous vegetation which does not interfere with the safe operation of the power line should be left undisturbed.
- k) Vegetation should be trimmed where it is likely that it intrudes on the minimum vegetation clearance distance, (MVCD) or will intrude on this distance before the next scheduled clearance.

Vegetation Control Standards In plantations or forests

Normative Reference: 0029E – maintenance and management agreement in forest plantation areas and servitude areas: The following clause in Eskom's Standard Servitude / Wayleave Agreement shall be adhered to:

- a) No tree shall be allowed to grow to a height in excess of the horizontal distance of that tree from the nearest conductor of any power line or to grow in such a manner as to endanger the line should it fall or be cut down."
- b) Where the Servitude/Wayleave Agreement makes reference to a specific width within which no trees may be deliberately grown, then this restriction width will apply.
- c) Acceptable vegetation that does not grow high enough to cause interference with overhead power lines, or cause a fire hazard to any plantation, should not be cut or trimmed, unless it is growing in the road access area and then only at the discretion of Eskom, provided that this shall not preclude the preparation of fire belts as contemplated in this agreement.
- d) Where clearing for access purposes is essential, the width to be cleared shall be to a maximum of 8 meters.
- e) Deep valleys and sensitive areas that do not allow vehicle access, or legally protected areas are not to be cleared of acceptable vegetation provided the acceptable vegetation poses no threat to the operation and reliability of the power line.
- f) Clearing of acceptable vegetation for tower positions shall be the minimum required for the specific tower, regard being had for the provisions of clause 4.8, and the costs shall be for Eskom's account.
- g) Where power line servitudes enter plantations from non timber farmlands or on either side of a road or river, if the natural vegetation is such that a visual barrier cannot be left, the planting of suitable indigenous vegetation may be considered to provide aesthetic screening.
- h) Trees, shrubs, grass, natural features and topsoil which are not removed shall be protected from damage during operations. Scalping of the earth or any unnecessary disturbance shall not be allowed in any clearing operation.
- i) Specifications for necessary re vegetation of an area shall be determined jointly by Eskom and the Grower, and implemented on an area specific basis by Eskom in consultation with the Grower.
- j) Rivers, water courses and other water bodies shall be kept clear of felled trees, bush cuttings and debris. Where possible, the integrity of riverbanks shall be maintained and shall be dealt with in accordance with the provisions of clause 4.11 if they are disturbed or damaged.
- k) The Grower shall have the right to retain cut vegetation, in which case it shall attend to its removal. If not, the cut vegetation shall be removed by Eskom in a manner that is mutually acceptable.
- l) Neither party shall undertake controlled burning or the making of open fires within or near servitudes unless agreed upon in writing by both parties in this instance.

Stakeholder Management

Normative Reference: EPC 32-247 – Environmental Procedure, Procedure for vegetation clearance and maintenance within overhead power line servitudes and on Eskom owned land:

Agreement in Forest Plantation Areas and Servitude Areas

Normative reference: 34-190 – access to farms (includes strategy on dealing with game farms:

Note: that all vegetation management within commercial forestry areas shall be done in terms of the Timber Growers Agreement, the "Maintenance and Management Agreement in Forest Plantation Areas and Servitude Areas". This document has however not been accepted by all foresters, but can be used as a guideline for future agreements. Should a deviation from below be required, a specific agreement with the Timber Growers Industry will be negotiated and contracted.

ITEM	STANDARD	FOLLOW UP
Plantation Trees	All trees or re-growth within the overturning distance or the specific tree restriction width as defined in the servitude / way leave agreement to be cut horizontally within 100mm of the ground. Stumps to be treated with herbicide. However and notwithstanding the above paragraph, where the timber growers have elected to allow plantations to encroach within these distances, then all the associated risks and responsibilities shall be borne by the Grower.	Re-growth to be treated with herbicide as necessary.
Acceptable vegetation under a power line within 6m beyond the outer phases	All acceptable vegetation that will attain a height in excess of 4m, cut horizontally within 100mm of the ground. Treat stumps with herbicide	Re-growth to be treated with herbicide as necessary.
Acceptable vegetation within the defined Servitude between the edge of the servitude or the timber whichever is the closer and 6m from the outer phase	Acceptable vegetation that will attain a height in excess of the overturning distance, cut horizontally within 100mm of the ground. Treat stumps with herbicides.	Re-growth to be treated with herbicide as necessary.
Declared weeds and invader plants within the overturning distance or the specific tree restriction width as defined in the servitude / way leave agreement	Treat with herbicide or cut at 100mm above ground level, treat stumps with herbicide.	Re-growth to be treated with herbicide as necessary.
Access routes to towers / structures	Where necessary, clear all trees and bush at ground level, treat with herbicide. Grass growth to be encouraged in collaboration with the Grower.	Re-growth to be treated with herbicide as necessary.
10m around power line structures, stays and within tower positions	Clear all trees and bush at ground level, treat with herbicide	Re-growth to be treated with herbicide as necessary.

1.3 Interpretation and terminology

If required include here definitions additional to those used in the *conditions of contract* which are required only for the purpose of making the Service Information easier to draft and read. Also list abbreviations used and provide a full interpretation of each one, for example:

The following abbreviations are used in this Service Information:

Abbreviation	Meaning given to the abbreviation
OBL	Outside battery limits

2 Management strategy and start up.

2.1 The Contractor's plan for the service

In the TSC3 the *Contractor's* plan is his "design" for performing the *service* throughout the *service period*. Section 2 of the *conditions of contract* describes what the *Contractor* is to show in his plan both in the core clauses and some additional requirements in each of the main Options.

The extent of the *Contractor's* plan will depend on whether the *Contractor* is required to develop a plan in accordance with the *Employer's* broad outline of the *service* or whether the *Employer* has provided a plan for the *Contractor* to follow. Read the TSC3 Guidance Notes pages 21 and 22 for more information on the *Contractor's* plan.

Use this section to describe any particulars which must be taken into account by the *Contractor* in developing his plan as required by clause 21.2. For example information about the order and timing or method of carrying out particular items of work.

List technical reporting and scheduling requirements which are to be incorporated into the *Contractor's* plan.

2.2 Management meetings

The *conditions of contract* (e.g. Clause 16.2) and other sections of the Service Information (e.g. safety risk management) may require that a meeting shall be held. However the intention of all NEC contracts is that the Parties and their agents use the techniques of partnering to manage the contract by holding meetings designed to pro actively and jointly manage the administration of the contract with the objective of minimising the adverse effects of risks and surprises for both Parties.

Depending on the size and complexity of the *service*, it is probably beneficial for the *Service Manager* to hold a weekly risk register meeting (Clause 16.2). This could be used to discuss safety, compensation events, subcontracting, overall co-ordination and other matters of a general nature. Separate meetings for specialist activities such as planning and activities of a technical nature may also be warranted.

Describe here the general meetings and their purpose. Provide particulars of approximate times, days, location, and attendance requirements, stipulating that attendees shall have the necessary delegated authority to make decisions in respect of matters discussed at such meetings.

The following text could be used as a model for this section:

Regular meetings of a general nature may be convened and chaired by the *Supply Manager* as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
Risk register and compensation events	Weekly on _____ at _____		
Overall contract progress and feedback	Monthly on _____ at _____		<i>Employer, Contractor and _____</i>

Meetings of a specialist nature may be convened as specified elsewhere in this Service Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the *service*. Records of these meetings shall be submitted to the *Service Manager* 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.

2.3 Contractor's management, supervision and key people

State any additional constraining requirements on *Contractor's* supervision and key people that are not already stated in other sections such as for Health and Safety. This section could be used to solicit an organogramme from the *Contractor* showing his people and their lines of authority / communication. This would be essential if the *Contractor* is a Joint Venture.

2.4 Provision of bonds and guarantees

The form in which a bond or guarantee required by the *conditions of contract* (if any) is to be provided by the *Contractor* is given in Part 1 Agreements and Contract Data, document C1.3, Sureties.

The *Employer* may withhold payment of amounts due to the *Contractor* until the bond or guarantee required in terms of this contract has been received and accepted by the person notified to the *Contractor* by the *Service Manager* to receive and accept such bond or guarantee. Such withholding of payment due to the *Contractor* does not affect the *Employer's* right to termination stated in this contract.

2.5 Documentation control

Specify how documentation will be identified with an alpha numeric which indicates source, recipient, communication number etc. Provide details of any particular format or other constraints; for example that all contractual communications will be in the form of properly compiled letters or forms attached to e mails and not as a message in the e mail itself. State any particular routing requirements but note from TSC3 who issues what to whom.

2.6 Invoicing and payment

The Z clauses make reference to invoicing procedures stated here in this Service Information. Also include a list of information which is to be shown on an invoice.

Within one week of receiving a payment certificate from the *Service Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice showing the amount due for payment equal to that stated in the *Service Manager's* payment certificate.

The *Contractor* shall address the tax invoice to
Eskom Holdings SOC (Ltd) _____
and include on each invoice the following information:

Name and address of the *Contractor* and the *Service Manager*;
The contract number and title;
Contractor's VAT registration number;
The *Employer's* VAT registration number 4740101508;
Description of service provided for each item invoiced based on the Price List;
Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;
Line/Site Description where service has been carried out

(add other as required)

Add procedures for invoice submission and payment (e. g. electronic payment instructions)

2.7 Contract change management

This section is intended to deal with any additional requirements to the compensation event clauses in section 6 of the core clauses; such as the use of standard forms. Not the same thing as documentation control.

2.8 Records of Defined Cost to be kept by the Contractor

If Option C or E applies first read clause 52.2 and then state whether the *Contractor* is required to keep any other records. Include any other constraint which may be required in regard to format and filing of the records, and whether access for the *Service Manager* shall be provided in hard copy or electronically.

Could delete if Option A applies unless the *Employer* requires some form of control over the *Contractor's* record keeping for the purpose of compensation event management.

2.9 Insurance provided by the Employer

First read TSC3 Core Clause 86.1 and then add anything necessary for the management of insurance related issues such as a cross reference to where procedures for making claims can be found. Also provide contact details for persons capable of being able to answer any insurance related queries the *Contractor* may have, as well as to whom the information required by Marine Insurance (if any) may be addressed.

2.10 Training workshops and technology transfer

Describe type and frequency of any on job training workshops, as well as any obligation for technology transfer being included as part of the *service* or at the end of the *service period*.

2.11 Design and supply of Equipment

On some complex services (e. g. nuclear) it could be in the Parties best interests that some details of the design of Equipment are shared with the *Service Manager*, not necessarily for his acceptance but as an assurance that the Equipment will be able to allow the *Contractor* to Provide the Service efficiently and without delay. For example specialised handling Equipment for a particular maintenance operation. Clause 23.1 is always available to the *Service Manager* if this paragraph is not used.

Also the *Employer* may wish to exercise constraints or include witness and hold points during manufacture, assembly or delivery of such Equipment. Include these constraints here.

Draft in such a way that there is no doubt that the liability for such design supply and use of the Equipment remains with the *Contractor*.

