APPLICATION FOR AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998)

CONSULTATIVE BASIC ASSESSMENT REPORT

PROJECT:

VODACOM BASE STATION: POLOKWANE TP (BS99778)



Environmental Consultant:



(Reg. No. 2000/019116/23)
P.O. Box 55714, Polokwane, 0700
Tel: 015 291 4177 Fax: 086 218 3267
tecoplan@mweb.co.za

NOVEMBER 2016





DEPARTMENT OF ECONOMIC DEVELOPMENT, ENVIRONMENT & TOURISM

BASIC ASSESSMENT REPORT - EIA REGULATIONS, 2014

Basic Assessment report in terms of the Environmental Impact Assessment Regulations, 2014, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

File Reference Number:	
	(For official use only)
NEAS Reference Number:	
Date Received:	
Due date for acknowledgement:	
Due date for acceptance:	
Due date for decision	
Kindly note that:	

- 1. The report must be compiled by an independent Environmental Assessment Practitioner.
- 2. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
- 3. Where applicable **tick** the boxes that are applicable in the report.
- 4. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the Department of Economic Development, Environment and Tourism as the competent authority (Department) for assessing the application, it may result in the rejection of the application as provided for in the regulations.
- 5. An incomplete report may be returned to the applicant for revision.
- 6. Unless protected by law, all information in the report will become public information on receipt by the department. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.

- 7. The Act means the National Environmental Management Act (No. 107 of 1998) as amended.
- 8. Regulations refer to Environmental Impact Assessment (EIA) Regulations of 2014.
- 9. The Department may require that for specified types of activities in defined situations only parts of this report need to be completed. No faxed or e-mailed reports will be accepted.
- 10. This application form must be handed in at the offices of the Department of Economic Development, Environment and Tourism:-

Postal Address:	Physical Address:
Central Administration Office	Central Administration Office
Environmental Impact Management	Environmental Affairs Building
P. O. Box 55464	Cnr Suid and Dorp Streets
POLOKWANE	·
0700	POLOKWANE
	0699

Queries should be directed to the Central Administration Office: Environmental Impact Management:-

For attention: Mr E. V. Maluleke

Tel: (015) 290 7138/ (015) 290 7167

Fax: (015) 295 5015

Email: malulekeev@ledet.gov.za

View the Department's website at http://www.ledet.gov.za/ for the latest version of the documents.

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section?



If YES, please complete the form entitled "Details of specialist and declaration of interest" or appointment of a specialist for each specialist thus appointed:

Any specialist reports must be contained in Appendix D.

1. ACTIVITY DESCRIPTION

Describe the activity, which is being applied for, in detail¹:

Vodacom intends to construct a 25m tree type mast with antennae mounted onto the mast, and container housing associated equipment. The size of the base station (fenced area) in which the mast and associated equipment will be placed will measure 10m x 10m (100m²).

2. FEASIBLE AND REASONABLE ALTERNATIVES

"alternatives", in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

- (a) the property on which or location where it is proposed to undertake the activity;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

Describe alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. The determination of whether site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the Department may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent. The Reader is referred to Appendix G (Assessment of Alternatives) for a description of the identified alternatives that have been investigated.

Please note that this description should not be a verbatim repetition of the listed activity as contained in the relevant Government Notice, but should be a brief description of activities to be undertaken as per the project description.
 LEDET BA Report, EIA 2014: Project Name: Vodacom Base Station: Polokwane TP

Paragraphs 3 – 13 below should be completed for each alternative.

3. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the Hartebeeshoek94 WGS84 spheroid in a national or local projection.

Latitude (S):

Longitude (E):

List alternative sites, if applicable.

Alternative:

			` '		•		
Alternative S12 (preferred or only site alternation	/e)	23°	54'	37,53"	29°	27'	47,86"
Alternative S2 (if any)	-	0	1	11	0	1	11
Alternative S3 (if any)		0	1	II	0	1	11
In the case of linear activities: Alternative:	Lat	itude (S):		Longit	ude (E):	I
Alternative S1 (preferred or only route alternative)							
Starting point of the activity	۰		ı	II .	0	1	II .
Middle/Additional point of the activity	•		ı	"	0	1	11
End point of the activity	0		ı	II .	0	1	11
Alternative S2 (if any)							
Starting point of the activity	0		ı	11	0	1	11
Middle/Additional point of the activity	0		ı	11	0	1	11
End point of the activity	0		I	п	0	1	11
Alternative S3 (if any)							
Starting point of the activity	0		ı	п	٥	1	11
Middle/Additional point of the activity	0		I	п	0	1	11

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

4. PHYSICAL SIZE OF THE ACTIVITY

End point of the activity

Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

² "Alternative S.." refer to site alternatives.

