ENVIRONMENTAL MANAGEMENT PLAN FOR THE EXISTING STADMITTE ROOFTOP ANTENNA, SWAKOPMUND CBD, ERONGO REGION-NAMIBIA

## **ENVIRONMENTAL MANAGEMENT PLAN (EMP) REPORT**

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Renewal of Environmental Clearance Certificate and continued use of the existing rooftop antenna at the Stadmitte building, Swakopmund.

## **Environmental Management Plan (EMP) Prepared for Powercom (Pty) Ltd**

P.O. Box 40799 Ausspannplatz Windhoek Namibia

## **D&P Engineers and Environmental Consultants (Pty) Ltd.**

20 Joseph Ithana Mukwayu street Ludwigsdorf Windhoek-Namibia PO Box 8401, Bachbrecht,

Telephone: +264 (61) 302 672/ 081299 8444/ 081 346 8492



https://www.facebook.com/DP-Engineers-and-Environmental-Consultants-193970370936785/

## August 2023 Compiled by:

D&P Engineers and Environmental

Consultants (Pty) Ltd

Email: <a href="mailto:tkasinganeti@dpe.com.na">tkasinganeti@dpe.com.na</a>

## **Authors:**

Adiel T. Mudzanapabwe Tendai E. Kasinganeti

Approved: Tendai E. Kasinganeti – Lead EAP

Date: 22 Aug. 23

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## **DEFINITIONS**

TERMS	DEFINITION
BID	Background Information Document
EAP	Environmental Assessment Practitioners
ECC	Environmental Clearance Certificate
ECO	Environmental Control Officer
EIA (R)	Environmental Impact Assessment (Report)
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
EMF	Electromagnetic Field Measurement
EMPr	Environmental Management Plan Report
GHG	Greenhouse Gasses
ISO	International Organization for Standardization
I&Aps	Interested and Affected Parties
MEFT: DEA	Ministry of Environment, Forestry and Tourism's Directorate of Environmental Affairs
NHC	National Heritage Council
NEMA	Namibia Environmental Management Act
ToR	Terms of Reference
UNFCCC	United Nations Framework Convention on Climate Change

## 1. CHAPTER ONE: BACKGROUND

## 1.1. Introduction

POWERCOM (PTY) LTD herein referred to as the proponent has been notified that the existing Stadmitte rooftop antennae at Stadmitte building, Swakopmund, which has been existing for 14 years has been receiving complaints from the residents on unit 16, 17 and 24 have put in a complaint that they are at risk of radiation from the existing Stadmitte tower which long-term may affect the health of the respective families and other nearby resident. It has also come to the attention that the Antennae is not high enough. To achieve the objective of improved telecommunication connectivity, POWERCOM has been appointed by Telecom Namibia, a sister company to establish telecommunication towers across different locations countrywide and Stadmitte building is one of the locations identified. The development is earmarked to expand connectivity, decongest connectivity and promote ICT in rural and periurban environment.

It is therefore envisaged that the existing telecommunication tower was inspected and an EMF study was done by Alphawave Mobile Network Services to assess the radiation levels, and results showed that there is minimal radiation with a highest reading 2.4290% which is more than 41 times below the General Public limit, which indicated that there is low risk on radiation. refer to Appendix 1.

In this respect, D&P Engineers and Environmental Consultants cc has been appointed as an Environmental Assessment consultant to carry out an EIA and develop an Environmental Management Plan as per the requirements of the Environmental Management Act No. 7 of 2007 and Namibian Environmental Impact Assessment Regulations of 2012 in terms of telecommunication infrastructure.

The conducted Environmental Impact Assessment and developed Environmental Management plan remains in force and applicable in this respect because of the proximity of the site and the project site environments are the same.

## 1.2. Legal or compliance requirements

As per the requirements of the Environmental Management Act No. 7 of 2007 and the Environmental Assessment regulations of 2012, POWERCOM has appointed D&P Engineers and Environmental Consultants (DPEE) to conduct an Environmental Assessment (EA) and develop an Environmental Management Plan (EMP) for the continued use of the base trans receiver station. Therefore, this report presents the EMP which has been undertaken in accordance with these requirements. As such, key requirements in accordance with this Act, classifies the proposed project as listed and invoke the need for an environmental management plan to sustainably implement this project. However, legal compliance is not

only limited to the EMA, but also applies to all applying legal requirements identified in the ESR. When licenses are required such as for wastewater discharge, the proponent should ensure that all licenses and permits are obtained and fulfilled as per conditions.

In accordance with the EMA ACT, the application for the renewal of the Environmental Clearance Certificate (ECC) will be done from the Ministry of Environment, Forestry, and Tourism (MET): Directorate of Environmental Affairs (DEA) whilst the project is operational unless with written consent from MEFT. In this respect, this document forms part of the application to be made to the DEA's office for renewal of Environmental Clearance certificate for the proposed continued activities of the BTS tower, in accordance with the guidelines and statutes of the Environmental Management Act No.7 of 2007 and the environmental impacts regulations (GN 30 in GG 4878 of 6 February 2012).

## 1.3. Other Legislation And Conventions

In addition to the Environmental Assessment Policy and the Environmental Management Act, the following additional pieces of existing or pending legislation and conventions may have some bearing on the proposed project:

### The socio-economic environment

- Atomic Energy and Radiation Protection Act (2005)
- Communal Land Act (2002)
- Decentralisation Policy (1998)
- Hazardous Substances Ordinance (1956)
- International Atomic Energy Agency Non-proliferation Treaty (1970)
- Labour Act (1992)
- National Employment Policy (1997)
- National Heritage Act (2004)
- Pending Minerals Safety Bill
- Public Health Act (1919)
- Regional Councils Act (1992) as amended
- Road Traffic and Transport Act (1999)
- Traditional Authorities Act (1995)
- War Graves and National Monuments Amendment Act (1986)

## The biophysical environment

- Air Quality Act (2004)
- Atmospheric Pollution Prevention Act (1965)
- Atmospheric Pollution Prevention Ordinance (1976)
- Convention on Biological Diversity (2000)
- Convention to Combat Desertification (1997)
- Forestry Act (2001)
- Minerals Policy of Namibia (2003)

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- Namibian Water Corporation Act (1997)
- Nature Conservation Ordinance (1975) and Nature Conservation Amendment Act (1996)
- Pollution and Waste Management Bill (draft)
- Ramsar Convention (1975)
- Soil Conservation Act (1969)
- United Nations Framework Convention on Climate Change (1992)
- Water Resources Management Act (2004)

## 2. CHAPTER TWO: PROJECT DESCRIPTION AND LOCATION

## 2.1. Project Location

The tower is located at the Stadmitte building, Swakopmund at coordinates, -22.6785309, 14.5271139. The tower is located in central business area of Swakopmund where development is ever continuing and the tower may give of radiation but the radiation measures conducted has shown minimal radiation that may affect nearby residents.

