#### **ENVIRONMENTAL IMPACT ASSESSMENT FOR DISTRIBUTION ACTIVITIES**

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### 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

CAPACITY (e.g. land owner, specialist): VCOSH1

DATE COMPLETED: 14 Oktober 2015.

Instructions

- Fill the report in as neatly and completely as possible.
- 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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1 Project description	
Project (name/Survey Request Poler Moticila E Project number Magaga mat hala Rural scheme/ Feeder Selons rivier P	File number
Supply from SRS 322 /15/	Voltage 22kv
(scheme name, pole numbers for tee-	
Supply to Various.	
(Farm name, etc.)	
/ Proportion frances	
2 Properties traversed	-
Farm name Diepkl	oof.
Farm name  Registration number and Division	186 JJ Sub-division 6
Registration number and Division Compilation number 25 29 BC	/86 55 Sub-division 6.  Line length (m) MY* /-82/ km LY* 4.5
Farm name  Registration number and Division  Compilation number  Z5 29 BC  Farm name	/86 55 Sub-division 6.  Line length (m) MY= 1.82/ km LY= 4.5
Registration number and Division	/86 55 Sub-division 6.  Line length (m) MV* /-82/ km LV* 4.5
Registration number and Division Compilation number 25 29 BC Farm name Registration number and Division	/86 55 Sub-division 6.  Line length (m) MY= 1.82/ km LY= 4.5
Farm name Registration number and Division Compilation number Registration number and Division Compilation number and Division Compilation number	Sub-division 6.  Line length (m) MV* 1.821 km LV* 4.5  Sub-division  Line length/Site area (m²)
Registration number and Division Compilation number Farm name Registration number and Division Compilation number Compilation number  Brief description of the surr	Sub-division 6.  Line length (m) MV* 1.821 km LV* 4.5  Sub-division  Line length/Site area (m²)
Registration number and Division Compilation number Farm name Registration number and Division Compilation number  Brief description of the surr	Sub-division 6.  Line length (m) MV* 1.821 km LV* 4.5  Sub-division  Line length/Site area (m²)

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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Annex B

			(continue	ea)			
4 Physical e	environme	nt					
4.1 Water:	streams ri	vers dams	wetlands	springs	floodplains	OTHER	
Present condition	on: None				, =	***************************************	
Potential impact	t (e.g. threat	of pollution)					
4.2 Soil	sandy	Cro	cky	clayey	(	OTHER	
Present condition  Potential impact  4.3 Topograph	(e.g. of eros	ion)	hills valleys		dongas	OTHER.	
Present conditio	E l	t area.	14 to 1 to 000000000 14 in a	a ravines	uungas	OTHER	
Potential impact	(e.g. of eros	ion) N.A	4				
Comments/mitig	ating measu	es:					
	/	/	FINANCIA	Carrel		**************************************	

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			(continued)			
5 Natural env	vironment		,			
5.1 Flora:	indigenous	protec	ted	exotic	ОТ	HER
Brief description	and conservation					
Potential impact (	(e.g. permit app	lications 1	/-A·		17.5	· · · · · · · · · · · · · · · · · · ·
5.2 Fauna:	mamn	nals	birds	(1,7,0); (1,0); (1,0)	OTHER	. New Printers Co.
Brief description a (e.g. rare, protect	ed, etc., mentic			ultures, etc	., mention (	migratory paths)
Potential impact (	e.g. threat of el	ectracution, colli	(10.000)(0.00000000000000000000000000000			
Comments/mitiga	ting		77777	rom samen	1244 - 1245 - 1246 - 12	measures:
6 Social envir	ronment		13777777			
6.1 Restricted areas Residential-	nature/game reserves ureen belts	hiking trails	tourism rou		parks	recreational areas
Brief description		grounds with star		has	ઈ.	

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		Annex E		
Potential impact e.g.	threat of encroach	ment, etc N-A	Hatta and Annie	
6.2 Visual aesthetic	cs: easily seen	hidden		partially
Brief description Mond white LV pegs in white Place	N pags in plags of street	streat to	Pent marked mid-bloc	d with red to marked with
6.3 Natural heritage	e: cultural significance	archaeological objects	monuments	palaeontological objects
	graves	meteorites	ruins	OTHER
Note: Should any Resource Act, No 25 the SAHRA. If line of Potential impact	r access road len	ed, the requirements	s of Act 25 of 1999 <b>SAHRA shall be</b> i -	ned in the National Heritag shall be followed by notifyin notified.
Comments/mitigating			<u> </u>	
A A	Line ex	reeds 300m	SAHRA	to be notified.
7 Economic env	ironment	HIBITITI NAME AND ASSESSMENT		***************************************
7.1 Land use:	crops	orchards	grazing	crop spraying
Ş	game farming	forestry areas	mining	OTHER
Brief description	lane -			

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Potential impact	A				
7.1.1 Commercial:	factories	S	shops	OTHER	
Brief description Potential impact	**!************************************				************
7.1.2 Infrastructure		ailways ewage	communications OTHER	power lines	air fields
Brief description	z kv	crossing			***************************************
Potential impact	VYTTA 1 4 4 4 ( 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4				
Comments/mitigating	measures;	····			
Z	/				
	/			*****************	USB URBBRRROKER

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Annex B (continued)