Alternative: Alternative A1³ (preferred activity alternative) Alternative A2 (if any) Alternative A3 (if any) M²

or,

for linear activities:

Length of the activity:

Alternative:

Alternative A1 (preferred activity alternative) m

Alternative A2 (if any) m

Alternative A3 (if any) m

Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Size of the site/servitude:

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

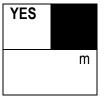
Alternative A3 (if any)

m²

5. SITE ACCESS

Does ready access to the site exist?

If NO, what is the distance over which a new access road will be built



Describe the type of access road planned:

The site is located next to the parking area of the municipal swimming pool in Burger Street, Polokwane.

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

6. SITE OR ROUTE PLAN

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document.

³ "Alternative A.." refer to activity, process, technology or other alternatives.

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The site or route plans must indicate the following:

- 6.1 the scale of the plan which must be at least a scale of 1:500;
- 6.2 the property boundaries and numbers of all the properties within 50 metres of the site;
- 6.3 the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
- 6.4 the exact position of each element of the application as well as any other structures on the site;
- 6.5 the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, storm water infrastructure and telecommunication infrastructure:
- 6.6 all trees and shrubs taller than 1.8 metres;
- 6.7 walls and fencing including details of the height and construction material;
- 6.8 servitudes indicating the purpose of the servitude;
- 6.9 sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):
 - rivers:
 - the 1:100 year flood line (where available or where it is required by Department of Water Affairs);
 - ridges;
 - cultural and historical features;
 - areas with indigenous vegetation (even if it is degraded or invested with alien species);
- 6.10 for gentle slopes the 1 metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
- 6.11 the positions from where photographs of the site were taken.

7. SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to this form. It must be supplemented with additional photographs of relevant features on the site, if applicable.

8. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

11. ACTIVITY MOTIVATION

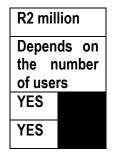
9(a) Socio-economic value of the activity

What is the expected capital value of the activity on completion?

What is the expected yearly income that will be generated by or as a result of the activity?

Will the activity contribute to service infrastructure?

Is the activity a public amenity?



How many new employment opportunities will be created in the development phase of the activity?

What is the expected value of the employment opportunities during the development phase?

What percentage of this will accrue to previously disadvantaged individuals?

How many permanent new employment opportunities will be created during the operational phase of the activity?

What is the expected current value of the employment opportunities during the first 10 years?

What percentage of this will accrue to previously disadvantaged individuals?

Vodacom to
sub-contract
Vodacom to
sub-contract

9(b) Need and desirability of the activity

Motivate and explain the need and desirability of the activity (including demand for the activity):

i. Was the	VEC	
i. Was tile	relevant municipality involved in the application?	
ii. Does the	e proposed land use fall within the municipal Integrated Development Plan? YES	
iii. If the answer to questions 1 and / or 2 was NO, please provide further motivation / exp		

DES	IRABILITY:		
i.	Does the proposed land use / development fit the surrounding area?	YES	
ii.	Does the proposed land use / development conform to the relevant structure plans, Spatial development Framework, Land Use Management Scheme, and planning visions for the area?	YES	
iii.	Will the benefits of the proposed land use / development outweigh the negative impacts of it?	YES	
iv.	If the answer to any of the questions 1-3 was NO, please provide further motivation / explanation /	anation:	
٧.	Will the proposed land use / development impact on the sense of place?		NO
vi.	Will the proposed land use / development set a precedent?		NO
vii.	Will any person's rights be affected by the proposed land use / development?		NO

viii.	Will the proposed land use / development compromise the "urban edge"?	NO
ix.	If the answer to any of the question 5-8 was YES, please provide further motivation / explanate	tion.

BEN	NEFITS:			
i.	Will the land use / development have any benefits for society in general?	YES		
ii.	Explain: The society in general will benefit, as the cellular network (coverage and be improved.	d capac	ity) will	
iii.	Will the land use / development have any benefits for the local communities where it will be located?	YES		
iv.	Explain: The local community (including nearby medical facilities, businesses and residents) in general will benefit, as the cellular network (coverage and capacity) will be improved.			

10. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

Title of legislation, policy or guideline:

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations, if applicable:

Administering authority:

Chapter 5 of the National Environmental Management
Act, 1998 (Act 107 of 1998)

Constitution of South Africa (Act 108 of 1996)

National Heritage Resources Act (Act 25 of 1999)

Department of Environmental
Affairs

SAHRA

1996

Occupational Health and Safety Act (Act 85 of 1993)Department of Health1993Polokwane/Perskebult Town Planning Scheme, 2007Polokwane Local Municipality2007

Date:

11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

11(a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

YES 3m³

If yes, what estimated quantity will be produced per month?

How will the construction solid waste be disposed of (describe)?

Limited construction waste will be generated during the construction phase as most of the parts are premanufactured and only being re-assembled on site. Construction waste will be transported to the nearest suitable waste disposal site.

Where will the construction solid waste be disposed of (describe)?

It is envisaged that all waste will be disposed of at the municipal waste disposal site.

Will the activity produce solid waste during its operational phase? If yes, what estimated quantity will be produced per month?



How will the solid waste be disposed of (describe)?

N/A

Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

N/A

If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the department to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation?

NO

If yes, inform the department and request a change to an application for scoping and EIA.

Is the activity that is being applied for a solid waste handling or treatment facility?

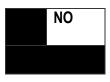


If yes, then the applicant should consult with the Department to determine whether it is necessary to change to an application for scoping and EIA.

11(b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

If yes, what estimated quantity will be produced per month?



This are delively produced any condense that will be a calculation disposed of on one.	110
If yes, the applicant should consult with the Department to determine whether it is necessary	to change to an
U () () () () () () () ()	

application for scoping and EIA.

Will the activity produce effluent that will be treated and/or disposed of at another facility?

Will the activity produce any effluent that will be treated and/or disposed of on site?

NO

NΟ

If yes, provide the particulars of the facility:

<i>3</i> ′ 1 1	,		
Facility name:			
Contact person:			
Postal address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

11(c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere?

If yes, is it controlled by any legislation of any sphere of government?

YES NO

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the emissions in terms of type and concentration:

Base stations transmit power levels from a few watts to 100 watts or more, depending on the size of the region or "cell" that they are designed to service.

The South African Department of Health sets out safety guidelines for all emissions throughout the electromagnetic spectrum (including RF emissions from base stations). These guidelines were developed by the International Commission on Non-ionising Radiation Protection (ICNIRP). The ICNIRP guidelines were endorsed by the European Commission in July 1999. The World Health Organisation (WHO) also endorsed the use of ICNIRP as a suitable safety standard for Radio frequency. The World Health Organisation's position is that the radio frequency field around base stations are typically a fraction of the levels stated in the safety guidelines and therefore do not constitute a health risk (See Appendix G - Information regarding Electromagnetic Radiation from Base Stations).

11(d) Generation of noise

Will the activity generate noise?

If yes, is it controlled by any legislation of any sphere of government?

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

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NO

2. WATER USE	
lease indicate the source(s) of water that will be used for the activity by ticking the appro	priate box(es)
	Il not use water
water is to be extracted from groundwater, river, stream, dam, lake or any other natu	rai leature, piease
ne volume that will be extracted per month:	Litres
oes the activity require a water use permit from the Department of Water Affairs?	NO
yes, please submit the necessary application to the Department of Water Affairs and a this application if it has been submitted.	ttach proof thereof
3. ENERGY EFFICIENCY	
Electricity is already available in the vicinity of the site. Vodacom will make use of fficient components for the base station. Describe how alternative energy sources have been taken into account or been built into	the most energy
Electricity is already available in the vicinity of the site. Vodacom will make use of fficient components for the base station. Describe how alternative energy sources have been taken into account or been built into ctivity, if any:	the most energy
Describe the design measures, if any, that have been taken to ensure that the activity is electricity is already available in the vicinity of the site. Vodacom will make use of efficient components for the base station. Describe how alternative energy sources have been taken into account or been built into activity, if any: Electricity is already available in the vicinity of the site.	the most energy
Electricity is already available in the vicinity of the site. Vodacom will make use of efficient components for the base station. Describe how alternative energy sources have been taken into account or been built into activity, if any:	the most energy the design of the es, it may be necessaryironment. In such contents
Rectricity is already available in the vicinity of the site. Vodacom will make use of fficient components for the base station. Rescribe how alternative energy sources have been taken into account or been built into ctivity, if any: Rectricity is already available in the vicinity of the site. RECTION B: SITE/AREA/PROPERTY DESCRIPTION In portant notes: 1. For linear activities (pipelines, etc) as well as activities that cover very large site complete this section for each part of the site that has a significantly different en please complete copies of Section C and indicate the area, which is covered by Plan.	the most energy the design of the es, it may be necessaryironment. In such contents
Electricity is already available in the vicinity of the site. Vodacom will make use of fficient components for the base station. Describe how alternative energy sources have been taken into account or been built into ctivity, if any: Electricity is already available in the vicinity of the site. SECTION B: SITE/AREA/PROPERTY DESCRIPTION Inportant notes: 1. For linear activities (pipelines, etc) as well as activities that cover very large site complete this section for each part of the site that has a significantly different en please complete copies of Section C and indicate the area, which is covered by	the most energy the design of the es, it may be necessaryironment. In such contents