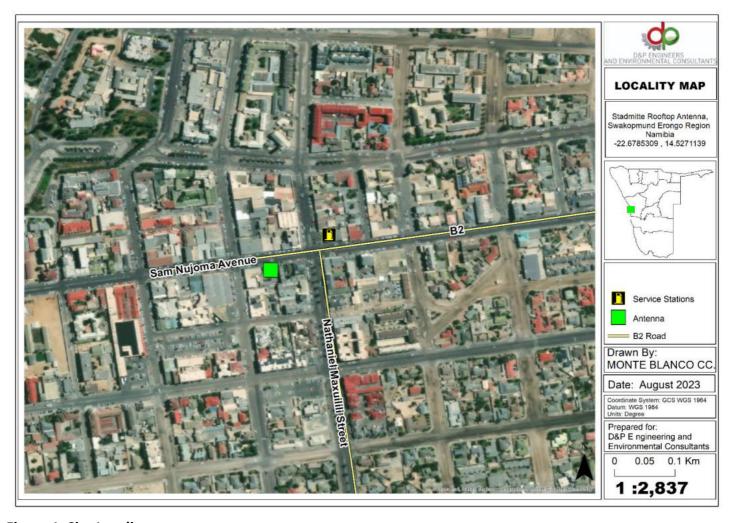


Figure 1: Site Locality

## 2.2. Brief Description Of The Environment

The tower is found at the Stadmitte building, within Swakopmund central business area along the Sam Nujoma Ave. The third and second floor are residential with some Offices also on the second floor, whilst shops are on the ground floor and has a parking basement. The Stadmitte building hosts population of about 50-70 people who are serviced. There are 21 units for residential of which 8 are permanent and the rest are for holiday accommodation.



Figure 2: Tower Site – From the top floor of Stadmitte building



Figure 3: Tower - Opposite end of the Stadmitte building



Figure 4: Stadmitte building with various shops.

## 2.3. Description and Design of the project

TELECOM Namibia's information and technology infrastructure development subsidiary, POWERCOM (Pty) Ltd is on a drive of construction network towers across the country. POWERCOM targets that, other than improving internet and voice connectivity in the regions, there is also a need to increase the company's footprint and asset base to best service ICT stakeholders and offer better connectivity in all regions of the country. POWERCOM aims at providing different telecommunication service providers in Namibia with ready-to-use infrastructure as well as expanding network coverage into the different areas where there is weak or no network connectivity at all. Behind this backdrop, Telecom identified areas that need improved network connectivity that is currently not serviced with telecom network.

The existing tower development includes the following:

- The site is to accommodate TN Mobile service and other service providers.
- Cell Phone Towers (also called Base Stations), have electronic equipment and antennas that send and receive signals to and from cell phones.
- Antennas are mounted on non-tower structure (Stadmitee building)
- The structure has barriers to limit public access to it.

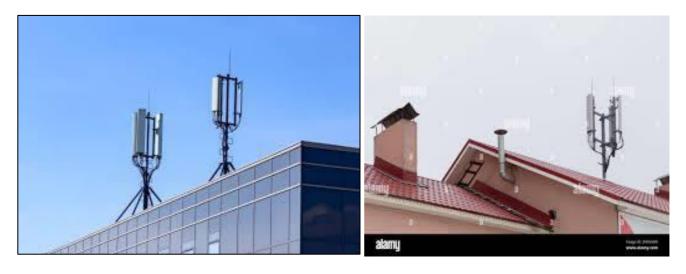


Figure 5: Typical roof-top mounted telecommunication antennas (visual purposes only)

## 3. CHAPTER THREE: ENVIRONMENTAL MANAGEMENT PLAN (EMP)

## 3.1. Purpose of the EMP

This EMP has been developed for the existing antennas of a telecommunication base transceiver station at Stadmitte Building. It forms the operational framework within which the proposed project is to operate within. All anticipated environmental and social impacts identified in the environmental scoping report are addressed, with a mitigation action, monitoring requirements, key indicators, and responsibilities. The purpose of this document is therefore to guide environmental management throughout the following life-cycle stages of the proposed development, namely planning and design, construction, operation, and maintenance. All this life-cycle has been addressed in this EMP (see table 2&3). This EMP is incessant, and it requires compliance monitoring, updating, and or amendment if the scope of operations changes. All personnel working on the project will be legally required to comply with the standards set out in this EMP.

Furthermore, this section describes the Environmental Management Plan (EMP) for impacts associated with the proposed development. The EMP stipulates the management of environmental programs in a systematic, planned, and documented manner. The EMP below includes the organizational structure, planning, and monitoring for environmental protection at the existing tower and other areas of its influence. The aim is to ensure that the proponent maintains adequate control over the project operations to

- To prevent negative impacts where possible;
- Reduce or minimize the extent of impact during the project life cycle;
- Prevent long-term environmental degradation.
- Ensure public safety and health are protected

## 3.2. EMP Administration

There is a strong need to clearly outline the roles and responsibilities of all stakeholders to ensure that the EMP is fully implemented. To ensure that the EMP is effectively implemented, the consultant also recommends that MET: DEA also conduct regular inspection visits on-site to enforce conducting of quarterly and biannual reports. Furthermore, there is also a need for the proponent to appoint an overall responsible person (project manager) to ensure the successful implementation of the EMP.

## 3.3. Roles and Responsibilities

Table 1: EMP Implementation-Roles and Responsibilities

ROLE	ENVIRONMENTAL RESPONSIBILITIES
Powercom Pty Ltd (Site Acquisition	Responsible to enforce EMP implementation during construction and operation phases.
Manager)	
Environmental Control Officer (ECO)	Implement, review and update the EMP.
	• Ensure all reporting and monitoring required under EMP is undertaken, documented, and distributed as needed
	• Conduct environmental site training (toolbox talks) and inductions with the support of an environmental
	consultant.
	Conducts environmental audit at the work site with the support of an environmental consultant.
	Close out all non-conformances.
	Ensure materials being used on site are environmentally friendly and safe.
The Directorate of Environmental	Approve the EMP and any amendments to the EMP.
Affairs	Approve reports of environmental issues and non-conformances as issued.
	Review and approve environmental reports submitted as part of EMP implementation
	• Ensure that the client is compliant with the EMP through biannual reporting on environmental performance.
Project Manager (Site Engineer)	Control and monitor actions required by the EMP.
	Report all environmental issues to HSE Manager.
	Ensure documented procedures are followed and records are kept on site.
	Ensure any complaints are passed on to the management within 24 hours of receiving the complaint.
Contractor	Follow requirements as directed by the EMP when conducting work.
	• Report any potential environmental issues to site engineer/project manager, indicating spilt oil, excess waste,
	excessive dust generation, dirty water running off the site and other possible non-conformances

## 3.4. Planning and design

**Table 2: Planning and Design Management Actions** 

Aspect	Management Requirement	Responsibility	Timeframes
Tower Design	<ul> <li>The design standards to be applied for the Tower should comply with the internationally accepted public exposure guidelines.</li> <li>The tower design should comply with the aesthetic guidelines for similar structures as prescribed by the City of Windhoek.</li> </ul>	Proponent	Pre-construction phase
Labour Recruitment	<ul> <li>It is anticipated that POWERCOM will utilize its own workforce. However, should there be the need to employ an extra person(s), especially for unskilled labor, it is highly recommended to recruit local people from Swakopmund.</li> </ul>	Proponent	Ongoing
Surrounding property owners	Consent letters are to be obtained from the surrounding property owners before construction or renovations.	Proponent	Pre-construction phase
Construction schedule	<ul> <li>A convenient construction work/schedule should be prepared and shared with the surrounding property owners. This will ensure that the surrounding property owners are aware of when to expect the construction team at the site.</li> </ul>	Proponent	Pre-construction

Compensation	of	• There needs to be a clear agreement between Proponen	t Pre-construction
land		POWERCOM and the land owners if they will be	
		compensated for the piece of land used before construction starts.	