2.12 Things provided at the end of the service period for the Employer's use

2.12.1 Equipment

The *Employer* may wish to use some of the Equipment used by the *Contractor* after the end of the *service period*. Clause 70.2 requires that details of such requirement be stated in the Service Information. Complete here or if not applicable retain the heading and state 'None'

2.12.2 Information and other things

Clause 70.2 requires that information and other things which the *Contractor* is to provide at the end of the *service period* be stated in the Service Information.

2.13 Management of work done by Task Order

NOTIFICATION TO BE GIVEN TO THE RELEVANT CLN PRIOR TO ANY WORK BEING UNDERTAKEN. ESTABLISH AND CONDUCT HEALTH AND SAFETY COMMITTEE MEETINGS. FOR FURTHER DETAILS REFER TO 34-316: OCCUPATIONAL HEALTH AND SAFETY COMMITTEE SYSTEMS

Vegetation management Task Order and Invoicing Process for LimlangaCluster Mpumalanga

Role players: Eskom Representative, Assistant Contract Co-ordinator (Technical Support), Senior Supervisors, Admin Support, Finance Department, Contract co-ordinator, HV Plant and Lines & Servitudes Managers, Contractor

	Activity		Responsibility
1	Contractor go through the Grid's SHE Evaluation thereafter send the Compliance Certificate to Contracts Co-ordinator		Contractor
2	CLN Team and Compliant Contractor Rep. Conduct vegetation survey from A to B using Vegetation Survey Report.		Eskom & Supplier representatives
3	Snr Supervisor receives the completed scope signed by both the Eskom Representative and Supplier's representative. Supervisor verifies and signs the scope thereafter sends the scope to the Contracts Co-ordinator		Snr Supervisor
4	Release Vegetation Work/Scope for quotations		Contract co-ordinator
5	Receive quotations/acknowledgement from contractor		Contract co-ordinator
6	Allocate Vegetation Work to specific contractor		Contract co-ordinator
7	Input data to SAP		Admin Support
8	Obtain SAP "45" number and release task order to contractor		Admin Support & Contract co-ordinator
9	Task order to be issued to the Contractor in writing (Fax, e-mail or by hand) Details that must appear on task order: a. CLN Area and Line/Substation designation where work is to be performed. b. Start date and end date c. Name of Contractor d. The 45# Order number e. Signatures of Eskom representative and Contractor f. Contract number		Contract co-ordinator
9	Copy of Task Order sent to CLN where work is taking place.		Contract co-ordinator
10	Contractor contacts the name of the Eskom representative whose name is on the Task order and notifies them of when they are going to start as well as the expected completion date.		Contractor

11	Contractor to submit a progress and production report weekly, this must contain a copy of the amounts of herbicide used and where.		Contractor
12	Eskom Representative to do regular site visits to check on progress and to check work on an on-going basis. Eskom representative confirms work done by doing site inspection and if satisfied then sends a signed report to the Contracts co-ordinator. If not satisfied with work done then the Contractor is requested to return and do follow up before payment is to be made.		Snr Supervisor, Eskom representative
13	Copies of the production and herbicide sheets to be filed at the CLN office and production sheets can be utilised to confirm work done on completion of work.		Senior Supervisor
14	Once all checks have been done on work completed, Assessmen accompanied by Progress report, Completion Certificate, Herbicide Register, Authorization of Responsible Person who supervised the work, PCO Certificate, Herbicide Training Certificate, Waste Removal Permit where applicable, Before & after Pictures, Gates registers, Landowner Consent Forms, Daily Risk Assessments, Health & Safety Stats.		Contractor
15	Senior Supervisor to compare Tax Invoice, Assessment Report and other documents within three days of receiving them. Compares them with daily hand written feedback of the field team, sign and dates the Tax Invoice, Assessment Report then forwards them together with all accompanying documents to the Contracts Coordinator.		Senior Supervisor/
16	Contract co-ordinator verifies the documents within two days, sign and dates the documents and submits to them to the Manager for approval, thereafter forwards them to Finance Support to capture on SAP in order to obtain the Service Entry number as well as the Goods Receipt number (GR)		Contract co-Ordinator
17	Finance Support creates the Service Entry and GR numbers within two days. Once they have been created the Finance Support sends them to the Contracts Coordinator.		Finance Support
18	Obtain the GR and send to the Contracts Co-ordinator		Admin Support
19	Contractor Coordinator includes the Service Entry and GR numbers on the Assessment Report and sends it to the Contractor.		Contract co-Ordinator
20	Contractor should include the GR number on the Tax Invoice and then submit the PDF Invoice to Finance Shared Services(FSS) within one week of receiving the Assessment Report. Keep records and make follow-up with payment centre.		Contractor

3 Health and safety, the environment and quality assurance

3.1 Health and safety risk management

In addition to the requirements of the laws governing health and safety, Eskom may have some additional requirements particular to the *service* and the Affected Property for this contract. The text below provides for these being attached as an Annexure to this Service Information. PLEASE ALSO READ CORE CLAUSE 27.4 TOGETHER WITH Z7 IN THE ADDITIONAL CONDITIONS OF CONTRACT TO MAKE SURE THAT WHATEVER IS INCLUDED IN THE ANNEXURE FOLLOWS ON FROM THOSE CLAUSES.

The Divisional/Regional Safety Risk Manager or his representative having jurisdiction over the *service* must provide the relevant safety, health and environmental (SHE) criteria for incorporation into this Service Information. The SHE specification / scope must be signed off by the Divisional/Regional Safety Risk Manager or his representative confirming that the applicable safety criteria have been taken into account.

The Commodity Manager / Buyer must refer the tender to the Divisional/Regional Safety Risk Manager or his representative in order to evaluate against enquiry-specific safety criteria.

The Divisional Safety Risk Managers who will be responsible for the allocation of resources to assist P&SCM with the above processes are as follows:

- Generation: Roley McIntyre
- Transmission: Tony Patterson
- Distribution: Alex Stramrood
- Enterprises: Jace Naidoo
- Corporate: Kerseri Pather

The *Contractor* shall comply with the health and safety requirements contained in Annexure _____ to this Service Information.

Safety Specification

Stakeholder management, relations and accountabilities

a) The relevant Customer Network Centre (Distribution) or Customer Load Network (Transmission) will be notified of the intention to conduct vegetation management operations prior to any work being undertaken. Establish and conduct Health and Safety Committee Meetings. For further details refer to 34-316: Occupational Health and Safety Committee Systems

b) Incorporation by Reference in Contracts: External Standards, Eskom and/or Divisional Procedural documents may be incorporated by reference into Eskom's Conditions of Contract.

Statutory Relationships

This procedure supplements Eskom's Conditions of Contract but shall not be considered as including all the responsibilities of Principal Contractors regarding the occupational health and safety requirements in terms of the Occupational Health and Safety Act, Act 85 of 1993.

a) The overall responsibility for occupational health and safety requirements at the Division sites and work to be carried out on public property of Local Authorities shall remain with the Principal Contractor and his sub-contractor/s.

b) All documents referred to in this procedure will be made available to the Principal Contractor by the Procurement Department who will consult with the necessary role players (i.e. Line Management, Risk Management, Environmental Management, and/ or other specialist as the need may be).

c) The Client may however from time to time order variations, alternations, modifications, amendments, additions, changes, revisions, cancellations or insertions to health and safety requirements to be met by Principal Contractors, via the organisational documentation control processes, provided that such requirements are communicated in writing to the other party.

d) Note: No extension of time will be allowed as a result of any action taken by Eskom in terms of, point c mentioned above, and the Principal Contractor shall have no claim against Eskom as a result thereof.

Furthermore, no amendments to Legislation or the Regulations or reasonable amendments to Eskom's Safety and Operating procedures shall entitle the Principal Contractor to claim any additional costs incurred in complying therewith from Eskom.

e) If a Principal Contractor considers any of the requirements in the procedure as being too onerous, exemption from specific clauses may be requested in writing through the Procurement Department who will consult with the relevant role players (i.e. Risk Management, Field Services, Major Engineering Works and Capital Programme).

f) Any difficulty experienced with the interpretation of this procedure may be discussed at any time with the Procurement Department who will consult with the necessary role players.

g) The OHS Act Requirements "Acknowledgement of Receipt form for Principal Contractors" shall be completed and signed by the Principal Contractor on award of the contract.

Felling of Dangerous Trees

Tree Felling Process

a) A team comprising a minimum of two people will fell a dangerous tree.

b) Where it is required for the tree to be strained with a tirlor, the team size will be increased so that a sufficient number of staff is available to operate the tensioning equipment in addition to the two persons referred to in the above bullet.

c) The person supervising the felling of the tree will take such a position that he / she has direct control over the chain saw operator and at the same time control the extended team while having overall control over the felling and landing of the large tree.

d) Before any tree is cut, the following will be considered and a risk mitigation plan will be devised and agree by all team members:

- i. The dimensions of the tree i.e. size and reach\
- ii. The risks to services and facilities i.e. roads and telecommunication lines
- iii. The electrical risks involved
- iv. Establishing the probable direction of fall of the tree
- v. Formulating the tactical steps required to manage the direction and pace of the falling tree.
- vi. Ensuring compliance to the General Risk Mitigation Requirements referred to in this standard.

Dangerous trees defined

a) Dead Trees: Trees like Black Wattle and Blue Gum are alien species and consume water at a rate higher than indigenous trees. They have been targeted by "Working for Water" as undesirable species and are systematically killed by ring barking or poisoning.

NOTE: Tall dead and dry trees are impossible to fell safely and any attempt to bring down under controlled conditions is prohibited because they vibrate when cut with a saw or chopped with an axe. These tremors result in large, high up branches becoming dislodged and presenting harm to any person standing under the tree.

b) Trees in the proximity of other services or facilities: Due to the long life expectancy of trees, various structures and/or services are positioned near trees over time. This may include telecommunication and power lines, buildings and structures, roads, water services, fences and even other trees. This includes underground services prone to shock damage.

c) Trees present the following hazards:

- i. It is often difficult to establish the exact fall direction and reach of the tree and thus it is difficult to estimate to a sufficient degree of accuracy the risk involved.
- ii. A tree which falls onto other trees or objects is difficult to bring to ground and can cause serious harm to persons or damage equipment when not controlled. This situation must be avoided at all cost.

d) Trees with structural damage to the heartwood of major branches or the trunk: Any deterioration of the heartwood (core) in the trunk of a tree results in its structural integrity being compromised. This makes it more dangerous for a person responsible to fell it as well as for people and assets in the vicinity since the fall direction cannot be predicted with sufficient accuracy. Cavities in tree trunks can be caused by:

