

Annex B - Distribution Environmental Screening Document (DESD)

(Informative)

Reticulation Powerlines and Ancillary Services

Ratified and accepted by
Environmental Practitioner
Environmental Specialist
Head of Engineering Survey
(one signature please)

Accepted by Land Owner/s/Users

I have seen the completed document and accept the
recommendations made

Assessor/s

Form completed by

Signature:

in consultation with:

Signature:

CAPACITY (e.g. land owner, specialist):

DATE COMPLETED:


.....
 APC PRETORIUS
.....
APC PRETORIUS
.....

.....
 LANDOWNER
.....

Instructions

1. Fill the report in as neatly and completely as possible.
2. Where the question / statement is not applicable mark N/A.
3. Indicate sensitive areas on a map and/or spanning plans.
4. When in doubt, consult the Environmental Practitioner in your region.

The purpose of this DESD is to:

- Determine whether or not the project should be subject to R543 -7, published in terms of the National Environmental Management Act 107 of 1998.
- Identify and mitigate the negative impact of Eskom's activities to a minimum in line with both Legislation and Eskom's Environmental Policies.
- This report is a guide to Route Selection, Construction and Field Services.

NOTE Complete the report before the survey!!!

This is not an office exercise.

Extra sheets of paper may be added and referenced if insufficient space has been provided.

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Annex B
(continued)

1 Project description

Project name/Survey
Request Area Traabagzambi C. Muni
Project number STH142157687B File number
Rural scheme/
Feeder Marseilles Voltage 22kV
Supply from FM170/22
(scheme name, pole numbers for tee-off)
Supply to Eilandspan 30 kV
(Farm name, etc.)

2 Properties traversed

Farm name Eilandspan 30 kV
Registration number and Division 30 kV Sub-division
Compilation number Line length (m)
Farm name Eilandspan
Registration number and Division 30 kV Sub-division
Compilation number Line length/Site area (m²)

3 Brief description of the surrounding area

The new overhead single phase line is the extension of project STH142157679 [Toff]. It goes over the cattle kraal to be converted into a buffalo kraal. There is 4 leadwood to be trimmed.

Could the proposed project have an impact on or be constrained by any of the following environmental aspects?

Encircle the appropriate aspect, giving a description of the present state as well as an indication of the possible negative impact. Note that mitigating measures for these impacts are to be included in the Environmental Management Programme.

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4 Physical environment

4.1 Water: streams rivers dams wetlands Springs floodplains OTHER Dryland

Present condition: Dryland

Potential impact (e.g. threat of pollution):
No impact, no stream or river nearby.

4.2 Soil: sandy Rocky clayey OTHER

Present condition: Sandy soil.

Potential impact (e.g. of erosion) Compact terrain.

4.3 Topography mountains ridges hills Valley Ravines dongas OTHER Flat terrain

Present condition: Flat terrain

Potential impact (e.g. of erosion) Flat terrain.

Comments/mitigating measures:
Normal construction - Design to cater for giraffe clearance.

Annex E
(continued)

5 Natural environment

5.1 Flora: indigenous Protected exotic OTHER

Brief description and conservation status (e.g. rare, etc., mention trees/bush/grass).....
There is a leadwood to be trimmed
Potential impact (e.g. permit applications)..... Leadwood to be
trimmed.

5.2 Fauna: mammals Birds OTHER

Brief description and conservation status:
(e.g. rare, protected, etc., mention giraffe, elephants, eagles, vultures, etc., mention migratory paths)
There will be giraffe in future and at
the present there are buffaloes, blow wildebeest
Potential impact (e.g. threat of electrocution, collision, etc.).....
Use longer poles to cater for
giraffe clearance.

Comments/mitigating measures:
Use longer poles to cater
for giraffes clearance.

6 Social environment

6.1 Restricted areas: nature/game reserves hiking trails tourism routes parks recreational areas
Residential-areas green belts sacred/holy grounds OTHER ... Farm workers house.

Brief description \$ Transformer to supply farm workers houses.

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Potential impact e.g. threat of encroachment, etc. Land been demarcated into fences.

6.2 Visual aesthetics: easily seen Hidden partially..

Brief description Line will be partially soft and hidden soft.

Potential impact No impact.

6.3 Natural heritage: cultural significance archaeological objects monuments palaeontological objects
graves Meteorites Ruins OTHER.....

Note: Should any natural heritage resource as listed above, or as defined in the National Heritage Resource Act, No 25 of 1999 be identified, the requirements of Act 25 of 1999 shall be followed by notifying the SAHRA. If line or access road length exceeds 300m SAHRA shall be notified.