## 3.5. Construction and Operation

Table 3: Construction and Operation EMP (C&O EMP)

Impact	Description	Effects	Class	Time	Responsibility	Action	Phase
				frame			
Noise	Noise will be	The health of working personnel	Environmental	4-6	Environmental	A construction interval will be established,	Construction &
pollution	generated through:	could be disturbed.		months	Control Officer	used, and adhered to.	Operation
	<ul> <li>Construction</li> </ul>	Swakopmund residents and			Site Manager	Workers will be issued earplugs to protect	
	activities	learners could be disturbed by the				them from excessive noise.	
	<ul> <li>Moving vehicles.</li> </ul>	noise.					
						The public will be notified through a	
		General annoyance				printed timetable stating planned	
						operational activities.	
		Driving away local animals species				Construction activities will be conducted	
		near the project site				during the daytime.	
						Site notices will be erected on, around the	
						site-notifying visitors, and nearby residents	
						of different hazards on site.	
						No areas marked as sensitive	
						environments, especially for birds, need to	

Impact	Description	Effects	Class	Time frame	Responsibility	Action	Phase
				Tune		be avoided during construction and operation.	
Dust	Dust will accumulate	This can lead to respiratory	Environmental	6-8	Environmental	Dust suppression will be done by watering	Construction &
Generation	because of the land	illnesses, especially among those	Liiviioiiiileiitai	months	Control Officer	dust source surfaces.	Operation
Generation	preparation, onsite	working in the area.		months	Control Officer	aust source surraces.	Operation
	movements of vehicles	Working in the area.			Site Manager	Watering down dusty surfaces,	
	and machines, wind	General air pollution.					
	blowing on loose	·				Ensure that protective equipment such as	
	material during	Nuisance to nearby residents				respirators are distributed to employees,	
	construction, and	-				and ensure their use.	
	tipping.	The process can also drive away					
		wild animals within the project				Site notices are to be erected on and	
		area's surroundings				around the site to inform visitors and	
						surrounding residents.	
GhG	Green House Gasses	Global climate change	Environmental	Constr	Environmental	Adopt the use of ethanol-blended fuels	Construction &
emissions	(GHGs) emissions will			uction	Control Officer	wherever necessary.	Operation
	be produced from the	Air pollution		phase			
	following activities:				Site Manager	Design an operating system that cuts on	
	• Fuels					fuel consumption.	
	combustion for				Department of		
	(construction				Environmental	Use of solar energy systems during	
	vehicles and				Affairs.	construction for lighting and other minor	
	equipment)					energy needs.	
	Ground						
	excavation						
	releases						
	phosphorus						

Impact	Description	Effects	Class	Time	Responsibility	Action	Phase
				frame			
	found						
	underground						
	and releases						
	particulate						
	matter into the						
_	atmosphere.						
Waste	Construction and	Pollution from oil spills resulting	Environmental	Constr	Environmental	Ensure that all waste from construction	
Generation	operation are	from the handling of various		uction	Control Officer	activities is stored and contained in	
	associated with a lot of	machinery used during the		phase		designated containers and transported to	
	raw materials and	construction phase			Site Manager	an approved waste disposal site.	
	activities that result in						
	pollution	Construction rubble, empty				Bulky waste such as building rubbles must	
		packaging containers/bags, and				be collected and disposed of for landfilling.	
	The construction and	materials remnants.				-Visual inspections monitoring	
	maintenance activities						
	may generate e-waste						
	and this needs to be						
	disposed of						
	sustainably.						
Safety and	Construction related	Injuries to workers such as	Health and	Constr	ECO	Equip workers with Personal Protective	Construction
Health risks	Safety and Health	Occupational dermatitis, slips and	Safety	uction		Equipment (PPE), and provide training on	and operation
	hazards	falls of humans and objects,		phase		how to effectively use the PPE.	
		musculoskeletal disorders, etc.					
						Provide platforms for briefings and	
						meetings about possible safety and health	
						hazards in the workplace	
						Provide site signs warning and informing	
						about different hazards on site.	
	Electrical hazards	Fatalities and fires	Health and	Constr	ECO	Employees should be trained on electrical	Construction
			Safety	uction		safety before working on-site.	and Operation
				and			

Impact	Description		Effects	Class	Time	Responsibility	Action	Phase
					frame			
					operati		Safety representatives with training on	
					on		electrical hazards and emergency	
							management should be a station on-site	
							always during construction	
							Safety signs during construction and	
							operation should be put on site. No-go	
							areas should be labeled, and PPE	
							specifications should be clear to	
							maintenance personnel.	
	Radiation	(Non-	Carcinogenic consequences	Health	Perman	Environmental	Radiation is the emission of energy as	Operation
	Ionizing)				ent	Control Officer	electromagnetic waves or as moving	
				Social			subatomic particles and it is part of our	
						Site Manager	everyday environment (Clegg et al,.2019).	
							Non-ionizing radiation encompasses both	
							natural and human-made sources of	
							electromagnetic fields, for example,	
							electrical power supplies and appliances	
							are the most common sources of low-	
							frequency electric and magnetic fields in	
							our living environment (ITU-T, 2014).	
							The contractors to be installing the	
							transmission are required to put on	
							appropriate PPE to protect them from	
							possible radiation.	
							Provisions of the Atomic Energy and	
							Radiation Protection Act, 2005 (Act No. 5	
							of 2005) should be effectively	

Impact	Description	Effects	Class	Time	Responsibility	Action	Phase
				frame			
						implemented, and 20 days before	
						installation of the transmitters,	
						communication should be made to the	
						Radiation Protection Authority for	
						authorization and supervision.	
	Avifauna	Bird fatalities	Environmental	Perman	Environmental	Towers will be built below 40m in height	Operation
				ent	Control Officer	which will avoid bird fatalities.	
					Site Manager	Construct towers, away from areas of high migratory bird traffic, wetlands, and other known bird areas.	
						Minimize the tower 'footprint' on newly constructed towers.	
						If the tower is decommissioned, it should be removed as soon as possible.	
						Use visual daytime markers in areas of high diurnal birds.	
						Security lighting for on-ground facilities should be minimized, point downwards, or be down-shielded.	
						Conduct on-site bird fatalities monitoring on the tower at least every month.	
						The use of white strobes results in less circling behaviour by nocturnal migrants	

Impact	Description	Effects	Class	Time	Responsibility	Action	Phase
				frame			
						and thus less mortality than red pulsating lights.	
	Aviation Impacts	Bird fatalities  Air transports impacts	Socio- economic Environmental	Perman ent	Environmental Control Officer Site Manager	The towers should comply with aviation guidelines so that they do not impact air transport systems.  Air traffic visibility systems such as lighting at the tip of the tower.  The towers should be designed so that they are visible to birds.	Construction and operation
Land use change	There will be change in land use and visual aesthetics	Sudden changes in landscape appearances may be unfavorable for Walvis bay residents.	Social  Terrestrial environment	Perman ent	Environmental Control Officer Site Manager	The development should blend into the existing area through designing and color coding.	Construction and operation
Positive Impac	ts						
Employment creation	The development provides an opportunity of outsourcing work	Improves disposable income for those employed and their immediate families.	Socio- economic	Project lifetime	Site Manager	Work with local leadership (councilor) on acquiring non-skilled labor from the residents.	Construction and operation
Business linkages	Raw materials acquiring and contracting companies provide an opportunity for businesses.	Local suppliers will be presented with an opportunity to empower their businesses.  Construction workers can be provided with accommodation, food, and services from the local community increasing business activities.	Socio- economic	Constr uction phase	Site Manager	The proponent will outsource most of its materials and services	Construction and operation