- i. Pests like termites and beetles.
- ii. Fire damage to heartwood core

- iii. Rotting of the heartwood core
 - iv. Damage as a sapling that resulted in abnormal growth of the heartwood
 - v. Cracking or splitting of major branches.
- e) These cavities can be detected by:
- i. Visual inspection of the tree
 - ii. The lack of back pressure on the chain saw during the cutting process
 - iii. The reduction in the rate of shavings ejected by the chain saw during cutting.
- f) Trees with multi-leader trunks or major branches: Some trees develop multiple leader trunks either at ground level (resembling multiple trees growing from the same spot) or some distance up the tree. This type of growth complicates the felling process of large trees in the following ways:
- i. It hinders access to the base of the tree by the saw operator:
 - ii. It limits the fall direction that is selected
 - iii. It restricts movement and escape routes from the base of the tree if required.
- g) Trees with Hanger Branches: Trees with branches that have broken off earlier and where these branches are suspended higher in the trees may cause risk to those who fell the tree. The tree should not be felled unless the loose branches have first been removed.
- h) Dangerous Felling Environments: Over and above the risks listed above, felling dangerous trees can be complicated further by the following environmental conditions that require distinct consideration and mitigation.
- i. Roadside Work
 - ii. Tall trees which may fall in/on roads during the felling process may result in unacceptable risk to motorists or to the road surface. This procedure requires effective traffic control, which may include road closure with the assistance of the relevant traffic department. If it is anticipated that it can damage the road, the team supervisor shall collaborate with the relevant departments during the planning phase.
 - iii. Water Logged environments: When a tree is cut and there is a risk that it will fall into water, the necessary recovery equipment must be used to recover the tree safely. The additional risk of water movement must be contemplated and the risk mitigated. Where trees grow in water the following risks are to be considered and managed:
 - Depth of the water
 - Safe escape routes
 - Safe use of machinery in the water
 - Wildlife in the surroundings which may be impacted
- i) Electrical Risks: Electrical power lines introduce the following risks to the process of felling trees:
- i. Any contact of the tree with live wires must be avoided as under certain conditions the fibres become electrically conductive and touch potential can be introduced to the work place. This excludes approved live work practices as any touch point between the conductor and the tree will be insulated with covers as per approved live work procedure.
 - ii. Rigging equipment must be positioned in such a way that it avoids the possibility of coming into contact or close proximity to electrical networks.
- j) Atmospheric Conditions: Due to the large surface area that trees present to wind, the pressure can exert significant forces on the tree. This can either be a hindrance to cutting a large tree down or it can be a resource, depending on the strength and direction of the wind.
- i. If the wind is favourable, in other words it supports the preferred fall direction of the tree, felling the tree can be carried out safely. If the opposite is true, the felling of the tree should be deferred to a date that will support the safe felling of the tree.
 - ii. Rain or snow creates conditions which are not suitable to tree felling and must be avoided, except where the risk is greater by not felling the tree.
 - iii. Uneven or overgrown terrain: Where the terrain is sloping, uneven, overgrown by other vegetation and / or wet so that the chain saw operator or any person supporting them cannot move freely, or where the escape in case of emergency is compromised, the area will be cleared and / or sufficiently prepared to ensure safe tree felling conditions. The tree felling process will not continue unless an escape route has been determined and is clear from any obstructions.
- k) Establishing the most probable direction that a tree will fall
- Estimating the Tree Centre of Gravity: The growth of trees is impacted by standing wind, damage in early life and competition with adjacent trees for sunlight. In the latter case the tree will develop more branches (weight) in a direction away from the other tall trees in the immediate vicinity.
- a) Prevailing wind: The direction and force of the prevailing wind along with the area that the tree presents to the wind will also dictate its direction of fall. Trees will tend to fall in the same direction of prevailing winds if all other factors are equal. 5

- b) Structural weakness: A visual inspection considering the position of structural weaknesses in the tree and trunk will reveal in which direction it is most likely to fall if it fails or is being felled.
- c) Growth Patterns: All else being equal, the tree will tend to fall in the opposite direction to where the trunk cross section contains the healthiest fibres.

Managing the Direction of fall entails:

- a) Removing large branches from the tree to alter the tree centre of gravity: Remove big branches positioned on the trunk away from the desired direction of fall. This requires accessing the branches by climbing the tree with approved techniques discussed later in this document, and cutting it with a chain or standard bow wood saw.
- b) Using cutting techniques that influence the direction of fall: A third of the tree diameter is cut with a V tilted towards the top of the tree in the desired fall direction. A felling cut is made slightly higher than the lowest level of the v-cut also for a third of the tree diameter on the opposite side of the tree to the v-cut. This ensures that the remaining third of the tree trunk provides mechanical strength to the tree and the tree will tend to fall towards the v-cut, now the weakest point.
- c) Straining the tree in the desired fall direction: The tree is secured some distance above the estimated centre of gravity with steel ropes and tensioned with a tirlor to some anchorage point a safe distance away (which in itself is not always available) to initiate and control the fall direction and initial fall pace.
- d) Inserting a wedge in the fell cut to initiate and direct the fall: A wood or synthetic wedge of suitable size and wedge angle can be inserted and hammered into the felling cut to force the tree to fall in the desired direction.

General Risk Mitigation

- a) The physical climbing of dead trees is prohibited immaterial of the climbing technique used.
- b) Climbing trees using ladders and/or climbing irons:
 - i. Non-conductive ladders may be positioned against a tree and used to ascend and descend the tree only if the ladder is secured to the tree as it is imperative to effect the functioning of FAS while climbing. A person supporting the ladder at the bottom is not deemed to be securing the ladder to the tree. Instead, the ladder will be lashed to the tree in accordance with Eskom standards.
 - ii. If it is required that the person leave the ladder to climb higher in the tree or cut a specific branch, the person will secure him / herself with an approved anchorage point as defined in SCSPVACL6: "Procedure For Using Fall Arrest System" and DISASABW3: "Standard For A Fall Arrest System".
 - iii. The person climbing or descending the tree, with or without a ladder, shall not hold on to a saw of any kind while doing so. Equipment will be sent up to the person in the tree with the aid of a rope and a pulley system. 6

General Health and Safety Specifications, Contract Guidelines and OHS Act Requirements

Working above Ground Level

- a) The Principal Contractor shall ensure that employees are issued with a Fall Arrest System as the minimum personal protective equipment in accordance with the following procedure – DPC_34-1402 Procedure for Using Fall Arrest System.
- b) The team must have an appointed Supervisor when work is performed above ground level at all times.
- c) Ladders shall be in accordance with Eskom specifications and regular inspections shall be conducted. For further details refer to DPC_34-724: Inspection of fiberglass extension ladders.

Supervision:

Each Contractor construction team shall have an Authorised person in accordance with the Operating Regulations for High Voltage Systems or in accordance with the risks that have been identified when the plant is handed over by the Authorised person. The competent person shall have knowledge of the activities being performed and shall supervise the work being undertaken. (See 32-846 Operating Regulations for High Voltage Systems (1.64))

Working in the Vicinity of Power lines and Live High Voltage Apparatus:

Where work is conducted inside the boundaries of the way leave or servitude of an existing and energized power line, the work will be conducted by a Responsible person 34-846.

Compliance to the Incident Management procedure (34-350):

- a) A Flash Report to be submitted within 24 hrs. after the incident to the designated Eskom Official e.g. the Project Manager, Risk Management Representative;
- b) Conduct a Preliminary Investigation within 24 hrs. after the incident;
- c) Conduct the Formal Investigation within 7 working days after the incident.

Non-compliance

Eskom views the following at-risk behaviour in a very serious light:

- a) Anyone disregarding any requirements contained in the OHSA, NEMA, Eskom Health, Safety, and Environmental Policies, this document, site specifications, and approved Health and Safety Plans;
- b) Anyone performing an unsafe act or creating an unsafe condition that could pose a danger to such person(s) or to others;
- c) A Principal Contractor allowing any of his/her own employees or employees of their subcontractors (including casual labourers or Labour- broker employees) to work on any site without ensuring that each employee has received proper training.

Any such person described above will be subjected to a disciplinary process, and if found guilty, this may lead to dismissal in the case of an Eskom employee, and in the case of a Principal Contractor, it may result in the cancellation of the contract and blacklisting.

Contractor Occupational Health and Safety Program

- a) The Principal Contractor shall have his/her own approved Health and Safety Policy, which must be displayed, at his work site, where displaying of the policy proves to be impractical the document must be kept in the project SHE File.
- b) The Principal Contractor shall formulate, implement and maintain an Occupational Health and Safety Programme, ensuring that his employees avoid any act, which may endanger their own health and safety or that of other persons who may be affected by their conduct.
- c) All aspects concerning occupational health and safety shall be a permanent standing item on all relevant site-meeting agendas.
- d) The Principal Contractor's Occupational Health and Safety Programme shall ensure that his/her employees and sub- contractor employees adhere to Eskom Instructions, Standards, Procedures and Operating Regulations for High Voltage Systems. The programmer shall ensure that his/her employees:
 - i. Only work above ground level under continuous and direct supervision of the contractor's appointed Supervisor,
 - ii. Wear appropriate personal protective equipment and/or clothing,
 - iii. Refrain from proceeding with the work in the absence of the appointed Supervisor; and
 - iv. Adopt Eskom Procedure on the management of substance abuse in its entirety.

OHS Act Legal Appointments:

The Principal Contractor shall draw up an Occupational Health and Safety structure for the contract, which will form part of his/her Occupational Health and Safety Programme. Examples of Statutory Appointments required:

- a) OHS Act Section 16(2) Employer
- b) OHS Act GMR 2 (1) Supervisor of Machinery
- c) OHS Act GMR 2 (7) Supervisor of Machinery Assistant
- d) OHS Act Section 17 Health and Safety Representative

- e) Depending on the nature of the contract the assignments will be expanded.

General Safety Specifications

- a) Safety at Workplaces: All appropriate precautions shall be taken:
- To ensure that all workplaces are safe and without risk of injury to the health and safety of workers.
 - To protect persons present at or in the vicinity of a construction site from all risks, which may arise from such site?
 - All openings and other areas likely to pose danger to workers shall be clearly indicated.
- b) Means of Access and Egress: Adequate and safe means of access to and egress from all workplaces shall be provided, indicated where appropriate and maintained in a safe condition. This is particularly true for every instance where a dangerous tree is felled.
- c) Good Housekeeping on Work Sites: A suitable housekeeping programmer shall be established and continually implemented on each construction site which should make provision for the proper storage of material and equipment; and the removal of scrap, waste and debris at appropriate interval.
- Loose materials, which are not required for use, should not be placed or allowed to accumulate on the site so as to obstruct means of access to and egress from workplaces and passages.
 - All combustible refuse must be removed from the inside of all buildings at the close of each day. All other waste must be removed at least once a week.
 - The construction site should be suitably and sufficiently fenced off and provided with controlled access points to prevent the entry of unauthorised persons.
 - Waste and debris shall not be disposed of from a high place with a chute, unless the chute complies with the requirements as set out in Construction Regulation 12(6).
 - Material left lying about after completion of the contract will be removed by Eskom and the cost debited to the contract price.
 - Eskom will not be held responsible for the loss of any material dealt with in this manner.
 - The Principal Contractor must ensure that the work site is kept tidy for the duration of the contract.
 - Construction sites in built- up areas or along traffic routes should be fenced off to prevent the entry of unauthorised persons.
 - Visitors should not be allowed access to construction sites unless accompanied by or authorized by a competent person and provided with the appropriate protective equipment.
 - Fire extinguishing equipment shall be properly maintained and inspected at suitable intervals by a competent person.
 - Access to fire extinguishers such a hydrants, portable extinguishers and connections for hoses shall be kept clear at all times.
 - All Supervisors and a sufficient number of workers shall be trained in the use of fire extinguishing equipment, so that adequately trained personnel are readily available during all working periods.
 - Workers shall be suitably trained in the action to be taken in the event of fire, including the use of means of escape.
 - Where appropriate, safety symbolic signs shall be provided to indicate clearly the direction of escape in the case of fire.
 - Sufficient and suitable means to give warning in case of fire shall be provided, where this is necessary, to prevent danger. Such warning should be clearly audible in all parts of the site where persons are liable to work. There should be an effective evacuation plan so that all persons are evacuated speedily without panic and accounted for and all plant and processes shut down.
 - Notices should be posted at conspicuous places indicating: the nearest fire alarm and the telephone number and address of the nearest emergency services.
- d) Use and Storage of Flammable Liquids, Solids and Gases
- The Principal Contractor shall ensure that none of his/her employees work in an area where the vapour of any flammable liquid, solid or gas generated is of such an extent that a potential fire or explosion hazard is created, endangering the safety of any persons.
 - The Principal Contractor shall ensure that all flammable liquids, solids and gases are stored in stores built for that purpose.
 - Secure storage areas should be provided for flammable liquids, solids and gases in order to prevent trespassers.