	(cont	inued)	
What impact will this pi 1 Physical	roject have on elements 4 to 7'	?	
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 above three spheres (p	s the overall environmental im physical, natural and social) ned	pact of the project. The impacts as assessed in the delayed to be considered to determine the overall impact	ne
0	2	4	
No impa	ct Vedium impact	High impact	
	No impact (0)  No impact (0)  No impact (0)  Social  No impact (0)  Overall impact: This section addresses above three spheres (p	What impact will this project have on elements 4 to 7' 1 Physical  No impact (0) Medium impact (2) 2 Natural  No impact (0) Medium impact (2) 3 Social  No impact (0) Medium impact (2)  Overall impact: This section addresses the overall environmental imabove three spheres (physical, natural and social) new	No impact (0) Medium impact (2) High impact (4)  No impact (0) Medium impact (2) High impact (4)  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 C - Environmental Management Plan

(Normative)

#### 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.
- 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.
- 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-ordiator.
- 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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### Annex C (continued)

- 1.13 If any vehicle should get stuck, the damage shall be repaired immediately so that no deep ruts remain.
- 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*.
- 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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Annex C (continued)

2 Speci	al conditions	
---------	---------------	--

(Specific issues identified protected trees, etc.).	during the	scoping	as	needing	attention	i.e	erosion	berms,	bird	flappers,
						e in in				
Hereit I was a series of the s										
HILLIAN STATE OF THE STATE OF T	The state of the s				VV					
1000,000,000										

### TYPICAL MITIGATION MEASURES

ENVIRONMENTAL CONCERNS	MITIGATION MEASURES
AGRICULTURE	
Loss of standing crop due to access road and tower work site.	limit width of access and size of tower site avoidance of crop areas monetary compensation for crop loss time construction to avoid growing season.
Soil Compaction	<ul> <li>scheduling activities to times of the year when soils are least susceptible to compaction.</li> <li>stop activities when ground conditions are poor use of equipment with low bearing capacity.</li> <li>chisel ploughing.</li> </ul>
Construction of new lines	locate access roads along existing traffic routs.
Topsoil — subsoil mixing/soil rutting	<ul> <li>scheduling activities.</li> <li>stop activity when ground conditions are poor, use of equipment with low bearing capacity.</li> <li>use of gravel roads.</li> <li>addition of manures to offset fertility loss.</li> <li>compensation for reduced soil pEAuctivity.</li> <li>removal of spoil and/or bentonite from foundation operations.</li> <li>Segregation of topsoil and subsoil.</li> </ul>
Disturbance to farm operations	maintain contact with landowner/tenant regarding preferences.
Loss of livestock	<ul> <li>employ noise control measures near sensitive livestock.</li> <li>Construction of farm gates.</li> <li>Securing farm gates.</li> <li>Clean-up construction materials which could be ingested.</li> <li>Compensation for lost, injured livestock.</li> </ul>
SOCIAL IMPACTS	, sand the root, mariou invository.
Mud and Dust	<ul> <li>wetting down dry soils</li> <li>chemical control of dust</li> <li>cleaning roads to remove mud</li> <li>temporary planting of grasses</li> </ul>

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### Annex C (continued)

Aesthetics	(continued)
Aestrietics	screen with natural of planted vegetation restoration.
	avoid linear access down the right-of-way
	addition of topsoil to gravel access roads.
	hoarding construction sites.
	installation of landscaping in advance of site
	completion
Inconvenience	- select route and method of installation to suit
	landowners' conditions.
	- select timing of activity.
Heritage resources	avoidance/isolation
	design measures to make facility less obtrusive
	screening
	alternate methods of equipment
	protection by use of enclosures, barrier fencing,
	covering
	salvage in conjunction with SAHRA
	relocation in conjunction with SAHRA.
Tourism and recreation resources	design measures to make facility less obtrusive of
	disruptive
	- screening and restoration.
	minimise noise and dust
	safety precautions to protect the public.
	scheduling to avoid peak use periods.
WATER QUALITY	scrieduling to avoid peak use periods.
Sedimentation of streams due to	- minimise use of slopes adjacent to streams during soils
erosion from the right-of way.	testing, construction and maintenance
in and right of that	
	maintain a cover crop retain buffers.
Stream bank erosion	mechanical erosion control
Tank Bank Greeker	
	rotain orrabby stream bank vegetation and selectively
	cut or prune trees during line clearing/maintenance.
	selective spraying of herbicides
Impedance of natural flow	Mechanical erosion control.
Impedance of natural flow streams/others surface waters.	use and maintenance of appropriate stream crossing
Panding or channel's it	device
Ponding or channelization of surface	timing activities to stable ground conditions.
waters due to rutting	use of gravel roads
Contamination of surface or ground	spill control material and procedures readily available
waters through spills or leaks of toxic	site selection where possible
substances	and delegated whole possible
Soil compaction/topsoil-subsoil mixing	avoidance of rutting by vehicles where possible
, and a second mining g	construction timing
	use of gravel roads.
	use of vehicles with low bearing pressures
Vind/water erosion	astrones when ground conditions are poor.
	are a local with high crosion potential.
	timing activities to the most stable ground conditions.
	slope stabilisation.
	mechanical erosion control
	vegetation erosion control
	recompaction of trenches
	<ul> <li>avoid trenching parallel to the fall of a slope.</li> </ul>

BOB mamagay