Impact	Description	Effects	Class	Time	Responsibility	Action	Phase
				frame			
Infrastructur	The development	Improvement in connectivity.	Socio-	Constr	Site Manager	The new tower should cover a larger area,	Construction
е	presents a unique		economic	uction		and they should also consider the provision	and operation
developmen	opportunity for	Boost in Local		phase		of infrastructure platforms to other	
t	infrastructure						

## 4. CHAPTER FOUR: CONCLUSION AND RECOMMENDATIONS

## 4.1. Recommendation from Environmental Assessment Practitioner

Based on the information provided it is the opinion of D & P Engineers and Environmental Consultants cc that no fatal flaws have been identified for the proposed development and that the information contained in this report is sufficient enough to allow DEA to make an informed decision.

The Environmental Consultant, therefore, recommends that Environmental Clearance be granted for the proposed development based on the following recommendations:

- The proposed activity is not anticipated to have significant environmental impacts.
- There is however a visual impact.

The following recommendations should be implemented to ensure that potential impacts associated with the establishment and operations of the site are minimised:

- Any areas disturbed during construction and operation must be rehabilitated.
- Construction is to take place during working hours.
- Trampling and disturbance associated with construction should be limited to within 5m (five meters) of the footprint of the site.
- Provisions of the Atomic Energy and Radiation Protection Act, 2005 (Act No. 5 of 2005) should be strictly abided to.
- On completion or renovations of the tower, all litter and construction debris shall be immediately removed from the site.
- Mitigation measures to reduce the potential visual impact should be implemented as far as possible.

# Appendix A. Electromagnetic Field Measurement Survey

## Appendix B. Stadmitte Lease Agreement

## **Appendix C. Lead Consultant resume**











MOBILE NETWORK SERVICES

## Electromagnetic Field Measurement Survey



Site Name: Stadtmitte

**Site Address:** 

Stadtmitte Swakopmund Namibia

Site visit date: 15 February 2023

**Revision Number: 1** 

## Introduction

A measurement survey of the Stadtmitte base station site was commissioned by Powercom Namibia. The aim of the survey was to measure the electromagnetic exposure levels at various positions around this base station.

Measured results are compared to the guidelines for limiting exposure, proposed by the International Commission on Non-Ionizing Radiation Protection (ICNIRP 2020).

The measurement protocol used is the IEC 62232 Ed 2 (2017) standard for determination of RF field strength, power density and SAR in the vicinity of radiocommunication base stations for the purpose of evaluating human exposure.

## Radio Frequency (RF) Environment

Through visual inspection, Telecom Namibia is observed to have equipment installed on site.

Apart from the above mentioned mobile-service operator, signals from other mobile-service operators were also detected during the measurement survey. Non-mobile-service signals were also detected during the survey, including, amongst others, television signals, as well as signals in the unlicensed ISM 2.4 GHz and used typically for Wi-Fi and Bluetooth devices.

All signals detected during the survey are included in the Total Exposure column of Table 1.



## **Measured Results**

Table 1 and Figure 1 presents the measurement positions and exposure levels in terms of a percentage of the ICNIRP General Public guidelines, where a 100% value would indicate that the exposure limit has been reached. Since the aim of the survey was to measure the typical exposure values, the reported results are un-extrapolated peak field instantaneous exposure results, at the specific date and time of the measurement survey.

**Table 1: RF Exposure Levels at Measurement Positions** 

No.	Measured On	Position Comment	Total Exposure
P1	15/02/2023 08:59	On the walkway at the base of the site, on the top floor.	2.4290
P2	15/02/2023 09:09	Inside the living room of unit 17 (Section 39), situated on the top floor.	0.1660
P3	15/02/2023 09:14	Inside the kitchen of unit 17 (Section 39), situated on the top floor.	0.0865
P4	15/02/2023 09:17	Inside the bedroom of unit 17 (Section 39), situated on the top floor.	0.0213
P5	15/02/2023 09:24	In front of the entrance door of unit 17 (Section 39), on the top floor.	0.5046
P6	15/02/2023 09:33	In front of unit 21, on the top floor, near the site.	1.1161
P7	15/02/2023 09:39	On the balcony of unit 22, on the top floor.	0.5914
P8	15/02/2023 09:45	On the second floor, in front of unit 10.	0.0459
P9	15/02/2023 09:52	In front of WagaWaga Café, on the ground floor.	0.0908
P10	15/02/2023 09:56	In front of Nedbank, alongside Sam Nujoma Avenue.	0.0748
P11	15/02/2023 10:03	At the corner of Woermann and Hendrik Witbooi Streets, in front of Beryl's Restaurant.	0.1678
P12	15/02/2023 10:09	Near Küki's Pub alongside Tobias Hainyeko Road.	0.0076





Figure 1: Map of Area around Base Station Site and External Measurement Positions

## **Photographs of the Measured Positions**



## **Summary of Results & Conclusion**

The area around the site was surveyed and measurements were recorded at positions of maximum exposure in areas accessible to the general public.

For the measured results presented in this report, a 100% value would indicate that the exposure limit for the ICNIRP General Public guidelines has been reached. The highest value measured is 2.4290% of these guidelines and was obtained at position 1. This is more than 41 times below the General Public limit.

## **Independent Assessor**

Alphawave Mobile Network Services (Alphawave) has expertise in the field of human exposure assessment to radio-frequency fields. Alphawave (previously known as EMSS) has been active in the field for more than 20 years and for more than a decade Alphawave has focused its efforts in this area on the assessment of human exposure to cellphone technologies. These include measurements and numerical predictions of exposure to EMF from cellphones and base station antennas. Alphawave also publishes its research results in international peer-reviewed literature and has written numerous technical reports on base station site surveys performed on request from cellular operators and/or members of the public. Alphawave is also involved internationally in writing of technical standards for assessment techniques of radio-frequency fields. An example is involvement in the IEC 62232 standards committee.

## **Measurement Equipment and Methodology**

Both survey meter and probe must be calibrated on a regular basis. The calibration status is presented in the following table.

Survey Meter:	Narda SRM-3006 Selective Radiation Meter, S/N: R-0019	Calibration Status:	Calibration valid until: 03 September 2023
Probe:	Narda P/N 3501/03 Three-Axis E-Field Probe (27 MHz – 3 GHz), S/N: M-0627	Calibration Status:	Calibration valid until: 03 September 2023

A full uncertainty analysis for the measurement methodology used by Alphawave, as required by the IEC 62232 standard, has been performed and is available from Alphawave on request.

Detailed information on the equipment specifications can also be obtained on request.

For more information, contact Alphawave at:

Tel: (021) 880-1880

Email: mns@aw.co.za Fax: (021) 880-1174





MEMORANDUM OF LEASE AGREEMENT POCFTOP AND BASEMENT PALACE.

Made and entered into and between:

## STADTMITTE PROPERTY (PTY) LTD

Herein represented by its duly authorized representative.