- iv. Flammable liquids on site should be stored in a well- ventilated, reasonably fire resistant container, cage or room and kept locked with proper access control measures in place.
- v. When decanting, the metal containers should be bonded or earthed.
- vi. The appropriate type and adequate amount of fire- fighting equipment shall be installed in suitable locations around the flammable liquid, solid or gas store/handling areas.
- vii. The appropriate safety symbolic signs shall be affixed at all entrances/handling areas, prohibiting smoking and naked flames.
- viii. Combustible materials such as packing materials, sawdust, greasy/oily waste and scrap wood or plastic should not be allowed to accumulate in workplaces but should be kept in closed metal containers in a safe place.

e) First Aid and Facilities

- i. The Principal Contractor shall ensure that a sufficient number of trained first aiders are appointed for the number of employees on site.
- ii. Taking into account the type of injuries that are likely to occur on site, the nature of the activities performed and the number of employees at such a work site, the Principal Contractor shall ensure that the first aid box contains the minimum requirements in accordance with the General Safety Regulations.
- iii. First aid kits or boxes shall not contain anything besides material for first aid emergencies.

f) Hazardous Chemical Substances (Act 36 of 1947)

- i. If the Principal Contractor's activities in performing the work, involve the handling of any hazardous chemicals or substances the Contractor shall implement such precautionary measures as may be required by the relevant legislation.
- ii. The Principal Contractor must conduct an assessment to determine which employees are exposed to which hazardous chemical substances and shall provide the affected employees with the required training and personal protective equipment.
- iii. Training shall also be provided by the Principal Contractor on the correct use, care and limitations of such personal protective equipment.
- iv. In terms of Act 36 of 1947, only a registered pest control operator may apply herbicides on a commercial basis. All commercial application of herbicides shall be carried out under the supervision of a registered pest control operator. The following was agreed with the Registrar in August 2005.

In cases when Eskom staff applies herbicides on servitudes, then they must undertake this under the "management" of a registered PCO. There is no need for a PCO to be on- site at all times in this particular case.

- v. A daily register shall be kept of all relevant details of herbicide usage as stipulated in Act 36 of 1947.

g) Personal Protective Equipment

- i. The provision and use of personal protective equipment by employees is the Principal Contractor's responsibility. The Contractor shall be responsible to ensure that such equipment is worn at all material times.
- ii. It is also the responsibility of the Principal Contractor to do a risk assessment to establish what type of PPE his employees are required to wear based on the nature of the hazard and the type, range and performance of the protection required.
- iii. The Principal Contractor shall ensure that contractor employees are trained in the correct use, care, maintenance and limitations of PPE.
- iv. Workers working alone on construction sites in confined spaces, enclosed premises or in remote or inaccessible places should be provided with an appropriate alarm and the means to rapidly summons assistance in an emergency.
- v. All personal protective clothing provided by the Principal Contractor to his/her employees should clearly display its' Company logo.
- vi. Construction Welfare Facilities
- vii. An adequate supply of wholesome drinking water should be provided at or within reasonable access of every construction site
- viii. The following facilities should, depending on the number of workers and the duration of the work, be provided, kept clean and maintained at or within reasonable access of every construction site:
- ix. Sanitary and washing facilities or showers.
- x. Facilities for changing and for the storage and drying of clothing.
- xi. Men and women workers should be provided with separate sanitary and washing facilities.

h) Information and Training

- i. The Contractor shall ensure that employees directly involved with operational vegetation management are trained as specified in the standard 240-52456757 – “Contract specification for Vegetation management services on Eskom networks”.
 - ii. The training of Principal Contractor employees in occupational health and safety matters relevant to their work is the responsibility of the Principal Contractor, unless other arrangements have been made contractually.
 - iii. The Principal Contractor shall ensure that his officials and employees are acquainted with all relevant provisions of the Occupational Health and Safety Act, the Regulations and the requirements of all relevant Environmental Legislation.
 - iv. The Principal Contractor shall provide his/her employees with information on potential health and safety hazards to which they may be exposed at their workplace.
 - v. The Principal Contractor shall instruct and train his/her employees in the measures available for the prevention, control and protection against those hazards.
 - vi. No person shall be employed in any work at a construction site unless that person has received the necessary information, instruction and training so as to be able to do the work competently and safely.
 - vii. The information, instruction and training should be given in a language understood by the worker and written, oral, visual and participative approaches should be used to ensure that the worker has assimilated the material.
 - viii. The Principal Contractor shall provide his employees with all personal protective equipment and the appropriate tools required for the safe and proper execution of the work.
 - ix. The Principal Contractor shall, if requested to do so by the Procurement Department, demonstrate to the satisfaction of the Risk Management Department, that his employees and any sub- contractors have completed site and job orientation and any other qualifications and safety training that may be required by Eskom.
 - x. The Project Manager shall ensure that the Principal Contractor and his staff undergo compulsory on site safety induction prior to commencing work on Eskom work sites.
- i) Symbolic Safety Signs: The Principal Contractor shall display all the necessary health and safety warning signs in accordance with the identified hazards for the applicable work site. (General Administration Regulation 13)
- j) Communication: The Principal Contractor shall have a system in place to ensure the immediate communication to his/her employees and the on-site application, of any new Legislation, Regulations or relevant Eskom Standard that may come into effect during the course of the contract.
- k) Reporting of incidents and accidents
- i. Incidents, accidents and diseases shall be reported to the relevant authorities as stipulated in the Occupational Health and Safety Act, the Compensation for Occupational Injuries and Diseases Act and the various Environmental Legislation.
 - ii. These incidents shall also be reported to the Project Manager as it happens, before end of shift and or within 24 hours after the incident, who will be responsible for reporting it to the relevant Eskom Divisional Risk Manager.
 - iii. The Principal Contractor shall collect all safety- related statistics and shall report it to the Eskom Project Manager at the end of each month.
- l) Investigations of incidents and accidents
- i. All incidents and accidents shall be investigated as stipulated in the Occupational Health and Safety Act and Environmental Legislation.
 - ii. Thereafter corrective actions and recommendations agreed upon shall be followed-up on to assess the effectiveness of the remedial measures taken.
 - iii. Damage Incidents: All damage to Eskom or Contractor buildings, structures, vehicles equipment and the environment shall be reported to the Project Manager and investigated promptly by the Contractor to ensure that action is taken to minimize possible production delays.
 - iv. Monthly Incident/Accident Statistical Information Reports: At the end of each month the Principal Contractor on site shall submit the following information to the Project Manager and forward a copy to the relevant Eskom Risk Co- coordinator/Practitioner.
- m) Injury types
- i. The number of fatal incidents.
 - ii. The number of diagnosed and reported occupational diseases.

- iii. The number of disabling injuries.
- iv. The number of medical incidents.
- v. The number of first aid incidents

n) Incident types

- i. The number of electrical contact incidents.
- ii. The number of public incidents.
- iii. The number of vehicle incidents.
- iv. The number of environmental incidents.
- v. The number of damage incidents.
- vi. The number of near-miss incidents.
- vii. The Principal Contractor shall, briefly, provide the relevant details for each incident reported monthly.

o) The Identification of Occupational Health and Safety Hazards: The Principal Contractor shall, before proceeding with work, visit and inspect the site and shall establish whether there are any additional hazards to the health and safety of persons involved, in any work, which is to be performed there. The Principal Contractor shall report any additional hazards identified to the Project Management Clerk of Works.

p) Each person working on a site or visiting a site, and the surrounding community shall be made aware of the dangers likely to arise from operations at the site and the precautions to be observed to avoid or minimise those dangers. The necessary signage shall be posted at all times.

q) On Site Risk Assessments: A risk assessment shall be conducted in accordance with Regulation 7 of the Construction Regulations.

r) An Onsite toolbox talk including a risk assessment shall be conducted prior to the commencement of work. The team leader, after conducting pre-task planning and after facilitating the onsite risk assessment shall share all the tasks at hand, the identified risks and control measures with all his team members before commencing a specific task. This shall be done to ensure common understanding of the tasks, risks and control measures required.

s) Supervision of Contractor Employees

- i. The supervision of contractor employees performing construction work shall be executed in terms of Regulation 6 of the Construction Regulations.
- ii. The Principal Contractor shall ensure that the work is performed under the close supervision of a contractor's employee.
- iii. The Principal Contractor shall ensure that the Supervisor has been trained to identify and understand the hazards associated with the work and have the authority to ensure that precautionary measures prescribed by the OHS Act and Eskom are implemented.
- iv. The Principal Contractor shall strictly enforce discipline against any of his/her employees regarding non-compliance by such employee with any health and safety requirement.
- v. The Principal Contractor shall not permit the use of any unsafe machinery, plant, equipment, vehicle (including cranes, hoists and forklifts), substances, article, material, tool, protective equipment, ladder or scaffolding on Eskom premises.
- vi. The Principal Contractor shall not permit any of his/her employees to use any material, machinery or equipment of Eskom unless the prior written consent of the Company has been obtained.

t) Fall Protection: The Principal Contractor shall designate a competent person to prepare a fall protection plan, which will include a risk assessment of all work carried out from an elevated position. This shall be done in accordance with Regulation 8 of the Construction Regulations and DST_34-1131: Standard for a Fall Arrest System.

- i. Suspended Platforms: The Principal Contractor shall ensure that all suspended platform work operations are carried out under the supervision of a competent person who has been appointed in writing and that all suspended platform erectors, operators and inspectors are competent to carry out their work. The Principal Contractor shall ensure that proof of their training is kept on site. (In accordance with the requirements of the Construction Regulation 15)
- ii. Boatswain's Chairs: The Principal Contractor shall ensure that the boatswain's chair is securely suspended and constructed in such a manner to prevent any occupant from falling there from. Ensure inspections are carried out prior to use and performance tests are carried out immediately after erection and a visual inspection daily.