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed:

All specialist reports must be contained in Appendix D.

Property description/physical address:

The site is located at Voortrekker Park, in an area next to the parking area of the Polokwane Municipal Swimming Pool in Burger Street, Polokwane, Polokwane Municipality area.

(Farm name, portion etc.) Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application.

In instances where there is more than one town or district involved, please attach a list of towns or districts to this application.

Current land-use zoning:

Public Open Space

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to , to this application.

Is a change of land-use or a consent use application required?

Must a building plan be submitted to the local authority?

YES YES

Locality map:

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.) The map must indicate the following:

- an indication of the project site position as well as the positions of the alternative sites, if any;
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (Indicate the position of the activity using the latitude and longitude of
 the centre point of the site for each alternative site. The co-ordinates should be in degrees,
 minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a
 national or local projection)

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

Flat

Alternative S2 (if any):

Flat 1:50 – 1:20 1:20 – 1:15 1:15 – 1:10 1:10 – 1:	:7,5 1:7,5 – 1:5 Steeper than 1:5
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Alternative S3 (if any):

F	at 1:50 – 1:20 1:20 – 1	:15 1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5	1
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2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site:

2.1 Ridgeline	2.6 Plain	
2.2 Plateau	2.7 Undulating plain / low hills	
2.3 Side slope of hill/mountain	2.8 Dune	
2.4 Closed valley	2.9 Seafront	
2.5 Open valley		I

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following (tick the appropriate boxes)?

Shallow water table (less than 1.5m deep) Dolomite, sinkhole or doline areas

Seasonally wet soils (often close to water bodies)

Unstable rocky slopes or steep slopes with loose soil

Dispersive soils (soils that dissolve in water) Soils with high clay content (clay fraction more than 40%)

Any other unstable soil or geological feature An area sensitive to erosion

Alternative or.		
	NO	

Alternative S1:

S2 (if any):					
YES	NO				
YES	NO				
YES	NO				
YES	NO				
YES	NO				
YES	NO				
YES	NO				
YES	NO				

Alternative

(if any)):
YES	NO

Alternative S3

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. (Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted).

4. GROUNDCOVER

Indicate the types of groundcover present on the site:

The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

		Gardens	
Paved surface	Building or other structure	Bare soil	

If any of the boxes marked with an "E" is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

5. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that does currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

	5.22 School	V
	5.23 Tertiary education facility	
	5.24 Church	1
	5.25 Old age home	
	5.26 Museum	
V	5.27 Historical building	
	5.28 Protected Area	
	5.29 Sewage treatment plant A	
	5.30 Train station or shunting yard N	
	5.31 Railway line N	
	5.32 Major road (4 lanes or more)	1
V	5.33 Airport N	
	5.34 Harbour	
	5.35 Quarry, sand or borrow pit	
V	5.36 Hospital/medical centre	1
	5.37 River, stream or wetland	
	5.38 Nature conservation area	
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	5.23 Tertiary education facility √ 5.24 Church √ 5.25 Old age home 5.26 Museum √ 5.27 Historical building 5.28 Protected Area 5.29 Sewage treatment plant A 5.30 Train station or shunting yard N 5.31 Railway line N 5.32 Major road (4 lanes or more) √ 5.33 Airport N 5.34 Harbour 5.35 Quarry, sand or borrow pit √ 5.36 Hospital/medical centre 5.37 River, stream or wetland

5.18 Agriculture	5.39 Mountain, koppie or ridge
5.19 Archaeological site	5.40 Graveyard
5.20 Quarry, sand or borrow pit	5.41 River, stream or wetland
5.21 Dam or Reservoir	5.42 Other land uses (describe)

If any of the boxes marked with an "N" are ticked, how will this impact / be impacted upon by the proposed activity?