MR. FRANCOIS N.J. LOOTS

in his capacity as MANAGING AGENT

having its principal place of business at:

STADTMITTE BUILDING, SAM NUJOMA AVENUE, SWAKOPMUND

(hereinafter referred to as "the Lessor")

AND

## PowerCom (Pty) Ltd

A Company incorporated under the laws of the Republic of Namibia, herein represented

By its duly authorized representative Alisa Amupolo in

her capacity as CEO of PowerCom (Pty) Ltd

Having its principal place of business at:

Unit 2, Maerua Heights, Burg Street Windhoek

P 0 Box: 40799

Windhoek

Telephone Number: 061-2012090

Facsimile Number: +264 88 655 9891

(hereinafter referred to as "the Lessee")





WHEREAS THE LESSEE IS CURRENTLY RENTING THE HEREINAFTER MENTIONED PREMISES FROM THE LESSOR FOR PURPOSES OF HOSTING A TELECOMMUNICATIONS BASE STATION:

AND WHEREAS THE LEASE AGREEMENT WHICH WAS SIGNED IN FEBRUARY 2007 IN RESPECT OF THE ABOVE LEASE HAS EXPIRED;

AND WHEREAS THE PARTIES ARE DESIROUS TO RENEW THE LEASE AGREEMENT ON THE FOLLOWING TERMS AND CONDITIONS:

## NOW THEREFORE IT IS AGREED AS FOLLOWS:

## 1. DEFINITIONS AND INTERPRETATION

1.1 In this Agreement and any appendixes thereto, unless inconsistent with or otherwise indicated by the context -

11.1	"the commencement date"	means the commencement date of the lease as set out in the annexed Schedule, which is annexed hereto and forms part of this lease agreement:
1.1.2	"the property"	means the Lessor's property upon which the premises are situated as described in the Schedule:
1,1.3	"the premises"	means the portion of the property selected by the Lessee for purposes of this Agreement and to be occupied in accordance therewith:
1.1.4	"the equipment and/or Structures"	shall include, but is not limited to: radio antennas: the hut and/or container; masts and towers; microwave dishes; fences and/or other structures, including security and/or safety equipment; foundation flooring, lightning protection—and earthing systems micro-cells; paving and other related and accessory structures;
1.1.5	"fixed rate"	shall mean fixed amount with no fluctuation and/or escalation of rental price for the lease period:
1.1.6	"the expiry date"	means the date set out as such in the Schedule, or such other date as may be agreed in accordance with clause 3.
11.7 "Base Transceiver Station"		means a tower structure with all its ancillary



referred to as BTS.

\* REXA

and supporting equipment, building and civil works and peripheral equipment, hereinafter

## 2. LEASE

- 2.1 The Lessor lets the premises to the Lessee, subject to the provisions of this Agreement. From the date of signing this Agreement by both parties, the Lessee will have six (6) months in which to decide whether or not to use the site.
- 2.2 Subject to the provisions of clause 11, the lease shall commence on 1 September 2018 for a period of 5 years.
- 2.3 Any party to this lease agreement may terminate the agreement on three (3) months written notice to the other party.

## 3. OPTION TO RENEW

The parties to this agreement hereby agree that either of them may request the other party to enter into bona fide negotiations during a 30-day period prior to the expiration of this tease agreement, in order to renew this lease agreement on the same terms and conditions for a further period or negotiate a new lease agreement. Additionally, either party to this agreement may engage each other within a reasonable period and on good cause to renegotiate further terms of the agreement.

## PURPOSE

- 4.1 Unless otherwise approved in writing by the Lessor, the premises shall only be used for the purposes of a BTS and related purposes, as the Lessee may deem expedient.
- 4.2 Without limiting the generality of 4.1, the Lessee shall be entitled, at its own expense, to
  - 4.2.1 install all or any equipment and/or erect structures on the premises for the purpose set out in clause 4.1, including on the roof top:
  - 4.2.2 erect. maintain, renew and replace any equipment as described in clause 1.1.4 as well as all required support structures upon the premises, and to remove the same at any time;
  - 4.2.3 affix fittings and fixtures, cables, piping, wiring, conductors and other equipment is kept, as well as all required support structures upon the premises, and to remove the same at any time:
  - 4.2.4 modify structural elements of the premises after approved by the lesson introduce innovations, improvements, additions, substitution of any property equipment and modifications to roof loads (according to generally accepted technical specifications) and whatever is necessary to the declared use of the premises:
  - 4.2.5 connect and ensure the supply thereto of electric current. It is further recorded that only persons appointed by the Lessee shall be entitled to supply and install, in terms of this clause, the necessary wiring and earthing systems:



- 4.2.6 build a BTS including necessary foundations and underground works by notice and upon first request on his premises until the permanent site is operational:
- 4.2.7 provide power for the BTS to the Lessee, provided there is a power connection point available at the Lessor's premises; and provided the available power meets the technical standards of the Lessee and approval of utility power provider.
- 4.3 The Lessor shall, at all times, allow the Lessee or its employees, agents or contractors to bring, lay and relay utility power, cables, pipes, telephone and earth wires and other equipment across the property to the premises, and in general shall allow such persons access to the premises 24 hours a day, 7 days a week.
- 4.4 All the aforegoing installations, and any decommissioning and removal thereof, shall be undertaken at the sole discretion of the Lessee, and without having to give notice to the Lessor or obtaining the Lessor's permission

## 5. SUBLEASE/SITE SHARING

- 5.1 The Lessee shall be entitled, subject to clause 5.2, to sublease part or the whole of the leased premises to other entities or suppliers of telecommunication services to use the premises or equipment thereon on terms not in conflict with this Agreement.
- 5.2 The Lessee shall be entitled, to share or allow the occupation of the premises as well as facilities thereon by a company or entity associated with the Lessee.
- 5.3 The Lessor has the right to apply for and join the tower built by the Lessee provided that:
  - 5.3.1 the Lessor applies for co-location through the regular PowerCom site sharing procedures
  - 5.3.2 the Lessor submits a proper structural analysis produced by a registered structural engineer on the additional load of the added equipment and antenna's to the Lessee
  - 5.3.3 the Lessee approves the structural analysis
  - 5.3.4 the principle "First come, first served" applies to this agreement
  - 5.3.5 the requested height or space is not occupied or reserved by another collocator.

### 6. EXCLUSIVE RIGHTS

6.1 The Lessee and its employees, clients, agents or contractors shall be entitled to access the site any time.

## INDEMNITY

7.1 The Lessee shall be liable for and indemnify the Lessor against any loss or damage that any entity or supplier referred to in clause 5 shall cause to the Lessee's equipment and installations on the property in the exercise of its rights conferred by the Lessee.



7.2 The parties agree that the Lessee, for purposes of using any structure and/or equipment constructed and/or erected, shall require the supply thereto of electric current. The Lessee shall pay for any costs in relation to the installation of supply. It is further recorded that only persons appointed by the Lessee shall be entitled to supply and install, in terms of this clause, the necessary wiring and earthing systems for the equipment and/or structure constructed, to the proposed works.

### CONTRACTING WITH COMPETITORS

The Lessor may contract with any other supplier or telecommunication service provider in respect of its property without the Lessee's prior written consent, save as may be required by law. The Lessor however undertakes that any existing or future supplier or telecommunication service provider, if any, and its equipment shall not limit or obstruct the functionality of Lessee's equipment or the access to and exit from the premises and the Lessee's site and installations thereon.