Potential impact No impact.

Comments/mitigating measures Use longer poles for giraffe camp clearance and giraffe fence around [TOOL]

7 Economic environment

7.1 Land use: crops game farming Orchards forestry areas grazing mining crop spraying OTHER Farm house for workers.

Brief description Land used for game farming a farm houses for workers

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Potential impact *No impact.*

7.1.1 Commercial: factories Shops OTHER *game farming*

Brief description *Land to be used for game farming.*
Potential impact *Use longer poles for good clearance for giraffes.*

7.1.2 Infrastructure: roads railways communications power lines air fields
pipelines sewage OTHER

Brief description: *There is an existing power line and bore holes*
Potential impact *No impact.*

Comments/mitigating measures:

..... *Use longer poles for giraffes clearance.*
.....
.....
.....

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What impact will this project have on elements 4 to 7?

1. Physical

No impact (0)

Medium impact (2)

High impact (4)

2. Natural

No impact (0)

Medium impact (2)

High impact (4)

3. Social

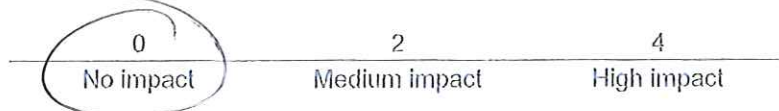
No impact (0)

Medium impact (2)

High impact (4)

Overall impact:

This section addresses the overall environmental impact of the project. The impacts as assessed in the above three spheres (physical, natural and social) need to be considered to determine the overall impact



If the overall impact is between 2 and 4, contact the Environmental Management Officer or the Environmental Senior Superintendent.

Alternatives

Have alternative routes been discussed with the relevant land owner/s or users?

Yes _____
No _____

Detailed study

Is an *environmental assessment* required in terms of Regulation R543?

Yes _____
No _____

Should a permit application be made to DWA?

Yes _____
No _____

Should the SAHRA be notified?

Yes _____
No _____

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Annex B - Environmental Management Plan

(continued)

1 General conditions

- 1.1 The Eskom project manager or co-ordinator shall be responsible for ensuring that the land owners have been informed before any work is carried out on site. Contractors shall find out if the landowners have been informed before moving onto site.
- 1.2 No fences, gates or locks shall be damaged to obtain access onto a line route. Arrangements shall be made in advance to obtain permission for access.
- 1.3 Use of private roads shall be arranged in advance. Any damage to private roads shall be repaired at the contractor's expense and to the satisfaction of the landowner. This shall be the responsibility of the project manager or co-ordinator.
- 1.4 Gates shall be left as they are found, i.e. closed gates shall be kept closed and open gates shall be left open. Gates to adjacent properties or onto public roads shall be closed at all times. Any Eskom gates installed on the line route shall be kept closed and locked except while stringing is taking place. Open gates shall be guarded to prevent animals straying and unauthorised persons and vehicles entering into adjacent camps or properties.
- 1.5 Permission shall be obtained from landowners before any water is used.
- 1.6 No fires shall be lit on private property. If fires are lit on Eskom's property or in the construction camp, provision shall be made that no accidental fires are started. No firewood shall be collected in the veld.
- 1.7 If activities that can cause a fire are carried out, fire extinguishers shall be available on site and in the construction camp.
- 1.8 No property may be accessed after normal working hours except with the permission of the landowner. Privacy shall be respected at all times.
- 1.9 Eskom, Eskom's contractors and their employees shall at all times be courteous towards landowners, tenants and the local community.
- 1.10 Eskom, Eskom's contractors and their employees shall not cause damage to property, crops or animals. Activities that may cause conflict with landowners, tenants, the local work force or the local community shall be avoided. Should conflict arise it shall be immediately reported to the Eskom project manager or co-ordinator.
- 1.11 Vehicles shall be driven at a moderate speed on private roads and stay within the statutory speed limit on public roads.
- 1.12 All movement of vehicles shall take place on the established Eskom servitude road or on private roads as agreed in advance. Keep to existing tracks. No movement shall take place through the veld. Special care shall be taken to prevent excess damage during wet weather.