- iii. Material Hoists: A Principal Contractor shall ensure that every material hoist and its tower have been constructed of sound material in accordance with the generally accepted technical standards and are strong enough and free from defects.
- u) Hand Tools and Safeguarding of Machinery. Machinery and equipment, including hand tools, should:
- be of a good design and construction, taking into account, as far as possible, health and safety and ergonomic principles;
 - be maintained in good working order;
 - be used only for the work for which they have been designed unless a use outside the initial design purpose has been assessed by a competent person who has concluded that such use is safe;
 - be operated only by workers who have been authorized and given appropriate training;
 - Be provided with protective safety devices including guards, shields, earths, tools, barricades, vehicles, chains, ropes, and all relevant safety signs.
 - As far as practicable, safe operating procedures should be established and used for all machinery and equipment.
 - Operators of machinery and equipment should not be distracted while work is in progress.
 - Machinery and equipment should be switched off when not in use and isolated before any major adjustment, cleaning or maintenance is done.
 - Where trailing cables or hose pipes are used they should be kept as short as practicable and not allowed to create a safety hazard.
 - A maintenance programmer shall be implemented on all items of equipment and proper records shall be kept of inspections, testing's and work performed on these items, as required by the Occupational Health and Safety Act.
 - The Principal Contractor shall be responsible for inspecting and maintaining all his own tools, equipment and personal protective equipment.
 - The Principal Contractor shall enforce the correct application, maintenance and use of the equipment and tools.
- v) Explosive Powered Tools: The use of explosive power tools shall be executed in accordance with Regulation 19 of the Construction Regulations. No Principal Contractor shall use or permit any person to use an explosive powered tool, unless:
- It is provided with a protective guard around the muzzle end, which effectively confines any flying fragments or particles; and
 - The firing mechanism is so designed that the explosive powered tool will not function unless;
 - it is held against the surface with a force of at least twice its weight; and
 - the angle of inclination of the barrel to the work surface is not more than 15 degrees from a right angle;
 - Provided that the provisions of this sub-regulation shall not apply to explosive powered tools in which the energy of the cartridge is transmitted to the bolts, nails or similar relevant objects by means of an intermediate piston which has a limited distance of travel
- w) Stacking and Storage of Articles: The stacking and storage of articles on construction sites shall be undertaken in terms of Regulation 26 of the Construction Regulations.
- The Principal Contractor shall ensure that stacks are safe.
 - Stacking is to be executed by a person with specific knowledge and experience of this type of work.
- x) Vessels under Pressure: The Principal Contractor shall ensure that an Approved Inspection Authority tests all compressors and other pressure vessels the contractor intends to use on the specific site. Gas cylinders must always be stored in an upright position and properly chained. (Vessels Under Pressure Regulations 15, 16 and 17)
- y) Record Keeping: It is recommended as a result OF; the onerous requirements stemming from the Construction Regulations that Line Management (the Client requesting the service) keep copies of all Contractor health and safety plans indefinitely depending on the nature of the risks that were identified in the required risk assessments.
- z) Transportation of Staff (34-317): As the health, safety and wellbeing of all persons working in the Eskom environment is of paramount importance to the organisation, no person shall be transported on the back of open vehicles or in the canopy of a vehicle. This excludes:
- persons being transported in an enclosed approved crew cab;

- ii. or in a canopy fitted with proper seats and seat belts;
- iii. or at the back of an open vehicle where it is not reasonably practicable, namely, where vehicles are used during line inspections on sites or private roads, or similar cases, when such vehicles must be driven at less than 30 km per hour.
- iv. The organisation fully commits itself to achieving and maintaining best practices as it continually strives, as far as it is reasonably practical, to provide a healthy and safe working environment.
- v. Contractors and Contractor employees are exempt from obtaining Eskom Driver permits.
- vi. Diligently and consistently managing substance abuse practices within the workplace (Refer to DPC 34- 367);
- vii. Effectively managing all employees utilising fleet resources by regularly checking the validity and legitimacy of driver's licences and managing changes in the employee's current health condition when brought to his/her attention;
- viii. Working with Construction Vehicles near Power lines: Where work is conducted with the aid of a construction vehicle with an extendable articulated component or a conductive body extending device that could encroach the safe working clearance tabled in 34-846, the work is deemed close proximity work as defined and specified in 34-846.
- ix. All construction vehicles will meet the specifications of 34-487 and all work with construction vehicles will meet the requirements of Procedure 34-445.
- x. Where work is to be performed under a permit on Medium or High Voltage Power lines that has been opened, isolated and earthed in terms of 34-846, equipotential earthing will be applied by the contractor as specified by the Procedure 34-444 employing earths specified by Specification 34-487. Any work on apparatus will be conducted in a touch potential free working environment as required by the referenced documents.

aa) All vehicles and earth- moving or materials- handling equipment should:

- i. be of good design and construction taking into account as far as possible ergonomic principles particularly with reference to the seat;
- ii. be maintained in good working order;
- iii. be properly used with due regard to health and safety;
- iv. be operated by workers who have received appropriate training, by their employers, in accordance with legislative requirements.
- v. All drivers have the relevant valid licences.
- vi. The employer of all drivers and operators of vehicles and earthmoving or materials handling equipment shall ensure that the employees are medically fit, trained and tested in accordance with legislative requirements.

bb) On all construction sites on which vehicles, earthmoving or material handling equipment are used:

- i. safe and suitable access ways should be provided for them;
- ii. traffic should be organised and controlled as to secure their safe operation
- iii. Adequate signalling or other control arrangements or devices should be provided to guard against danger from the movement of vehicles and earth moving or material-handling equipment. Special safety precautions should be taken for vehicles and equipment when manoeuvring backwards.
- iv. The assistance of a trained and authorized signaller should be available when the view of the driver or operator is restricted. All involved should understand the signalling code.
- v. The Principal Contractor shall see to it that all his employees obey road traffic signs and speed limits at all times.
- vi. Any person ignoring or violating traffic rules on site may be prevented from driving on the site or even prevented from entering the premises.
- vii. When earth-moving or material-handling equipment is required to operate in dangerous proximity to live electrical conductors, adequate precautions should be taken, such as isolating the electrical supply or erecting overhead barriers of a safe height.
- viii. Preventive measures should be taken to avoid the fall of vehicles and earth- moving or materials- handling equipment into excavations or into water.
- ix. Contractor owned construction vehicles and mobile equipment shall be in a roadworthy condition at all times in accordance with the National Road Traffic Act. (Refer to Regulation 21 of the Construction Regulations for details of all requirements under the heading of Construction vehicles and mobile plant.)
- x. Contractor owned vehicles shall display their own company logo on their vehicles used during the duration of the Eskom contract.

cc) Cranes: Notwithstanding the provisions of the Driven Machinery Regulations promulgated by Government Notice No.R.533 of 16 March 1990, as amended, a Principal Contractor shall ensure that where tower cranes are used:

- i. account is taken of the effects of wind forces on the structure;
- ii. account is taken of the bearing capacity of the ground on which the tower crane is to stand;
- iii. the bases for the tower cranes and tracks for rail- mounted tower cranes are firm and level;
- iv. the tower cranes are erected at a safe distance from excavations;
- v. there is sufficient clear space available for erection, operation and dismantling;
- vi. the tower crane operators are competent to carry out the work safely

Content of the Contractor Health and Safety File

- a) Contract appointing Contractor.
- b) Health and Safety Specification
- c) Approved Health and Safety Plan.
- d) The Contractor's organogram.
- e) Company Health and Safety Policy.
- f) Agreements as contemplated in terms of Section 37(2) of the OHS Act.
- g) Organisational organogram (detailing all statutory appointments). List all possible appointments.
- h) OHS Act, Section 17 –Appointment of the Health and Safety Representatives
- i) Specific Construction Regulation Appointments:
 - i. Regulation 4 (1) (c) –Appointment of the Principal Contractor
 - ii. Regulation 4 (5) –Appointment of the Client Agent
 - iii. Regulation 5 (3) (b) –Appointment of the Contractor
 - iv. Regulation 6 (1) –Appointment of the Construction Supervisor
 - v. Regulation 6 (6) –Appointment of the Construction Site Health and Safety Officer
 - vi. Regulation 7 (1) –Appointment of the Construction Site Risk Assessor
 - vii. Regulation 8 (1) (a) –Appointment of the Fall Protection Plan Developer
 - viii. Regulation 10 (a) –Appointment of the Formwork and Support Work Supervisor
 - ix. Regulation 11 (1) –Appointment of the Excavation Work Supervisor
 - x. Regulation 12 (1) –Appointment of the Demolition Work Supervisor
 - xi. Regulation 14 (2) –Appointment of the Scaffolding Supervisor
 - xii. Regulation 15 (1) –Appointment of the Suspended Platform Supervisor
 - xiii. Regulation 17 (8) –Appointment of the Material Hoist Inspector
 - xiv. Regulation 18 (1) –Appointment of the Batch Plant Supervisor
 - xv. Regulation 19 (2) (g) (i) – Appointment of the Explosive Powered Tools Issuer
 - xvi. Regulation 21 (1) (j) –Appointment of the Construction Vehicles and Mobile Plant Inspector
 - xvii. Regulation 22 (e) –Appointment of the Temporary Electrical Installation controller
 - xviii. Regulation 26 (a) –Appointment of the Stacking and Storage Supervisor
 - xix. Regulation 27 (h) –Appointment of the Fire Extinguisher Inspector
- j) Copies of relevant Appointment letters.
- k) Certificates of Compliance for electrical installations.
- l) Exemptions and/or notifications.
- m) COID Registration
 - i. Registration number
 - ii. Letter of good standing
- n) Risk assessments and analysis
 - i. Task and Job Listing
 - ii. Task analysis
 - iii. Risk assessments
 - iv. Risk Control Strategies
 - v. Safety work procedures
 - vi. Fall protection plan
 - vii. Fall protection risk assessment
 - viii. Scaffold plan and inspection records
- o) In case of Modifications, the revised Health and Safety Specifications and Approved Health and Safety Plans and relevant Risk Assessments
- p) Evacuation plans and Emergency contact details
- q) PPE – Personal Protective Equipment