### 8. COSTS OF SERVICES AND INSTALLATIONS

- 8.1 All costs in relation to the consumption of electricity on the premises, as well as all expenses relating to the metering of such consumption, shall be paid by the Lessee.
- 8.2 The Lessee shall be entitled at its own cost to upgrade the electricity supplied to the premises with the prior consent of the Lessor, which consent shall not be unreasonably withheld, or delayed.
- 8.3 All costs of other services supplied to the premises shall be for the account of the Lessor.

## 9. RENTAL

The Lessee shall pay to the Lessor the rental set out in the Schedule. All rental and other amounts payable by the Lessee to the Lessor in terms of this Agreement shall be paid in accordance with the provisions set out in the Schedule, in advance on or before the first day of each period as agreed (that is, either monthly or annually), free of bank exchange and without deduction, at the Lessor's domicilium address in terms of this Agreement or as otherwise directed by the Lessor. No rental payment is due to Lessor before municipal and/or other relevant consents are duly obtained as provided by clause 11.1 here below or before construction works are started by the Lessee, if any. Any rental will be proportionally paid from the date of the Lessee's receipt of the last consent, permit, authorization or permission to be obtained and/or upon the start date of construction works on the Lessor's property, whichever date comes first.

## 10. VAT

The Lessee shall be liable for the payment of Value Added Tax, if chargeable, on the rent amount payable in terms of this lease agreement.

## 11. CONSENTS, PERMITS, ETC.



- 11.1 The Lessee shall at its own cost ensure that
  - any relevant consents necessary for the construction, erection and/or fixture of the equipment referred to above are in place. The Lessor undertakes, in case of need and if so requested by the Lessee, to apply for any further consents, permits, authorizations and permissions to be received from any Authority whatsoever on behalf of the Lessee. and any costs theretofore will be paid by the Lessee.
- 11.2 Should any relevant consent, permit, authorization or permission referred to in clause II 1
  - a) not be obtained within a reasonable time after the Lessee and/or the Lessor has applied therefore, or
  - b) be refused or
  - c) having been granted, be suspended or revoked by the relevant authority:
  - the Lessee shall, notwithstanding the provisions of clause 2.2., be entitled to cancel this Agreement forthwith on seven (7) catendar days' notice. Until the cancellation date the Lessee remains liable to pay any costs, including rental, only in case c) above and liable to pay any costs, excluding rental, in cases a) and b) above.
  - Notwithstanding the provisions of clause 2.2, should the Lessee's license to operate a 113 Class Network Facilities Telecommunications Service be suspended or revoked for whatever reason, or should any occurrence, including but not limited to buildings being erected adjacent to the premises, have measurable interference with the Lessee's class network facilities telecommunications service network, then the Lessee shall be entitled to cancel this Agreement on 30 (thirty) days' notice, the Lessor agreeing that the aforesaid events shall constitute valid grounds for early termination. The Lesson, shall not be entitled to any further rental, or damages, where the lease is terminated in accordance with the provisions of this clause.
  - If it should appear during the use of the installation that it becomes less performing or 11.4 impossible to use for technical, regulatory or practical reasons, the Lessee is entitled to cancel this lease agreement before its expiration by giving three (3) months' notice without any further compensation.
  - The Lessee may cancel the Agreement before the expiration of the term by giving three 11.5 (3) month notice and an agreed fixed indemnification of three (3) month rent.

### 12. **OWNERSHIP**

Any equipment and/or structures constructed and/or erected in terms of clause 4 shall remain. the property of the Lessee, and the parties agree that same shall at all times be regarded as and constitute moveable property, and that the Lessee shall be obliged, at the termination of this Agreement, for whatever reason, to remove such equipment within a period of 90 (ninety) days after termination of the contract at its own cost.

### 13. WARRANTIES

13.1. The Lessor warrants that he is the registered owner of the property and has exclusive title and rights thereto and that there are no third party rights, real or personal liens. limitations or constraints of any nature whatsoever, which might exclude a smit any Lessee's rights under this Agreement.







13.2. The Lessor will avoid any act or use of the premises by third parties that may in any way affect the proper functioning of the Lessee's equipment and infrastructure. The Lessee will avoid any act or use of the equipment and infrastructure that will disturb the normal functioning of the existing Lessor's equipment. In case of disturbance or interference caused by either Party, the disturbing Party shall take all necessary measures in order to correct the disturbance and restore the normal functioning of the affected equipment.

# 14 ALTERATIONS

Upon termination of the Agreement, as proprietor of the equipment and/or structures, the Lessee will retain title to the equipment and/or structures (all the elements and components of the Base Station) and shall, within a reasonable period and at its own costs, remove its personal property and fixtures, except for underground supporting structures (if any have been installed) and restore the premises to its original condition, normal wear and tear excepted. The Lessor shall take any necessary action in order that the equipment and/or structures may be removed by the Lessee or by any persons so designated by the Lessee.

## 15 DAMAGE TO THE LEASED PREMISES

Any direct damage caused to the premises as a result of any installation or removal of equipment or as a result of the Lessee's fallure to maintain the premises in good order and condition, shall be made good by the Lessee at the Lessee's own cost and expense within a reasonable period of time after written notice received from the Lessor.

# 16. NO ALTERATIONS TO PREMISES BY LESSOR

The Lessor shall not change, move, alter or interfere with any installation, construction, erection, structure or equipment in or upon the premises constructed and/or erected by the Lessee, nor shall the Lessor attach any electrical appliances to the electric system of the premises supplied for the purposes of any such installation, construction, erection, structure or equipment, or interfere, alter or do any repairs to the electric system referred to above without the prior written consent of the Lessee first having been obtained, and the Lessor shall not appoint any person other than such persons that may from time to time be approved by the Lessee for the execution of any such works, whether in relation to wiring, the repair of equipment or the joining of cabling or otherwise.

# 17. COMPLIANCE WITH LAWS

The Lessee shall at all times comply with all laws, by-laws, Ordinances, Proclamations and Regulations relating to the tenancy of the premises including fire extinguishing appliances to be kept and maintained on the premises.

## 18. CESSION

The Lessor shall not for whatever reason during the currency of this Agreement cede, assign, transfer, or make-over any of the Lessee's right in terms of this lease, nor give up occupation or possession of the premises or any portion thereof, without the Lessee's prior written consent, which consent shall not be unreasonably withheld. Having obtained the Lessee's consent, the Lessor undertakes to have any obligation under this Agreement transferred and



delegated to the transferee's party and shall be jointly responsible for the aforesaid obligations together with the Transferee party.

# 19. BREACH

- 19.1 Should the Lessee -
  - 19.1.1. fail to pay rental or any other monies due by the Lessee in terms of this tease on the due date and thereafter fail to make payment thereof within 2 (two) months after receipt of the Lesson's written demand to such effect:
  - 19.1.2 Fail to comply with the Lessor's written notice to the Lessee requiring a breach to be remedied; or
  - 19.1.3 be liquidated or sequestrated or be placed under judicial management (whether provisionally or finally), then and in such event the Lessor shall be entitled, without prejudice to any other claim of any nature whatsoever which it may have against the Lessee as a result of such breach, to terminate this lease forthwith and to evict the Lessee from the premises and to claim compensation for any damages suffered by the Lessor.
- 19.2 Should the Lessor-
  - 19.2.1 breach any material term of this Agreement and fail to remedy such breach within 30 (thirty) days of receipt of the Lessee's written notice or the Lessor be liquidated or sequestrated (whether finally or provisionally), the Lessee shall be entitled in any such event and without prejudice to any other claim of any nature whatsoever which it may have against the Lessor as a result of such breach, to cancel this lease forthwith and claim compensation for any damages suffered by the Lessee.