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- 1.13 If any vehicle should get stuck, the damage shall be repaired immediately so that no deep ruts remain.
- 1.14 Any damage to private property shall immediately be reported to Eskom and the owner. The damage shall be rectified immediately if possible and/or appropriate compensation shall be paid to the owner at the discretion of the project manager/co-ordinator in consultation with the property owner. A record of damages and rectifying action shall be kept. The landowner's satisfaction with the outcome of rectifying action shall be obtained in writing.
- 1.15 A proper system of waste management shall be instituted in the construction camp. This entails that sufficient waste bins are available on site and in the construction camp. The waste shall be dumped at an approved waste disposal site. No containers, scrap metal, conductor etc. shall be left on site.
- All scrap shall be removed and taken to an appropriate disposal site. No oil, diesel or other chemicals shall be spilled or discarded anywhere. If an accidental spill occurs, it shall be reported immediately and cleaned to the satisfaction of Eskom and the landowner. No waste shall be left in the veld or on the line route.
- 1.16 Washing and toilet facilities shall be provided on site and in the construction camp. The facilities shall comply with Eskom standards and shall have the approval of the landowner.
- 1.17 No human excrement shall be left in the veld. If no toilet facilities are available such waste shall be buried *immediately*.
- 1.18 Herbicides shall only be applied with Eskom's permission and in accordance with the Eskom Policy on Herbicides ESKPBAAD4.
- 1.19 Camp and office sites shall be dismantled and removed after completion of the construction phase of the project. The site shall be rehabilitated to as close as possible to its original condition to the satisfaction of the landowner, which shall be in writing.
- 1.20 All excavations shall be enclosed to prevent animals or people from accidentally falling into excavations.
- 1.21 No trees shall be cut or removed without prior permission from the landowner. Permits shall be obtained for the cutting and removal protected trees (protected trees shall be dealt with in 2, Special conditions).
- 1.22 Should any natural heritage object be found, or exposed during excavations, all work shall be terminated immediately and the finding reported to the Project Manager who shall inform the Eskom Environmental Practitioner and the SAHRA.

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2 Special conditions

(Specific issues identified during the scoping as needing attention i.e. erosion berms, bird flappers, protected trees, etc.).

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HANDOVER DOCUMENT:

PERMITS AND LICENSES ASSOCIATED WITH NEW ESKOM D_x 11-132 kV
PROJECTS AND MAINTENANCE PROJECTS REQUIRING ENVIRONMENTAL
PERMITS AND LICENCES

NEW PROJECTS (A-D)

A) National Environmental Management Act No. 107 of 1998

Section	Description	Y/N	If Yes [Land Development]	Project Management		
24	Is this a listed activity according to the Environmental Impact Assessment or Waste regulations?		Have you submitted an application to DEA?	Y	Has the Environmental Authorisation been obtained?	Y
				N		N
30	Is this activity being carried out under an emergency?		Has an application been submitted to DEA	Y		
				N		

B) National Water Act No. 36 of 1998

Section	Description	Y/N	If Yes [Land Development]	Project Management		
21 (c)	Can this activity be deemed to divert the flow of water in a watercourse?		Have you applied for a water use license from DWA?	Y	Has the license been obtained?	Y
				N		N
21 (i)	Can this activity be deemed to be altering the bed, banks, course or characteristics of a watercourse (e.g. wetlands, rivers, springs etc)?		Have you applied for a water use license from DWA?	Y	Has the license been obtained?	Y
				N		N

C) National Heritage Resources Act No. 25 of 1999

Section	Description	Y/N	If Yes [Land Development]	Project Management		
34	Are you likely to disturb any structure that is older than 60 years, archaeological or palaeontological site or any meteorite or grave?		Have you applied for a license from the applicable heritage authority?	Y	Has the license been obtained?	Y
				N		N
38	Is the power line or access road longer than 300m?		Has the applicable heritage authority been notified?	Y		
				N		

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D) National Forests Act No. 84 of 1998

Section	Description	Y/N	If Yes [Land Development]		Project Management	
7	Are you likely to cut, disturb, damage or destroy any indigenous, living tree in, or remove or receive any such tree from, a <u>natural forest</u> ?		Have you applied for a license from the regional Department of Agriculture, Forestry and Fisheries?	Y	Has the license been obtained?	Y
				N		N
15	Are you likely to cut, disturb, damage, destroy or remove any protected tree or collect, remove, transport, export, purchase, sell, donate any <u>protected tree</u> ?		Have you applied for a license from the regional Department of Agriculture Forestry and Fisheries	Y	Has the license been obtained?	Y
				N		N
	Are you likely to encounter a <u>champion tree</u> ?		Have you applied for a permit from the regional Department of Agriculture Forestry and Fisheries	Y	Has the permit been obtained?	Y
				N		N

E) Mineral Resource Development Act (Act 28 of 2002)

Section	Description	Y/N	If Yes [Land Development]		Project Management	
	Do you need to obtain material from a borrow pit?		Have you applied for a permit from the regional Department of Mineral Resources?	Y	Has the license been obtained?	Y
				N		N

OPERATION AND MAINTENANCE PROJECTS (A-B).

A) National Forests Act No. 84 of 1998

Section	Description	Y/N	If Yes [Field Services]		Project Management/Field Services	
7	Are you likely to cut, disturb, damage or destroy any indigenous, living tree in, or remove or receive any such tree from, a <u>natural forest</u> ?		Have you applied for a license from the regional Department of Agriculture, Forestry and Fisheries?	Y	Has the license been obtained?	Y
				N		N
15	Are you likely to cut, disturb, damage, destroy or remove any protected tree or collect, remove,		Have you applied for a license from the regional Department of Agriculture Forestry and Fisheries	Y	Has the license been obtained?	Y
				N		N

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	transport, export, purchase, sell, donate any <u>protected tree</u> ?				
	Are you likely to encounter a <u>champion tree</u> ?		Have you applied for a permit from the regional Department of Agriculture Forestry and Fisheries	Y N	Has the permit been obtained? Y N

B) National Water Act No. 36 of 1998

Section	Description	Y/N	If Yes [Field Services]	Project Management/ Field Services	
21 (c)	Can this activity be deemed to <u>divert the flow of water in a watercourse (e.g. repairing a cable)</u> ?		Have you applied for a water use license from DWA?	Y	Has the license been obtained? Y
				N	N
21 (i)	Can this activity be deemed to be <u>altering the bed, banks, course or characteristics of a watercourse (e.g. wetlands, rivers, springs etc)</u> ?		Have you applied for a water use license from DWA?	Y	Has the license been obtained? Y
				N	N

COMMENTS

Signed by: _____
Date: _____

Designation: _____

- Notes: 1) If a permit is required, complete sections A, B and C
 2) For all other work, complete Sections B and C
 3) Form must be completed on the worksite by Risk Assessor/Responsible Person/Supervisor responsible for employees

Site: _____ Date: _____

What task is being performed today?

List the Task Manuals and/or Safe Work Procedures applicable to this task that were discussed with all on the worksite.

A) I hereby declare that Work Permit No. _____ has been shown to all workers registered below for this work. The work order number for the job is: _____ I declare that the nature and location of this work/activity as well as all the precautions, special conditions, the dangers involved and the right to refuse principle have been explained to the workers.

Name: _____ Unique No.: _____

Signed: _____ Date: _____ Time: _____

B) Risk Assessment: Use this Hazard Checklist and applicable Task Manuals and/or Safe Work Procedures to supplement the risks analyzed

	Hazard	Risk Rating	Associated Risk	Control Measures
E L E C T R I C A L	1. Low/Medium Voltage 2. Live apparatus 3. Close proximity 4. Lock-out 5. Access 6. Barricading 7. Open, Isolate, Safety test and Earth 8. Touch Step potential, etc.	H M L		
F A L L S	Working on heights: 1. Scaffold 2. Structure stability 3. Crane stability 4. Ladder stability 1. Slippery or uneven surfaces 2. Trench covers 3. Walkways, etc.	H M L		
E N V I R O N M E N T	Weather conditions: 1. Rain 2. Hot 1. Animals 2. Insects Fire: 1. Combustible 2. Flammable 3. Excessive smoke Pollution: 1. Ground 2. Water 3. Air, etc. 1. Dangerous 2. High risk and/or 3. Protected tree	H M L H M L H M L H M L H M L H M L		

Hazard	Risk Rating	Associated Risk	Control Measures
	H M L		
	H M L		
	H M L		
	H M L		
	H M L		
	H M L		
	H M L		
List additional hazards that were identified on-site	H M L		

What PPE is required for this task as per applicable Task Manuals and/or Safe Work Procedures?

Overall acid or normal	Pants	Top	Dust coat	Apron	Hard hat	Gumboots	Safety shoes	Safety glasses

C) Acknowledgement:

I acknowledge that I understand the requirements as per Task Manuals and/or Safe Work Procedures listed in this risk assessment. I also understand the hazards associated with the task that I am going to perform. I further undertake to work according to the Task Manuals and/or Safe Work Procedures and as per control measures mentioned within this risk assessment that were discussed with me. I will report any unsafe acts and conditions that I discover while I am working.

Sign On / Working		Sign off / Withdrawn	
Name (Print)	Signature	Name	Signature

I declare that the nature and location of this work/activity, as well as the precautions, special conditions, the dangers involved and the right to refuse have been explained to the workers.

Risk Assessor Name: _____ Unique No.: _____ Date: _____

Signed: _____