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If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity?

If YES, specify and explain:	-
If NO, specify:	-

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity.

If YES, specify and explain:	The proposed mast will not have a negative impact on the filling station in the area and will have a positive impact as the cellular network coverage and capacity will be increased.
If NO, specify:	-

6. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including	NO
Archaeological or palaeontological sites, on or close (within 20m) to the site?	
If YES, explain:	
If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish such a feature(s) present on or close to the site.	whether there is
Briefly explain the findings of the specialist:	
Will any building or structure older than 60 years be affected in any way?	NO
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	NO

If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT

The person conducting a public participation process must take into account any guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of the application which is subjected to public participation by—

- (a) fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the department) at a place conspicuous to the public at the boundary or on the fence of—
 - (i) the site where the activity to which the application relates is or is to be undertaken; and
 - (ii) any alternative site mentioned in the application;
- (b) giving written notice to—
 - (i) the owner or person in control of that land if the applicant is not the owner or person in control of the land:
 - (ii) the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
 - (iii) owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
 - (iv) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;
 - (v) the municipality which has jurisdiction in the area;
 - (vi) any organ of state having jurisdiction in respect of any aspect of the activity; and
 - (vii) any other party as required by the department;
- (c) placing an advertisement in—
 - (i) one local newspaper; or
 - (ii) any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;
- (d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the local municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette* referred to in subregulation 54(c)(ii); and
- (e) using reasonable alternative methods, as agreed to by the department, in those instances where a person is desiring of but unable to participate in the process due to—
 - (i) illiteracy;

- (ii) disability; or
- (iii) any other disadvantage.

2. CONTENT OF ADVERTISEMENTS AND NOTICES

A notice board, advertisement or notices must:

- (a) indicate the details of the application which is subjected to public participation; and
- (b) state—
 - (i) that the application has been submitted to the department in terms of these Regulations, as the case may be:
 - (ii) whether basic assessment or scoping procedures are being applied to the application, in the case of an application for environmental authorisation;
 - (iii) the nature and location of the activity to which the application relates;
 - (iv) where further information on the application or activity can be obtained; and
 - (v) the manner in which and the person to whom representations in respect of the application may be made.

3. PLACEMENT OF ADVERTISEMENTS AND NOTICES

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the department in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of these Regulations.

Advertisements and notices must make provision for all alternatives.

4. DETERMINATION OF APPROPRIATE MEASURES

The practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate. Please note that public concerns that emerge at a later stage that should have been addressed may cause the department to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

5. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments and respond to each comment of the public before the application is submitted. The comments and responses must be captured in a comments and response report as prescribed in these Regulations and be attached to this application. The comments and response report must be attached under Appendix E.

6. AUTHORITY PARTICIPATION

Please note that a complete list of all organs of state and or any other applicable authority with their contact details must be appended to the basic assessment report or scoping report, whichever is applicable.

Authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input.

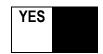
Name of Authority informed:	Comments received (Yes or No)
Capricorn District Municipality	Yes
Polokwane Local Municipality	No
Limpopo Heritage Resources Authority	No

1. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for linear activities, or where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that subregulation to the extent and in the manner as may be agreed to by the department.

Proof of any such agreement must be provided, where applicable.

Has any comment been received from stakeholders?



If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

The Capricorn District Municipality (Mrs. Nokuthula Shiburi) indicated that they "do not have any objection to the proposed activity".

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

- 1. Mr. Hluke Baloyi registered as an I&AP and indicated that he is concerned about the radiation associated with the telecommunication mast and the impact of prolonged exposure to people staying in the area.
- 2. Mr. L.A. Pretorius indicated that he is concerned about the colony of migrating birds roosting in the high exotic trees during the summer months in the proximity of the proposed site. His suspect that the birds might be European Bee-eaters. His is concerned that the proposed base station will affect their breeding and that it seems to him that there are fewer birds each season.

Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached to this report as Annexure E):

- 1. Information regarding the electromagnetic radiation is provided under Section A point 11 (c) of this Report. Additional documentation is also attached to Appendix G Information regarding Electromagnetic Radiation from Base Stations.
- 2. An Avifaunal specialist (Mr. Joe Grosel) from Tembele Ecological Services was appointed to investigate the occurrence of birds in the vicinity of the site and made the following findings and recommendations (see letter attached as Appendix D Letter regarding impact of proposed base station on Avifauna):

"Two site visits to the Municipal swimming pool area on the evenings of the 31st October and 1st November revealed that a number of European Bee-eaters Merops apiaster (approximately 60 individuals) gathered over the area and then proceeded to roost in the canopy of the large American Plane Platanus occidentalis trees situated within the northern section of the municipal swimming pool enclosure. Small groups of Bee-eaters flew in from various directions from about 18h00 suggesting that these trees represent an established roost site for this species. This roost site is situated approximately 65m from the proposed cellular mast site.