# 20. TERMINATION

- 20.1 Either party may terminate the agreement by giving three (3) months written notice of such termination to the other party.
- 20.2 Should the Lessor terminate this lease and the Lessee dispute the Lessor's right to do so and remain in occupation of the premises pending the determination of such a dispute, the Lessee shall continue to pay all amounts due to the Lessor in terms of this lease on the due dates thereof, and the Lessor shall be entitled to accept and recover such payments, without prejudice to the Lessor's claim for termination then in dispute.
- 20.3 Should such a dispute between the Lessor and the Lessee be determined in favour of the Lessor, such payments shall be deemed to be amounts paid by the Lessee on account for damages suffered by the Lessor of the unlawful holding over of the premises by the Lessee.

# 21. DOMICILIUM

- 21.1 The parties choose as their domicitium citandi et executandi their respective addresses set out or referred to in this clause for all purposes arising out of or in connection with this Agreement at which addresses all processes and notices arising out of or in connection with this Agreement, its breach or termination may validity be served upon or delivered to the parties.
- 21.2 For purposes of this Agreement the parties' respective addresses shall be -
  - 21.2.1 as regards the Lesson at the address set out in the Schedule hereto:

Stadtmitte Building Sam Nujoma Avenue Swakopmund

P 0 Box: 8786 Swakopmund

Contact Number: 064 407090 Email: flettrust@gmail.com

21.2.2 as regards the Lessee at:

PowerCom Head Quarters Unit 2, Maerua Heights, Burg Street Windhoek

P 0 Box: 40799 Windhoek

Telephone Number: 061-2012090 Facsimile Number: 088 655 9891 Email: info@powercom.na

or at such other address, not being a post office box or *poste restante*, of which the party concerned may notify the other in writing.

- 21.3 Any notice given in terms of this Agreement shall be in writing and shall -
  - 21.3.1 if delivered by hand deemed to have been duly received by the addressee on the date of delivery:
  - 21.3.2 if posted by prepaid registered post deemed to have been received by the addressee on the 21st (twenty first) day following the date of such posting
  - 21.3.3 if transmitted by facsimile deemed to have been received by the addressee 1 (one) business day after dispatch.



21.4 Notwithstanding anything to the contrary contained in this Agreement, a written notice or communication actually received by one of the parties from the other, including by way of facsimile transmission, shall be adequate written notice or communication to such party.

# 22. NON-WAIVER

No addition to or variation, consensual cancellation or novation of this Agreement and no waiver of any right arising from this Agreement or its breach or termination shall be of any force or effect unless reduced to writing and signed by all the parties or their duly authorized representatives.

# 23. WHOLE AGREEMENT

This Agreement constitutes the whole Agreement between the parties as to the subject matter and no agreements; representations or warranties between the parties regarding the subject matter hereof other than those set out herein are binding on the parties.

# 24. ADMINISTRATIVE COSTS

The Lessee shall pay all its own costs incurred in the negotiating and drafting of this. Agreement, as well as all stamp duty payable in respect hereof. The Lessor shall pay all its own costs incurred in the negotiating and drafting of this Agreement.

M = 18

LESSEE

(the signatory hereby warranting to be duly authorized and empowered to sign this agreement on behalf of the

Lessee and to bind the Lessee to this agreement

WKCCKKUD on this 6th day of 1

DATED and SIGNED at \_1

presence of the undersigned witnesses:

# SCHEDULE

Site ID: ENG0014

Site Name: STADTMITTE

Owner: STADTMITTE (PTY) LTD

DESCRIPTION OF THE PREMISES:

ROGFTOP

COMMENCEMENT DATE:

1 September 2018

CONTRACT PERIOD:

5 years

4. RENTAL:

N\$ 14, 500.00 (VAT EXCLUSIVE)

5. ESCALATION:

FIXED

6. METHOD OF PAYMENT:

(monthly in advance into Lessor's bank account)

 LESSOR'S DOMICILIUM (PHYSICAL ADDRESS):

> Stadtmitte Building Sam Nujoma Avenue Swakopmund

8. BANKING DETAILS:

Account Holder: Stadtmitte Property Development

Bank: Bank Windhoek

Account Number: 8000550938

Branch: Swakopmund Branch code: 481772

A 7 10 1

# Curriculum Vitae (CV) for Tendai. Kasinganeti

- 1. Proposed Position: Environmental Assessment Practitioner
- 2. Name of Firm D&P Engineers and Environmental consultants
- 3. Name of Staff Evidence Tendai Kasinganeti
- 4. Date of Birth: 27 November 1991\_Nationality: Zimbabwean
- 5. Education:

Name of University or institution, location, dates attended (year from – year to)	Degree(s)/diploma(s) obtained
Midlands State University, Zimbabwe (11/12011 – 05/2015)	BSc Hons. Geography and Environmental Science
	Thesis "Spatial and temporal analysis of base transceiver stations development and associated environmental impacts (Zimbabwe)
National University of Science and Technology 2018-2020 (Ongoing)	Master of Geoinformation Science and Earth Observation (Natural Resources Management)

# 6. Membership of Professional Associations:

- Environmental Assessment Professionals of Namibia (EAPAN)
- International Association for Impact Assessment (IAIA)

# 7. Other Training:

# Further education:

- Certificate on Going Green for Social Entrepreneurs (Young African Leaders Initiative Network, USA, 2016)
- Fundamentals of Health and Safety in the Workplace (Allison International, Ireland, 2016
- Introduction to Ecosystem Service Valuation and Policy Design (RESMOB Namibia, 2018)

# 8. Countries of Work Experience:

- Namibia
- Zimbabwe
- Mozambique

# 9. Languages:

Language	Reading	Speaking	Writing	
English	excellent	excellent	Excellent	

# 10. Employment Record:

E	Employment record relevant to the assignment:		
F		Employing organization and your title/position. Contact info for references	Summary of activities performed relevant to the Assignment

AHT 1 of 5

April 2018 to date	Environmental Practitioner and Consultant  Mr. Timo David Director: Project Management D&P Engineers and Environmental Consultants E: tdavid@dpe.com.na	<ul> <li>GIS mapping and Environmental Sensitivity mapping.</li> <li>Providing professional consulting services to clients in Namibia with focus on EIAs, EMPs reporting and compliance advisory.</li> <li>Conducting Environmental Scoping Assessments and Environmental Management Plans</li> <li>Application for Environmental Clearance Certificates</li> <li>Environmental Control for projects during construction and operation.</li> <li>Environmental Quarterly and Biannual reporting</li> <li>Environmental monitoring and compliance auditing.</li> </ul>
January 2016 to April 2018	Environmental Planner  Mr. Henry Krohne Director-Plan Africa Consulting E: pafrica@mweb.com.na	<ul> <li>Coordinating and managing Environmental Impact Assessment Studies:</li> <li>Environmental Reports writing.</li> <li>Conducting Bio-Physical studies.</li> <li>Stakeholder engagement and consultation</li> <li>Environmental Monitoring and Auditing</li> <li>Land use Mapping and GIS</li> </ul>
July 2013 to December 2015	-Student intern -Junior Environmental and Spatial Consultant  Mr. Anesu Mudiwa Director: NWAS Environmental Consulting E: anesu@nwas.co.zw W: www.nwas.co.zw	<ul> <li>Occupational Health, Safety and Environmental Management</li> <li>Baseline surveys for EIA projects (Social, ecological, economic and political impact Assessment</li> <li>Compiling Environmental and Social Impact Assessment Reports for different projects</li> <li>Public and Stakeholder consultation</li> <li>Environmental Compliance Auditing and Quarterly Reports</li> <li>Soil and water samples processing (Sample collecting, sending for lab tests and interpretation of results)</li> <li>Emissions testing</li> </ul>