- i. List of PPE
- ii. Issue list
- iii. Inspection of PPE
- iv. Material Safety Data Sheets
- r) Training records
 - i. The relevant training records of all employees
 - ii. Health and safety induction
 - iii. Risk assessment training
 - iv. Responsible persons (ORHVS)
- s) Medical Records
 - i. Proof of medical surveillance plan
 - ii. Minutes of all site and statutory meetings
 - iii. Agenda
 - iv. Minutes
- t) Incident reporting and investigation reports
 - i. Report of incident to the Department of Labour
 - ii. Report of incident to Eskom (The Project Manager)
 - iii. Report to COID
 - iv. OHS Act Annexure 1
 - v. Proof of follow-up and close out of incident recommendations
 - vi. Non-conformance reports including Disciplinary action records pertaining to safety managements
- u) Monthly Audit reports
- v) Maintenance Plans for Machinery and equipment
- w) Project Close-out/review reports
- x) Health and Safety File: Copy of the Health and Safety File must be available on site
 - i. It must contain a copy of the organisational organogram specifically depicting the appointment of the Construction Supervisor
 - ii. OHS Act Appointments
 - iii. Copies of the relevant OHS Act appointments for that specific work site
 - iv. List of names of persons working under the supervision of the Construction Supervisor
 - v. Design and work specifications
 - vi. Technical drawings
 - vii. Technical specifications
 - viii. Relevant Eskom Policies, Standards and Procedures
 - ix. Risk analysis, Risk profiling and Job Observations
 - x. Relevant task analysis
 - xi. On-site risk assessments
 - xii. Specific written safe work procedures
 - xiii. Personal protective equipment (PPE)
 - xiv. Proof of job observations conducted
 - xv. Sub-Contractors
 - xvi. List sub-contractors and contract details (where applicable)
 - xvii. Proof of sub- contractor competencies
 - xviii. ORHVS authorisations
- y) Inspections (site specific)
 - i. Record of relevant / required inspections (site specific)
 - ii. Occupational Health and Hygiene Surveys
 - iii. Proof of survey reports (where applicable)
- z) Incident investigations
 - i. Copies of the incident report to the Department of Labour
 - ii. Copies of the incident reporting to Eskom (Project Manager)
 - iii. Copies of report to COID (where applicable)
- aa) Copies Of OHS Act Annexure 1's

3.2 Environmental constraints and management

The *Contractor* shall comply with the environmental criteria and constraints stated in Annexure _____

Environmental Preservation

- a) Reference Environmental Impact Assessment Regulations (NEMA)– Where in the interest of vegetation management it is required to clear an extended area of vegetation, the EIA regulation should be consulted and where required a new environmental authorisation shall be obtained.
- b) Deep valleys and environmentally sensitive areas that restrict vehicle access, or legally protected areas, shall not be cleared of vegetation provided that the vegetation poses no threat to the safe operation and reliability of the power line. In the case of the construction of new power lines, a one (1) meter “trace-line” may be cut through the vegetation for stringing purposes only and no vehicle access shall be allowed along the cleared “trace-line”. Alternative methods of stringing across inaccessible valleys should however be considered.
- c) Measures to prevent soil erosion shall be implemented at all times. Road construction may only be undertaken following agreement of authorities and obtaining of Environmental Approvals.
- d) Rivers, watercourses and other water bodies shall be kept clear of felled trees, vegetation cuttings and debris. The integrity of riverbanks shall be maintained by only trimming parts of trees directly affecting the safe operation of the power line
- e) Aesthetic consideration shall be taken into account, especially where power lines cross major roads and rivers, or enter dense vegetation, or woodlands.
- f) Trees, shrubs, grass, natural features and topsoil, which are not removed during the vegetation control operations, shall be protected from damage during operation of the power line. Disturbance of the surface of the earth shall only be allowed for access purposes.
- g) It shall be ascertained from the property owners concerned whether they wish to retain the cut vegetation. If not, it shall be removed, or disposed of in an appropriate manner to the satisfaction of the owner. Burning shall not be permitted under any circumstance.
- h) High levels of biomass below a power line may lead to increased risk of flash over during fires. Annual fire management programs will need to be implemented to manage the risk appropriately, and it may be necessary to remove all trees and shrubs below a line.
- i) Branches and other debris resulting from pruning processes should not be left below conductors, or in areas where it will pose a risk to infrastructure.
- j) Debris shall not be burnt under any circumstances.
- k) Fires shall not be made for the purpose of chasing or disturbing indigenous fauna.

Disposal of cut vegetation is the sole accountability of the Contractor allocated to the line route. Cost of disposal is regarded as project specific cost and quotes based on standard rates, to be submitted to Eskom as required by the project (Task Order to be issued before commencement of work). Eskom reserves the right to verify quotes in detail on any project.

Pest Control and Application Requirements

- a) The use of herbicides shall be in compliance with the terms and conditions of The Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act 36 of 1947).
- b) Only a registered pest control operator may apply herbicides on a commercial basis. All commercial application of herbicides shall be carried out under the supervision of a registered Pest Control Officer who shall be present on site.
- c) Where a worker is likely to be exposed to any chemical, physical, biological hazard/agent and climatic conditions to such an extent that it may be dangerous to his/ her health, appropriate preventive measures shall be taken against such exposure.
 - i. The preventive measures referred to in paragraph (a) should place emphasis on the need to eliminate or reduce the hazard at the source and in particular should require:
 - ii. The replacement of hazardous substances by harmless or less hazardous substances wherever possible;

- iii. Technical measures applied to the plant, machinery, equipment or process;
- iv. Control the release of harmful agents or chemicals into the working environment;
- v. Training in manual lifting;
- vi. Appropriate protection against climatic conditions likely to jeopardize health;
- vii. Proper working posture when workers are required to work in fixed working positions or when they are carrying out repetitive work;
- viii. Where workers are required to enter any area in which toxic or harmful substances may be present, or in which there may be an oxygen deficiency, or a flammable atmosphere, adequate measures shall be taken to guard against danger.
- ix. Waste shall not be destroyed or otherwise disposed of on a construction site in a manner, which is liable to be injurious to health.
- x. The employer should make arrangements for the identification and assessment by competent persons of health hazards presented by the use of different operations, plant, machinery, equipment, substances and radiations at the construction site and takes appropriate prevention and control measures against the identified health risks in conformity with legislative requirements.

Note: Where it is not possible to comply with the above mentioned sub-paragraphs, other effective measures, including the use of personal protective equipment and clothing shall be applied

Fire Protection

In terms of the Veld and Forest Fire Act (Act 101 of 1998 as amended), owner of land which belongs to a state owned enterprise is obliged to comply with the provisions of The Veld and Forest Fire Act inclusive of membership of registered fire protection associations, requirements for fire breaks and firefighting provisions. Eskom does participate in several registered Fire Protection Associations, prepare fire breaks and in certain instances actively participate in firefighting provisions, although this is executed in an uncoordinated fashion. This absence of coordination has necessitated the establishment of this standard.

Eskom's infrastructure and operations are at risk of being impacted by veld and forest fires and Eskom's plant and people can trigger veld and forest fires. The Eskom Fire Protection Association Participation standard guides on the relationship between Eskom and Fire Protection Associations in terms of the National Veld and Forest Fire Act (Act 101 of 1998) as amended (The VFF Act) as well as the National Disaster Management Act (Act 57 of 2002) as amended (The DM Act) and National Disaster Management Framework (2005) (NDMF).

The Veld and Forest Fire Act places a duty on all owners to acquire equipment and have available trained personnel, equipped with the appropriate firefighting PPE to fight veld and forest fires. Certain persons and officials are given the power to enter land and fight fires in an emergency.

The Fire Safety Plan must clearly reflect where any site that is within a registered FPA will not be able to practicably participate in firefighting and where such site ensures that the fire prevention measures, as mentioned in 3.2, will suffice as risk treatment. Such prevention measures must reasonably show that a veld fire will not start on, burn from or spread from the Eskom site. Where sites are within a registered FPA and such sites are able, equipped and trained to practicably participate in firefighting the Fire Safety Plan of such a site must describe to what level such site will participate and contribute in fighting veld and forest fires.

Fire Prevention:

Adherence to statutory requirements relating to the requirements of the Veld and Forest Fire Act (Act 108 of 1998 as amended) must be ensured. This is to be reflected in all aspects of the Eskom management, control, operations and functions.

In terms of Eskom document 32-124, Eskom Fire Risk Management Standard, each affected area must perform a Fire Specific Risk Assessment and compile a Fire Safety Plan based on the outcome. Where Eskom owned land includes the risk of veld fires it must be reflected in the FRA and the Fire Safety Plan. In all instances where Eskom owns land within a registered FPA fire breaks are mandatory to protect Eskom

assets from veld fires emanating from externally and to prevent any unplanned fires that occur on the Eskom property from spreading to any neighbouring land. Where Eskom owned land is not within a registered FPA the creation of fire breaks are to be determined through the Fire Risk Assessment.

41-334, Vegetation Management Guideline must be utilized to determine the most appropriate methods for the creating of the fire breaks, which may be accomplished through grass cutting, chemical treatment, and mechanical means or controlled burning, amongst others.

Where Eskom makes fire breaks under power lines for purposes of protection of the system and continuation of supply the purpose of such fire breaks is for risk treatment and not as compliance to The VFF Act.

Under the fire danger rating system, no individual, whether a land owner or not, may light fires in the open air when the danger rating is high.

Note: All Eskom field personnel and contractors need to be made aware of the fire danger index and take note of the risk of run-away fires under high fire danger index conditions.

The table below shows the Minimum Requirements to be met by the Vegetation Management Contractors.

Brush cutter operators	Bakkie Sakkie Min 200 litres	PPE for job at hand	Basic fire fighting training	Fire beater	Knapsack Min 15 l	DCP - fire extinguisher min 2.5kg	25l water containers	Emergency contact list	Emergency kit, cell	Basic tool kit	FDI - actuals plus forecast for relevant	Relevant signage	Public liability Insurance
Team of 5 people		All	All	5	1	1	1	Yes	Yes	1	Yes	Yes	Yes
Team of 10 people	1*	All	All	10	2	2	2	Yes	Yes	1	Yes	Yes	Yes

*Access to reserves within 5km radius

Lawn Mowers or Grass slashers	Bakkie Sakkie Min 200 litres or fire tender	PPE for job at hand	Basic fire fighting training	Fire beater	Knapsack Min 15 l	DCP - fire extinguisher	5l water containers	Emergency contact list	Emergency kit, cell phone and	Basic tool kit	FDI - actuals plus	Relevant signage	Public liability Insurance
Unit	*For every 5 units	All	All	1	1	1	1	Yes	Yes	1	Yes	Yes	Yes

*Access to reserves within 5km radius

Firefighting Provisions: having such equipment, protective clothing and trained personnel for extinguishing veld or forest fires or assist in doing so.

3.3 Quality assurance requirements

Specify minimum requirements for the *Contractor's* Quality Plan and Work Procedures or provide the *Employer's* Quality Plan if that is to be used. Make sure witness and hold points are identified generally and describe any particular requirements for QA outside the Affected Property. Indicate how the *Contractor's* QA documentation is to be submitted for acceptance and any conditions that need to be imposed relating to acceptance. State whether ISO compliance is a condition and if so which ISO standard shall apply.

Technical Reporting Requirements

The invoice and production reporting requirement will include the following:

- a) Before and after photos of area where work was done. This will form part of the invoice submission and approval process.
 - b) The Production Report will include the following detail per line segment (can be ring fenced by referencing the pole numbers on the Biome perimeter) exposed to the specific biome. (Pole x to z))
 - c) The Surface area cleared or treated in m2
 - d) Biome type treated
 - e) Vegetation control activity applied (Mechanical tree/scrubs/reeds/grass harvest and removed and/or or Pest Control applied
 - f) Submission of the relevant permit or copy thereof for the area treated
 - g) Copies of the Land owner agreements/consent forms or instructions signed
 - h) Advise of the optimal duration to the next maintenance activity cycle based on the vegetation type in the biome
 - i) Pest Control application Certificate (Chemical description, volumes and area in which applied.
 - j) Reporting and requesting outages for the cutting of trees that is encroaching the minimum safety clearance
 - k) Health and Safety Incident report if applicable and Daily Risk Assessments
- Reporting any access restrictions preventing work to be performed or completed.