European Bee-eaters are considered to be a common <u>non-breeding</u> Palearctic migrant in South Africa arriving from their European and North African breeding grounds in September and departing in mid-April (Hockey et al 2005). Several breeding records do exist for locations in the Northern Cape but these seem to be sporadic and unsustainable. According to the IUCN's Red List the species' conservation status is regarded as '<u>Least Concern</u>' with a 'Stable' population trend. The global population is estimated to be in the region of 12,000 000 adult birds (IUCN, 2012). The current South African Red Data book also places the European Bee-eater in the 'Least Concern' category (Taylor et al 2015).

Although not fully understood cell phone masts may have a long term negative impact on resident

birds. Whether this will be the case with non-breeding species which utilise areas near masts on a seasonal basis is unclear. However in the case of European Bee-eaters in the urban environs of Polokwane several know roost sites occur around the city in suburbs including Flora Park, Welgelegen and Ladanna. There also happen to be cell phone masts within these areas. The closest established cell phone mast to the Voortrekker Park roost site is less than 270m away (Situated in Dorp Street) and seemingly the Bee-eaters don't seem to be affected by this. It is therefore unclear whether the proposed erection of the cellular mast will have a significant impact on the Bee-eaters that roost in the area. If the birds are disturbed by the presence of, or radiation from, the proposed mast it will in all likelihood result in them vacating the current roost site. Should the erection of the mast go ahead it is suggested that the faculty of Biodiversity at the University of Limpopo be approached to conduct a long term case study on the possible effects of radiofrequency radiation on birds which roost en-mass. It should also be taken into consideration that the proposed base station will provide essential telecommunication coverage to Polokwane's main medical node and the neighbouring densely populated residential areas."

Copies of the Consultation Basic Assessment Report were sent to the following I&AP's to comment on:

- Capricorn District Municipality
- Polokwane Local Municipality
- LIHRA
- Mr. Hluke Baloyi
- Mr. L.A. Pretorius

Any comments received will be included in the Final Basic Assessment Report.

2. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

List the potential direct, indirect and cumulative property/activity/design/technology/operational alternative related impacts (as appropriate) that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed.

Alternative (preferred alternative)

PLANNING AND DESIGN PHASE Direct impacts:

Impact upon fauna and flora:

Due to the extremely limited extent of the proposed site (100m²), which is situated in a park in Polokwane, the impact upon the natural environment will be minimal. The site is located in a park next to the parking area of the Polokwane municipal swimming pool. The impact of the proposed mast on the nearby colony of European Bee-eaters roosting in the nearby trees was investigated by a specialist and it was found to be unclear. It is however proposed that the impact of the mast on the birds be monitored. During the project planning and design stages, Vodacom and its contractors, must take into account the recommendations of this Basic Assessment Report, so that it is positively utilised on a proactive basis to aid in the mitigation of impacts.

• Minimising of visual impact:

Due to the fact that the infrastructure in question will be a 25m high mast located in a park next to the parking area of the Polokwane municipal swimming pool, is it deemed important that the visual impact be minimized. The mast will be camouflaged as a tree in order to minimize the visual impact of the mast. Vodacom will implement elements of good visual design.

Indirect impacts:

• <u>Vodacom need to upgrade their network in the area. These network problems will be resolved after the mast has been erected:</u>

The proposed infrastructure will improve the cellular coverage and capacity in the area.

Cumulative impacts:

- The size of the base station will measure approximately 10m x 10m (100m²) in extent and is located next to a parking area. The specific position for the base station was chosen as there are no trees that will need to be removed.
- The surrounding area (medical facilities, businesses and high density residential areas) will benefit by this development as the cellular network in the area will be upgraded.

CONSTRUCTION PHASE

Direct impacts:

Earthworks:

All excavation activities for any purpose whatsoever should be preceded by selective stripping and stockpiling of vegetative (humus) and soil materials in the order of their horizons as found on site, for the purpose of replacement in the appropriate horizon order, after the completion of construction. These activities should include:

- trenching for the installation of services (e.g. electricity),
- foundations.
- access road construction.
- site clearance,
- borrow pits, and
- yards or lay-down areas or any other areas affecting the natural environment.