# 11. Detailed Tasks Assigned

- Stakeholders Engagement
- Legislative Frameworks Review
- Environmental Compliance Manual and Guidelines Development
- Team Leader Backstopper

# 12. Work Undertaken that Best Illustrates Capability to Handle the Tasks Assigned

[Among the assignments in which the staff has been involved, indicate the following information for those assignments that best illustrate staff capability to handle the tasks listed under point 11.]

Name of assignment or project: Environmental Management Plans development

Year: 2017/18

Location: Namibia (All Regions) -56 Fuel Retail facilities

Client: Engen Namibia/ Nam-Geo Enviro Solutions

Main project features:

- EHS Auditing
- Environmental Management Plans Development
- Application for Environmental Clearance Certificates for service stations (New application/ Renewals)
- Develop EHS monitoring and compliance schedule
- Conduct site risk assessment and recommend corrective action plan

Name of assignment or project: Namibia Water Support Programme

D&P 2 of 5

Year: 2019

Location: Namibia (All Regions)

Client: Ministry of Agriculture Water and Forestry/ African De-

velopment Bank

Main project features:

- Strategic Environmental and Social Assessment/ Strategic Environmental and Social Management Framework
- Environmental Compliance Guidelines for implementing the Namibia Water Sector Support Programme

Positions held: Environmental and Social Assessment Expert\_ Activities performed:

- Stakeholders Consultation
- Regional Workshops
- Baseline Environmental Scoping Assessment
- Institutional Capability and Needs Assessment for Environmental Compliance
- Strategic Environmental and Social Assessment Development (SESA)
- Strategic Environmental and Social Management Framework (ESMF)
- ESMF Workshop and Compliance Training

Name of assignment or project: Etunda Feedlot

Year: 2019

Location: Etunda, Omusati Region-Namibia

Client: Ministry of Agriculture Water and Forestry/ European

Union

Main project features:

 Environmental and Social Impact Assessment (ESIA)/ Environmental and Social Management Plan (ESMP)

Positions held: Environmental and Social Assessment Expert\_

Activities performed:

- Environmental Scoping Assessment
- National, Regional and International Legal Frameworks Review
- Public and Stakeholders Consultation
- Groundwater Impact Assessment
- Sensitivity Mapping
- Environmental and Social Management Plan Development

Name of assignment or project: Le'Monte Village Development (Township Establishment and Incorporation)

Year: 2018

Location: Grootfontein, Otjozondjupa Region-Namibia

Client: Singleton Commercial Pty Ltd

D&P 3 of 5

Main project features:
Environmental and Social Management Flan (ESMF)
Positions held: Environmental and Social Assessment Expert_
Activities performed:
<ul> <li>Environmental Scoping Assessment</li> <li>National, Regional and International Legal Frameworks Review</li> <li>Public and Stakeholders Consultation</li> <li>Groundwater Impact Assessment</li> <li>Sensitivity Mapping</li> <li>Environmental and Social Management Plan Development</li> </ul>

# ADDITIONAL PROJECTS EXPERIENCES

Client, Year and Country	Project Name and Deliverable
GIZ and Ministry of Agriculture Water and Land Reform, 200-21-Namibia	Flexible Land Tenure System: Environmental and Social Management and Compliance Guideline Manual for the Flexible Land Tenure Implementation
Centre for Natural Resources Governance, 2020-21- Zimbabwe and Zambia	Coal mining and thermal power generation in Sengwa-Kariba areas Zimbabwe: Environmental and Social Impact Assessment-Focus on Environmental Rights and Gender impacts
European Union and Ministry of Agriculture, Water and Forestry, 2020-Namibia	Program to improve livestock efficiency and marketability in the Northern Communal Areas (NCAs) of Namibia: Various Environmental and Social Impact Assessments for specific projects
UNDP Namibia and Ministry of Mines and Energy, 2020-Namibia	Supporting livelihoods through small-scale mining of semi-precious stones, metals and minerals: Environmental, Health, Safety and Social Guidelines for Small Scale Miners in Namibia
AfDB and Ministry of Agriculture, Water and Forestry, 2019-Namibia	Namibia Water Sector Support Programme: Strategic Environmental and Social Assessment and Environmental and Social Management Framework
Keetmanshoop Medical Practice, 2018-Namibia	Keetmanshoop Private Hospital: Environmental and Social Impact Assessment.
Anpro Hides and Skins, 2018-Namibia	Anpro animal rendering plant and tannery: Environmental Impact Assessment

D&P 4 of 5

# **CURRICULUM VITAE** Tendai E. Kasinganeti (Environmental Expert (Backstopper)

# 13. Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

de		
	Date:	19-May-21
[Signature of staff member or authorized representative of the staff]		Day/Month/Year

Full name of authorized representative: Evidence Tendai Kasinganeti

D&P 5 of 5

# MARI YEKUNE DZINIWE NYIKA YOKUFAMBISA IMALI YOKUHAMBISA EYAMANYE AMAZWE FOREIGN EXCHANGE FOR TRAVELLING EXPENSES

Akuothunyelwa ukubhala opojini la ngaphandle kwamafihanga eZimbabwe afanole afate iaidhinda duzane kwatoko okubhaliwayo. No entries to be made on this page except by a Bank in Zimbahwe whose official stamp must appear against each entry. ZIMBABWE CURRENCY EQUIVALENT OF AMOUNT ISSUED OR REFUNDED

PASSPORT



REPUBLIC OF ZIMBABWE

STATE PASSPORT NOT PASS POTTURANTER
ZWE GN224334 TYPE PN

SURNAME / ZITA REMHUR( / ISIBONGO KASINGANETI

CTHER MAMES / ZITA / 18/20
EVIDENCE TENDAL

NATIONALITY ZIMBABWEAN

SEX BIRTH PLACE FIXWAWAXABEREKERWA FOWAZALEUWA KHISNA M MUTASA

BIRTH DATE / ZUMA REKUBEREKWA! ILANGA LOKUZALWA 27/11/1991

COUNTRY OF PERMANENT RESIDENCE ISSUE DATE COUNTRY OF PERMANENT RE 22/07/2020 ZIMBABWE AUTHORITY

REGISTRAR GENERAL-HRE 21/07/2030

PROFESSION ENVIRONMENTAL PRACTITIONER



PNZWEKASINGANETI << EVIDENCE < TENDAI << < < < < < GN224334<5ZWE9111277M3007217750446994B07<<80

NAMIBIAN POLIC WINDHOEK