4 Procurement

There is a cross reference from the core clause 11.2(6) definition of Disallowed Cost to the Service Information regarding procurement procedures. This part of the Service Information MUST include any such procedures to be able to administer Disallowed Cost.

4.1 People

4.1.1 Minimum requirements of people employed

Specify any constraints relating to people employed to Provide the Service; for example permits for foreigners, training (other than H & S), use of labour from designated areas and industrial relations.

Team Leader:

The contractor must appoint a Team Leader per team who will be in charge of the day to day activities of the work team. The Team Leader needs training in the following:

- ORHVS module 1,2,3,4 & 7(HVO2)
- Fire Fighting
- Herbicide training
- First Aid level 1 & 2
- Environmental Training
- Environmental Law
- Fall Arrest Training
- Fall Arrest Recovery Training
- PCO license

The above mentioned courses are the most important. Additional training required by government or Eskom standards could be identified at a later stage and will need to be completed in a reasonable negotiated time period.

The Team Leader shall ensure that all safety regulations and procedures are adhered to. He/ she must be on site at all times and no work may be performed if the team leader may not keep direct supervision of work performed. He/ she must be able to assess the risks on the project and ensure that all steps are taken to minimize risks. If work cannot be done safely he should move off site and ask his contract manager and the Eskom Supervisor to assist.

The Team Leader must negotiate all work with Eskom customers. Written permission (use standard Landowner Consent Form) must be obtained from each customer before any work may be performed. The

property owner must sign the approved consent form to indicate whether permission is provided or not for access, cutting & herbicides. No work may be performed without the signed approval from the customer. If access is rejected by the customer a Contracts manager must also approach the customer and try to obtain approval. If any work is performed without the signed permission form the Employer will not accept any responsibility for claims submitted by the property owner. The company will need to rectify the situation to the complete satisfaction of the property owner.

Contractor Classification and licencing by Eskom

All prospective contractors will submit their credentials to be licenced for the type and classification as an approved Vegetation Management Service Provider according to the groups listed below. Only then will a Service Provider be considered for a contract.

The following terms shall apply

- a) A company will be licenced by Eskom according to its capacity and technical competencies in one or more classes. The company shall licence every team according to its capacity and technical competences in one or more classes.
- b) A portfolio of evidence for every member in the team shall be maintained in the site safety file and the team leader shall ensure that all members comply with minimum requirements
- c) A punitive system in accordance with commercial processes shall be employed to assure safe operations, work quality and environmental preservation.
- d) Licence Card shall be valid for the duration of the contract.
- e) Auditing and assurance on site shall be the responsibility of the Ops and Maintenance Manager of the OU and shall ensure record keeping and audit trail for the card system

Conformance Management

- a) Development of SHE Evaluation questions to measure degree of compliance of the Contractor.
- b) Make use of activity assessment form to measure degree of compliance.

License Category A (See Annexure C):

- a) Level 1. Grass cutting
- b) Level 1 A. Tractor user
- c) Level 2. Brush and low risk tree cutting
- d) Level 3. High risk tree cutting

Licence Category B:

- a) Level 1. Herbicide applicators

Contracts Manager:

Each Contractor must have a Contracts Manager (can be senior management). This person will be responsible for safety, quality and production on all of his sites. This contract manager must be available to the Employer or his representatives at all times. He must do regular site and quality inspections by himself and visit each team at least once a week by himself.

He is also required to go with the Eskom Representative to inspect the work completed to date. It should be standard practice that he accompanies the Eskom Representative to perform safety and quality inspections. The Eskom Representative will complete the Inspection Form on site and this must be signed by both the Team Leader and the Contracts Manager. The Eskom Representative may perform surprise visits without the Contracts Manager.

The Contracts Manager will report to the relevant Eskom CLN/Department on a regular basis (once a week) to inform him of progress and problems encountered and provide feedback on the work completed during the previous week.

The format on which the feedback needs to be provided will be given to him by Eskom.

Each company is responsible for his own Quality Management. Part of this is to have a comprehensive Quality Management System for his Company. The practical part of this is inspection by the Contracts Manager to ensure that all work comply to the Eskom standard. On the days that the teams are visited the Contracts Manager must either sign the Pre Task Analysis or complete a separate report which must be filed in Supervisors file as proof of his visit and acceptance of the quality of work performed.

This service will be rated on a 3 monthly basis by the Employer. If not acceptable or if there is too many mistakes on site the contractor will be informed of his poor quality management. This will not be allowed and can lead to suspension or contract termination.

General:

- The contractor shall adhere to Eskom procedure ESKASABG3 and shall confirm that he understands the procedure and will adhere to the procedure at all times.
- The contractor will be required to have Eskom identification on himself and his staff as well as the vehicles which will be supplied to him by Eskom.
- Where any vegetation are very close to or touching Eskom live conductors the contractor will inform the senior of the CLN/Department before doing any tree or bush cutting. He will only proceed to cut vegetation when it is safe to do so. All work must be performed in accordance with the Scope of work layout.

Work done by the contractor will be checked by Eskom staff and a non-conformance will be issued if work is not according to the required standard. Where repeated non-conformance is issued to the contractor for the same type of mistake and unwillingness from the contractor to correct are evident, this will be reason for termination of the contract with penalties.

4.1.2 BBEE and preferencing scheme

Specify constraints which *Contractor* must comply with after contract award in regard to any Broad Based Black Economic Empowerment (B-BBEE) or preferencing scheme measures.

4.1.3 Accelerated Shared Growth Initiative – South Africa (ASGI-SA)

If the ASGI-SA requirements are to be included in this contract specify constraints which *Contractor* must comply with after contract award in regard to any ASGI-SA requirements. The ASGI-SA Compliance Schedule completed in the returnable tender schedules is reproduced here. If ASGI-SA does not apply, delete this paragraph.

The *Contractor* complies with and fulfils the *Contractor's* obligations in respect of the Accelerated and Shared Growth Initiative - South Africa in accordance with and as provided for in the *Contractor's* ASGI-SA Compliance Schedule stated below

[Insert the agreed ASGI-SA Compliance Schedule here]

The *Contractor* shall keep accurate records and provide the *Service Manager* with reports on the *Contractor's* actual delivery against the above stated ASGI-SA criteria. [Elaborate on access to and format of records and frequency of submission etc.]

The *Contractor's* failure to comply with his ASGI-SA obligations constitutes substantial failure on the part of the *Contractor* to comply with his obligations under this contract.

4.2 Subcontracting

4.2.1 Preferred subcontractors

TSC3 does not make use of nominated subcontracting, but the *Employer* may list which subcontractors or suppliers the *Contractor* is required to enter into subcontracts with. This is usually only required where specialist services need to be obtained from a particular supplier or group of suppliers in order to comply with operational standards.

a) Sub-contractors

- I. In terms of the Construction Regulations, all the duties that the Client has towards the Principal Contractor, the Principal Contractor in turn have towards all his/her sub-contractors. It must be

noted that the Principal Contractor remains accountable and responsible for his/her sub-contractors.

- II. All the responsibilities reflected in the section on the responsibilities of Principal Contractors, which apply to the Principal Contractor, must apply to the Subcontractor.
- III. The relationship between the Principal Contractor and the Sub- contractor will be governed by the contractual arrangements into which they have entered.
- IV. Whilst the Principal Contractor has overall responsibility for the site, this does not remove from the Sub-contractor any of their responsibilities. Any areas of concern should be discussed urgently with the Principal Contractor.
- V. The sub-contractor shall be an Eskom approved contractor and Eskom needs to be informed if a sub-contractor was appointed.

b) Emerging Contractors

- I. The development of Black or Black Empowering Suppliers/Contractors shall be done in accordance with the policy on Procurement from Black Suppliers- ESKADAAT6.
 - II. Development areas or areas for improvement shall be identified during the supplier management / qualification process. Record shall be kept of the action required and an agreed time period shall be given to the supplier/contractor to develop to the required standards in accordance with ESKADAAT6.
- c) The Principal Contractor shall enter into written contracts with his sub- contractors in terms of section 37(2) of the Occupational Health and Safety Act, whereby all safety procedures and arrangements are agreed upon amongst them.
- d) The Principal Contractor shall accept full responsibility for any acts or omissions of his sub- contractors, when creating a safety, health or environmental hazard.
- e) Incorporation by Reference in Contracts: External Standards, Eskom and/or Divisional Procedural documents may be incorporated by reference into Eskom's Conditions of Contract.

Therefore, this procedure supplements Eskom's Conditions of Contract but shall not be considered as including all the responsibilities of Principal Contractors regarding the occupational health and safety requirements in terms of the Occupational Health and Safety Act, Act 85 of 1993.

- f) The overall responsibility for occupational health and safety requirements at the Division sites and work to be carried out on public property of Local Authorities shall remain with the Principal Contractor and his sub- contractor/s.
- g) All documents referred to in this procedure will be made available to the Principal Contractor by the Procurement Department who will consult with the necessary role players (i.e. Line Management, Risk Management, Environmental Management, and/ or other specialist as the need may be).
- h) The Client may however from time to time order variations, alternations, modifications, amendments, additions, changes, revisions, cancellations or insertions to health and safety requirements to be met by Principal Contractors, via the organisational documentation control processes, provided that such requirements are communicated in writing to the other party.
- i) Note: No extension of time will be allowed as a result of any action taken by Eskom in terms of, point c mentioned above, and the Principal Contractor shall have no claim against Eskom as a result thereof. Furthermore, no amendments to Legislation or the Regulations or reasonable amendments to Eskom's Safety and Operating procedures shall entitle the Principal Contractor to claim any additional costs incurred in complying therewith from Eskom.
- j) If a Principal Contractor considers any of the requirements in the procedure as being too onerous, exemption from specific clauses may be requested in writing through the Procurement Department who will consult with the relevant role players (i.e. RISK Management, Field Services, Major Engineering Works and Capital Programme).
- k) Any difficulty experienced with the interpretation of this procedure may be discussed at any time with the Procurement Department who will consult with the necessary role players.
- l) The OHS Act Requirements "Acknowledgement of Receipt form for Principal Contractors" shall be completed and signed by the Principal Contractor on award of the contract.

4.2.2 Subcontract documentation, and assessment of subcontract tenders

Specify any constraints on how the *Contractor* is to prepare subcontract documentation, whether use of the NEC system is compulsory or not (compulsory is recommended) and how subcontract tenders are to be issued, received, assessed (using a joint report?) and awarded.

4.2.3 Limitations on subcontracting

The *Employer* may require that the *Contractor* must subcontract certain specialised work, or that the *Contractor* shall not subcontract more than a specified proportion of the whole of the contract.

4.2.4 Attendance on subcontractors

State requirements for attendance on Subcontractors, if any

4.3 Plant and Materials

4.3.1 Specifications

List the Specifications that apply to this contract.