Replacement and rehabilitation should be progressive with construction and not left until the end. Temporary topsoil stockpiles should be seeded, or protected in a manner acceptable to the environmental planner, so as to avoid erosion by rain or wind.

Stockpiled topsoil and sub-soils should be protected from contamination e.g. by fuel spillages etc.

Vehicular access and movement of construction vehicles:

The following mitigatory measures are deemed necessary to ensure safe and efficient traffic flow to and from the mast site, during construction:

- Posting of relevant traffic signage where construction will take place (to inform motorists of construction vehicles).
- Adequate parking shall be provided on site, to accommodate construction vehicles no vehicles should be parked in any public road reserve, at any time.

Contractors' yards:

A material delivery and storage area should be demarcated in co-ordination with the contractor. Material should not be brought onto a site prematurely, which could result in additional areas being cleared or affected.

Rehabilitate compacted soils:

Soils compacted by construction activity shall be deep ripped to loosen compacted layers and graded evenly. Topsoil shall be re-spread upon completion of construction activities.

Impacts on the biological environment:

Due to the extremely limited extent of the proposed activity, the impact upon the biological environment will be minimal (100m²). Capture or snaring of birds must be strictly prohibited on site - especially w. r. t. contractors' employees. Avifauna (Birds) may be temporarily displaced from the area during construction due to the noise and activity. The immediate proximity of other available habitat (in the remaining area of the park) means that this impact is of moderate significance. Construction activities will only be allowed under normal working hours as the nearby colony of European Bee-eaters utilizes the nearby area to roost from approx. 18:00 in the afternoon.

Toilet facilities:

The use of portable chemical toilets for use by the labour force is essential to avoid pollution and attraction of vermin and flies (which could become a nuisance or a health hazard).

Waste handling:

Contractors should remove all waste generated by themselves during construction and it should be disposed of at a suitable solid waste disposal venue. Waste material will be kept in designated areas.

Mixing cement:

Where cement and concrete, etc. is mixed on site, this shall be done in specified areas on concrete aprons or on protected plastic linings and provision shall be made to contain spillage or overflows onto soils.

Mixing of chemicals:

The mixing of any paints, solvents, sealants, adhesives, chemicals or other noxious materials shall only be undertaken in designated areas on concrete aprons that have spillage control channels and separate storage areas. The mixing of materials shall not be permitted in the general areas of the site. All surplus or waste materials are to be removed from the site. All these operations shall only be allowed on site under strict observations of the manufacturers' instructions.

Silencing of plant:

All plant and vehicles on the site will be equipped with noise suppressing measures and kept in proper working order. Where working at the site, noise levels must be within ambient noise level. Excessive noise from the labour force should be avoided, as this may cause a nuisance to adjacent areas of residence.

Maintain vehicles:

Vehicles and equipment shall be maintained in proper working order, in order to limit gaseous emissions, pollution and should be free from oil and hydraulic fluid leaks, etc.

Fires:

No fires will be permitted on site without the authority of the resident engineer or project manager.

Indirect impacts:

Optimisation of the local economy:

Where appropriate, use should be made of labour intensive construction methods - local emerging contractors should be used if at all possible.

Cumulative impacts:

Safety on site:

The implementation of an Occupational Health and Safety management system should be required of all contractors. Safety measures and work procedures/instructions should be communicated to all construction workers. First aid facilities shall be on hand at all times. Medical screening of employees shall take place.

The contractor shall implement adequate and mandatory safety precautions relating to all aspects of the operation. Warning and advisory signage should also be implemented (also with regards to vehicular movement along public roads).

Cleanliness:

The site is to be maintained in a sanitary condition and all toilet facilities shall be maintained in good order. Food cooking will only be permitted in designated areas.

Vodacom should monitor the site on a regular basis during the construction phase.

OPERATIONAL PHASE

Direct impacts:

Handling of objections:

In cases where inhabitants of the surrounding areas have objections to the infrastructure, Vodacom should meet with such persons in order to discuss and address their concerns. Records of such deliberations to be circulated to all parties involved (including relevant provincial departments/authorities).

Minimising of visual impact

Due to the fact that the infrastructure in question will be a 25m high mast located in a park next to the parking area of the Polokwane municipal swimming pool, is it deemed important that the visual impact be minimized. The mast will be camouflaged as a tree in order to minimize the visual impact of the mast. Vodacom will implement elements of good visual design.