Title	Date revision	or	Tick if available	publicly
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240-52456757:Contract Specification for vegetation management services on Eskom networks 240-70172585:Vegetation Management and Maintenance within Eskom Land, Servitudes and Right of Way 240-131190011:Eskom Fire Protection Association Participation Rev.1 32-124: Eskom Fire Risk Management 240-84733329: Medical Surveillance Procedure 240-135662021 (DMN 34-98): Working with chainsaws on ground level and from a bucket attached to a vehicle mounted crane/aerial device 240-134709307(DMN 34-99): Work with mechanical high cutters - on ground level and from a bucket attached to a vehicle mounted crane/aerial device 32-418: Work at Height Standard 240-100979499: Personal Protective Equipment for Work at Heights Specification 34-1710: Provision and Use of Personal Protective Equipment 34-323: Personal Protective Equipment Specification 34-333: Health and Safety Requirements to be met by principal contractors employed by Eskom. 240-62946386: Vehicle and Driver Safety Management Procedure 240-80605256: 34-190: Access to farms (including strategy on dealing with game farms 240-125120940(DMN 34-100): Work with petrol driven pruners - on ground level and from a bucket attached to a vehicle mounted crane/aerial device		
NOTE: It is the responsibility of the Eskom Grid Contracting Agent or responsible person, to provide the most recent version of the standards, specifications and procedures applicable and/or listed in the text to their contractors to assure compliance and standardised performance assessment.		

4.3.2 Correction of defects

State any constraints when dealing with defective Plant and Materials such as how repairs are carried out - can the item be fixed up or must it be replaced by a new one.

4.3.3 Contractor's procurement of Plant and Materials

Specify any constraints on how the *Contractor* is to order, codify, expedite, freight, import, transport to the Affected Property and any other requirements for delivery and storage before installation. The *Employer* may require warranties from suppliers to be in favour of the *Employer* and not just to the *Contractor*. The *Employer* may also need schedules of vendor data for his own use after the end of the *service period*.

4.3.4 Tests and inspections before delivery

Core Clause 41.1 makes reference to the Service Information stating which Plant and Materials are to be inspected and tested before delivery. Specify any requirements particularly if such tests and inspections are to be carried out by agents of the *Employer* overseas.

4.3.5 Plant & Materials provided "free issue" by the Employer

List any Plant and Materials which are to be provided by the *Employer*.

State arrangements for collection by *Contractor* or delivery by others on behalf of the *Employer*, off loading, inspection, storage, care custody and control, return of unused Plant and Materials, etc. Always include a statement to the effect that 'all other Plant and Materials are to be provided by the *Contractor*'.

4.3.6 Cataloguing requirements by the Contractor

State whether cataloguing is applicable, if it is, reference the requirements for cataloguing that need to be satisfied by the *Contractor* (consult Procurement Instruction Number 1 of 2018 – Incorporating Cataloguing into the Procurement Environment, Unique Identifier 240-1289988974).

5 Working on the Affected Property

This part of the Service Information addresses constraints, facilities, services and rules applicable to the *Contractor* whilst he is doing work on the Affected Property.

5.1 Employer's site entry and security control, permits, and site regulations

Sites such as Koeberg Nuclear Power Station have very strict entrance requirements which tendering contractors need to allow for in their prices, and the *Contractor* has to comply with. State these or similar requirements here.

In addition to the above there may be other restrictions once on the site, plus rules relating to roads, walkways and the provision of barricades

Access protocol should be followed as per the property owners' requirements and Eskom's Access to farms 34-190: (TGL 41-340) including strategy on dealing with game farms

All Contractors should adhere to respective sites' specific requirements, i.e Private property, Farms, Game reserves, Plantations, Mines, e.t.c.

Accessing private land

The Eskom contractor shall as a minimum:

- a) remain on all existing roads and tracks and within the servitude area and not deviate there from;
- b) Keep Eskom gates locked and leave property owners' gates as found; also complete the Eskom Gate's register
- c) not interfere with the property owners' activities;
- d) request permission for the use of water;
- e) provide appropriate toilet facilities;
- f) not make fires;
- g) not litter;
- h) not drop fences;
- i) not collect firewood without consent; and
- j) Not disturb or remove stones/rock from the site (e.g. archaeological and heritage sites).
- k) Contractor to complete the Landowner Consent forms to obtain permission to work within the property, and submit them to Eskom
- L) On completion of the work, land owners shall sign-off that work was completed to their satisfaction.

Access to farms

Normative Reference: 34-1173 – Access to farms (Distribution, Transmission and Generation):

The mushrooming of game farms in all parts of the country brings about new challenges to Eskom such as restriction of access, safety of Eskom staff and the interaction of game and electrical infrastructure. Coupled to this is the escalating crime rate on farms, which have highlighted the need for Eskom to implement initiatives to control the movement of staff requiring access to farms. The above referenced document describes approaches to be implemented to facilitate better access to farms for all Eskom staff and contractors (performing work on behalf of Eskom). This guide will assist Eskom in facilitating access to farms through proactive communication and identification of Eskom staff and contractors as per the Eskom/AGRI- SA protocol on access to farms. The strategy for interacting with game farms depends on the purpose of the visit and is summarized below:

- a) Action: Eskom will notify customers at least 48 hours in advance through the appropriate media – either in writing, electronically or telephonically. Should its attempts to communicate fail, the work will proceed regardless.
- b) Planning and building of new assets: Extended negotiations and interaction with the customer and adjoining property owners include supply proposals, quotations, guarantees, line route planning, and construction project planning and execution

Action: All stakeholders must cooperate to enable Eskom to provide the customer with a project schedule reflecting the period during which the construction and commissioning activities will take place. In addition, customers may request a work order number to be verified with the contact centre.

- c) Personal visits: All visits to individual customers, i.e. sales or service- related activities, investigations (technical, non-technical), claims, etc.

Action: Must take place by appointment

- d) Power interruption caused by external factors: Rapid power restoration without any delay is in the interest of both Eskom and the customer. This is dependent on free movement.

Action: All Eskom staff as well as representatives of Eskom contractors will carry identity cards containing their photographs to indicate whether they are Eskom employees or Eskom contractors. In addition, customers may request a work order number to be verified with the contact centre. Vehicles must be clearly marked.

- e) Helicopter line patrols over game farming areas must be preceded by reasonable notifications to affected landowners as they are usually a disturbance to tourists and hunters visiting game farms. There is a great need to inform game farm owners timeously of planned maintenance activities. All notifications and arrangements regarding access should preferably be confirmed in writing as per 34-190 section 2.6.

f) Game-farmers are also not in favour of motorized equipment e.g. chain saws due to noise pollution affecting hunting and game viewing activities. It is thus advisable that prior notification be issued and that their usage be restricted to what is absolutely necessary.

Access to Plantations

Normative Reference: 0029E – maintenance and management agreement in forest plantation areas and servitude areas

- a) It is recorded that in terms of the Servitude / Wayleave Agreements, Eskom has the right to enter and be upon the property at any time whether to perform work on the property itself or to gain access to any adjacent property.
- b) In the exercise of the rights referred to in the previous clause, Eskom/Contractor personnel shall make every effort to inform the Grower's local forester or his delegate of such entry in advance, and shall take reasonable steps to minimize the inconvenience to the Grower.
- c) Under no circumstances shall access be gained by cutting or "dropping" of fences. All gates are to be left closed and Eskom servitude gates are to be locked at all times unless otherwise requested by the Grower.

Restriction of access

Normative Reference: 34-190 – Access to farms (includes strategy on dealing with game farms:

All instances where access has been unduly restricted should be taken up with the Responsible Manager in consultation with the Customer Services Area Manager to ensure a normalization of the situation. The 2 lock system should also be enforced where it has been violated. The Customer Services Area Manager could bring the following to the attention of the landowner in terms of our way leave/servitude agreement:

- a) That access is being restricted.
- b) That the removal of Eskom locks and gates without prior notice and agreement are illegal.
- c) That security is required for accompaniment where the introduction of problem animals restricts access.
- d) That there is a need to use motorised equipment for bush clearing where trees pose a risk to the safe operation of the line

5.2 People restrictions, hours of work, conduct and records

Restrictions and hours of work may apply on some sites. It is very important that the *Contractor* keeps records of his people working on the Affected Property, including those of his Subcontractors. State that the *Service Manager* shall have access to them at any time. These records may be needed when assessing compensation events.

5.3 Health and safety facilities on the Affected Property

Section 3 deals with contractual H & S requirements in addition to those of the OHSA Act. This section allows the *Employer* to state what measures are to be taken on the Affected Property by describing where First Aid facilities provided by the *Employer* are located and any other emergency arrangements. Do not use if already addressed in 2.3.

5.4 Environmental controls, fauna & flora

This sub-paragraph may not be required in a service contract or if these matters are dealt with in the general environmental requirements referred to in section 3 above.

5.5 Cooperating with and obtaining acceptance of Others

This sub-paragraph could be used to deal with two issues.

- 1) The cross reference from core clause 25.1 about cooperation generally as well as details about Others with whom the *Contractor* may be required to share the Affected Property. See clause 11.2(9) for the definition of Others.
- 2) Requirements for liaison with and acceptance from statutory authorities or inspection agencies.

All Contractors should adhere to respective sites' specific requirements, i.e Private property, Farms, Game reserves, Plantations, Mines, e.t.c. Records of *Contractor's* Equipment

This sub-paragraph is intended to address how records are to be kept of Equipment on Site including whether it is owned or hired. Include any constraints about scaffolding, rigs, heavy lifts and cranes, including removal from the Affected Property.

5.6 Equipment provided by the *Employer*

Provide details of equipment (e.g. overhead cranes) made available for use by the employer and set out conditions relating thereto.

5.7 Site services and facilities

5.7.1 Provided by the Employer

This is a mandatory cross reference from clause 25.2 in TSC3. State what the *Employer* will provide in the way of power, water, waste disposal, telecomms, ablutions, fire protection and lighting (etc) on the Affected Property. Give hook up locations and any constraints on how the hook up is to be done. Always conclude by stating that the *Contractor* shall provide everything else necessary for Providing the Service.

5.7.2 Provided by the Contractor

Describe what the *Contractor* is to provide in the way of accommodation, laboratories, storage, vehicles and office equipment for the *Service Manager* and any restrictions or minimum requirements concerning the *Contractor's* own facilities. Also state what happens to these facilities upon completion of the contract.

5.8 Control of noise, dust, water and waste

State requirements, if any.

5.9 Hook ups to existing works

State any constraints

5.10 Tests and inspections

5.10.1 Description of tests and inspections

Describe the tests and inspections to be carried out by the *Contractor* and the *Service Manager* and others [40.1].

5.10.2 Materials facilities and samples for tests and inspections

State what materials facilities and samples for tests and inspections the *Contractor* and the *Employer* are to provide, per core clause 40.2.

6 List of drawings

6.1 Drawings issued by the *Employer*

This is the list of drawings issued by the *Employer* at or before the Contract Date and which apply to this contract.

Drawing number	Revision	Title