Indirect impacts:

Maintenance of the site:

Employees of Vodacom will visit the site on a regular basis to do routine maintenance to keep all the components in good working order.

Cumulative impacts:

• Cell phone coverage and capacity will improve:

The surrounding area (medical facilities, businesses and high density residential areas) will benefit by the proposed project as the cellular network coverage and capacity will be improved.

The medical facilities, businesses and residents in the area are dependent on good telecommunication networks.

DECOMMISSIONING OF EXISTING MAST

All infrastructure will be removed

The site should be rehabilitated to the state it was prior to the installation of the infrastructure.

Indirect impacts:

• Poor cell phone coverage in this area

The coverage and capacity problem will not be solved in the area should the mast be demolished.

Cumulative impacts:

• The coverage problem will remain in the area should the mast be demolished

The cell phone coverage and capacity is currently not reliable and the problem will remain should the mast be demolished. The medical facilities, businesses and residents in the area are dependent on good telecommunication networks.

3. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Alternative A (preferred alternative)

- Concerns relating to the social impacts of a development such as this one could range around aspects such as dissatisfaction with the proposed infrastructure based on value judgements, e.g. perceptions that the "sense of place" could be disturbed.
- The (uncertain) impact on the nearby colony of European Bee-eaters will be the same no matter

where the mast is located in the park. The surrounding area consists of high density residential areas and limited space is available for the construction of the base station.

- It is recommended that possible negative impacts be mitigated through the implementation of the proposals contained in this report.
- The writer came to the conclusion that, done in the right way the advantages of the proposed development, will outweigh the social disadvantages, which might result from the installation and existence of this infrastructure.

No-go alternative (compulsory)

The Department of Environmental Affairs stresses the consideration of the "no development/no-action" option in cases where a proposed development is envisaged to have significant negative environmental impacts, or where such impacts cannot be mitigated against effectively or satisfactorily. The IEM procedure suggests that the "no action" option should be considered as an alternative. This option is normally considered during a full EIA where <u>significant</u> negative environmental impacts are expected or if the proposed site is considered to be ecologically sensitive or unique.

The site is located in a park in Polokwane. Due to the extremely limited extent of the proposed mast site (100m²), the impact upon the biological environment will be minimal.

The cell phone coverage and capacity will remain problematic in the area should this activity not take place. Should the mast not be built on the proposed site, then an alternative site must be planned.

Alternative B		
Alternative C		
I .		

For more alternatives please continue as alternative D, E, etc.

SECTION E. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?



If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment):

-

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the department in respect of the application:

The surrounding environment must not be disturbed and the site must be cleared of all waste after construction. The applicant must adhere to Section D of this report and attached EMPr.

Is an EMPr attached?

YES

The EMPr must be attached as Appendix F.

SECTION F: APPENDIXES

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports

Letter regarding impact of proposed base station on Avifauna

Appendix E: Comments and responses report

Appendix F: Environmental Management Programme (EMPr)

Appendix G: Other information

- Assessment of Alternatives
- CAA Approval
- Owner's Consent Letter
- Information regarding Electromagnetic Radiation from Base Stations

SECTION G: DECLARATION BY THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

I, Danie Combrink, declare that I -

(a) act as the independent environmental practitioner in this application;

(b) do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for

work performed in terms of the Environmental Impact Assessment Regulations, 2014;

(c) do not have and will not have a vested interest in the proposed activity proceeding;

(d) have no, and will not engage in, conflicting interests in the undertaking of the activity;

(e) undertake to disclose, to the competent authority, any material information that has or may have the potential to

influence the decision of the competent authority or the objectivity of any report, plan or document required in

terms of the Environmental Impact Assessment Regulations, 2006;

(f) will ensure that information containing all relevant facts in respect of the application is distributed or made

available to interested and affected parties and the public and that participation by interested and affected

parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable

opportunity to participate and to provide comments on documents that are produced to support the application;

(g) will ensure that the comments of all interested and affected parties are considered and recorded in reports that

are submitted to the Department in respect of the application, provided that comments that are made by

interested and affected parties in respect of a final report that will be submitted to the Department may be

attached to the report without further amendment to the report;

(h) will keep a register of all interested and affected parties that participated in a public participation process; and

(i) will provide the Department with access to all information at my disposal regarding the application, whether

such information is favourable to the applicant or not.

Dombink

Signature of the Environmental Assessment Practitioner:

Tekplan

Name of company:

3 November 2016

Date: