

45 Feld Street, Ausspannplatz, Windhoek, Namibia PO Box 81808, Windhoek, Namibia Tel: (+264) 61 248 614 Fax: (+264) 61 238 586 Web: www.gcs-na.biz

BACKGROUND INFORMATION DOCUMENT (BID):

ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED CONSTRUCTION OF TELECOMMUNICATION TOWERS IN THE OSHANA, OTJOZONDJUPA AND OMUSATI REGIONS, NAMIBIA

May 2023

Proponent: PowerCom (Pty) Ltd



GCS Project Number: 22-1081

ENVIRONMENTAL ASSESSMENT PRACTITIONER: GCS (PTY) LTD

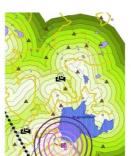
GCS Water Environmental Engineering (Pty) Ltd (GCS) is a fully integrated water, environmental, and earth science consulting services company based in the Republic of South Africa, with offices in Namibia, Botswana, and the Czech Republic. GCS provides a professional consulting service in the fields of environmental, water and earth sciences. GCS has a team of highly trained staff with considerable experience in the fields of environmental and water science.

GCS will act as the Independent Environmental Assessment Practitioner (EAP), as well as the Public Participation Practitioner for this environmental authorisation process.











	ABBREVIATIONS
BID	Background Information Document
CRR	Comments and Response Report
EAP	Environmental Assessment Practitioner
ESIA	Environmental and Social Impact Assessment
EMA	Environmental Management Act (No 7 of 2007)
EMP	Environmental Management Plan
I&AP	Interested and Affected Party
MEFT: DEAF	Ministry of Environment, Forestry and Tourism: Department of Environmental Affairs and Forestry
MHz	Megahertz
PPP	Public Participation Process

1 INTRODUCTION

PowerCom (Pty) Ltd (PowerCom or the proponent hereafter) proposes to erect 8 telecommunication towers within the Oshana (2 sites), Otjozondjupa (2 sites) and Omusati (4 sites) Regions respectively (Figure 3). The proposed project aims to strengthen the coverage for mobile services, inclusive of voice and data services within the subject area.

Under the Environmental Management Act (2007) and its Regulations (2012), an Environmental Assessment (EA) is required for:

10.1 The construction of (g) masts of any material or type and of any height, including those used for telecommunication, broadcasting, and radio transmission.

This Background Information Document (BID) has been compiled by GCS with the following aims:

 To introduce the proposed project and related activities to potential Interested and Affected Parties (I&APs);

- To provide information on the Environmental Impact Assessment and related processes;
- To inform I&APs on how to be involved in the Environmental Impact Assessment process;
- To invite all parties to register as I&APs on the Environmental Impact Assessment database; and
- To provide all I&APs with an opportunity to comment on the proposed project and associated process, including biophysical and socio-economic aspects, as well as any other issues of concern.

2 PROJECT DESCRIPTION

The Proponent proposes to erect 8 telecommunication towers in Oshana, Otjozondjupa and Omusati Regions, which aims to strengthen the coverage for mobile services, inclusive of voice and data services within the subject area.

2.1 Need and desirability for the development

Due to the constant growth in the use of mobile communication services in Namibia, the pressure to continuously expand the communications network is increasintg. PowerCom identified the need for the new structures, which will provide capacity and improve the coverage in these particular areas. This proposed development will ensure that the quality of the service provided to the telecommunication users in the area is improved.

2.2 Description of Activity

2.2.1 Site Location

The site was selected with the aid of a radio planning tool and as instructed by the shareholder. There is currently poor network coverage at the proposed areas. The proposed site locations are detailed in the table below:

Table 1: Site Locations

Site Name	Site	Region
	Coordinates	
Outapi Extension	17°29'49.53''S	Omusati
8 (on Erf 2539,	14°58'57.55"E	
Outapi Ext 8)		
Oikokola (Etayi)	17°25'15.40''S	Omusati
	15°33'3.52"E	
Otavi Extension 4	19°38'59.4''S	Otjozondjupa
(on Erf 313, Otavi	17°20'07.7''E	
Ext 4)		
Khoaeb Extension	19°37'50.1"S	Otjozondjupa
4 (Otavi)	17°19'35.7''E	
Oshikuku	17°38'41.7"S	Omusati
Extension 4 (on	15°28'01.7"E	
Erf 1566 Oshikuku		
Ext 4)		
Oshikuku	17°39'46.81''S	Omusati
Extension 7 (on	15°28'35.09"E	
Erf 1911 Oshikuku		
Ext 7)		
Ondangwa	17°54'18.14''S	Oshana
Extension 6 (on	15°58'48.40''E	
Erf 1789		
Ondangwa Ext 6)		
Ondangwa	17°53'24.4"S	Oshana
Extension 8 (on	15°57'24.1''E	
Erf 2556		
Ondangwa Ext 8)		

2.2.2 Site Design

There are different types of structures that can be utilised depending on the requirements. These different types of structures include:

- Lattice towers are self-supporting structures that are generally made out of steel.
- Monopole towers consist of a single tubular mast.

 Guyed towers or lattice structures that has guyed ropes to stabilize it because of its height. These towers are normally between 60-240m in height.



Figure 1: Example of the proposed Monopole Tower (https://powercom.na/)



Figure 2: Example of the proposed Lattice Tower (https://powercom.na/)

It will also include the construction of an equipment room which will house the communication equipment. The site will be fenced in order to limit public access. The antenna size will differ depending on the frequency used as well as different types of antennae. The main frequencies that will be used is 900, 1800 & 2100 MHz. The proposed towers types and heights are detailed in the table below.

Table 2: Proposed Towers Type and Height

Site Name	Region	Tower Type	Tower Height
Outapi Extension 8	Omusati	Lattice	30
Oikokola (Etayi)	Omusati	Lattice	60
Otavi Extension 4	Otjozondjupa	Lattice	30
Khoaeb Extension 4	Otjozondjupa	Lattice	30
Oshikuku Extension 4	Omusati	Lattice	30
Oshikuku Extension 7	Omusati	Lattice	30
Ondangwa Extension 6	Oshana	Lattice	30
Ondangwa Extension 8	Oshana	Lattice	30

2.3 Infrastructure and Services

Water will only be used during the construction period, more specifically for the foundation works. The contractor will be responsible for the sourcing of water. Access to the site will be prohibited to anyone except the construction team and PowerCom. 3 Phase 40 Ampere power will be required for the operation of the towers and will be connected to the respective electricity provider's grid.

PowerCom Telecommunication Towers

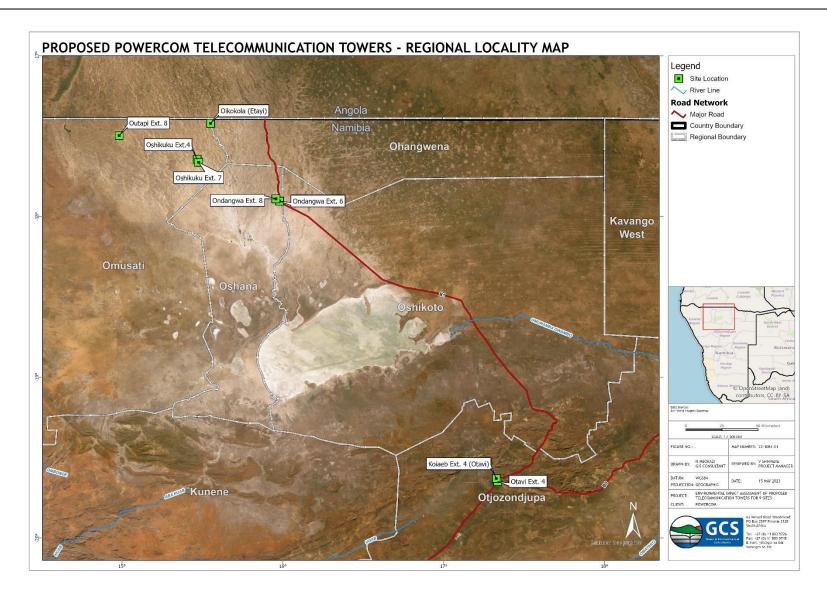


Figure 3: Locality Map of the proposed Telecommunication Towers

3 ENVIRONMENTAL ASSESSMENT PROCESS

3.1 Environmental Management Act No. 7 of 2007

The Environmental Management Act (EMA) provides a list of activities, the development or execution of which require an Environmental Clearance Certificate (ECC) from the Ministry of Environment, Forestry and Tourism: Department of Environmental Affairs (MEFT: DEA) prior to construction. Due to the nature of the proposed project, an ECC will be required prior to project commencement. Accordingly, an Environmental Impact Assessment (EIA) process as per the requirements of EMA: Environmental Impact Assessment Regulations (18 January 2012) must be conducted to inform the ECC decision.

3.2 Environmental Impact Assessment

The EMA defines EIA as a process of identifying, predicting and evaluating the significant effects of activities on the environment, the risks and consequences of activities, alternatives to these activities and options for mitigation of such activities. This is done with a view to minimise negative impacts, maximise benefits and promote compliance with the principles of environmental management. The figure below outlines the EIA process to be undertaken for the proposed project.

APPLICATION PHASE Review of project against EMA listed activities to determine the need for an EIA Process Compile and submit an ECC application to DEA SCOPING PHASE Identify and consult with Interested and Affected Parties (IAPs) and conduct baseline studies to determine the sensitivity of the receiving environment and population to the proposed project Identifiv potential environmental and social impacts based on the baseline studies and consultation with IAPs Determine the Terms of Reference for further study during EIA/EMP (If required). Compile Draft Scoping Report and Draft EMP detailing the above process and outcomes, and circulate to IAPs for review and comment Finalise Scoping Report and Draft EMP with IAP review outcomes and submit to DEA for adjudication.

Figure 3: The EIA Process

3.3 Competent Authority

The competent authority administering the EIA process and deciding on the issue of an ECC is the Ministry of Environment, Forestry and Tourism's Department of Environmental Affairs and Forestry (MEFT: DEAF). As such, the application for an ECC and all reports and documentation associated with the EIA process will be submitted to the MEFT: DEAF.

PURPOSE OF THE ENVIRONMENTAL ASSESSMENT PROCESS

The Environmental Management Act, 2007 (Act No. 7 of 2007), and supporting Environmental Impact Assessment (EIA) Regulation of 18 January 2012, prescribes the processes to be followed when conducting the Environmental Clearance Certificate (ECC) Application and associated Environmental Impact Assessment (EIA) process.

In broad terms, the purpose of the EIA process is to assess the current environment (including the socio-economic and cultural setting) in which a proposed activity will take place and assess all potential impacts.

The process aims to ensure that all relevant factors are considered when evaluating the potential impacts of a project, as well as developing appropriate environmental management measures (in the form of an Environmental Management Plan – EMP) to mitigate these impacts.

The EMP describes the goals and objectives for impact management to minimise or eliminate potential negative impacts; the action plans to bring effect to those goals and objectives; the procedures to be implemented to ensure integration of environmental management into the daily operations; as well as a plan to raise awareness of employees and the surrounding community with regards to environmental management.

REGISTRATION OF I&APS AND THEIR COMMENTS/CONCERNS

PUBLIC PARTICIPATION PROCESS

Public involvement is an essential part of any Environmental Assessment process. Interested and Affected Parties (I&APs) include any person or organisation that will be directly or indirectly involved and/or affected by the project.

You have been identified as a potential I&AP who may want to receive information regarding the above-mentioned project and/or provide input into the Environmental Impact Assessment process. To be recognised as an I&AP and to be kept informed of the proposed project and EIA process going forward, one must register with GCS to be added to the Stakeholder Database for the project. You may communicate via fax, email, or telephone to obtain further information or comment on the proposed project.

Registered I&APs will be kept informed of the Public Participation Process throughout the EIA process, will be given the opportunity to review and comment on the EIA reports and documents, will receive feedback on how comments have been taken into account, and will be informed of the outcome of the assessment. All comments will be recorded and presented to the project team and competent authority by means of the Project Comments and Responses Register (CRR).

Attached to this BID is a comment form which you can complete and record any comments you may have with respect to the proposed activity. The contact details of the EAP to whom the comments can be addressed are outlined to the right.

The general public as well as any I&APs are hereby invited to attend the public meeting during which the potential environmental and social impacts of the project will be presented for comments and inputs from the public. The meeting is scheduled to take place as follows:

Otavi Extension 4: Khoaeb Extension 4: Oikokola (Etayi) Date: 29 May 2023 **Date: 29 May 2023** Date: 30 May 2023 **Time:** 17h30 Time: 14h30 Time: 15h00

Venue: Oikokola Village Venue: Khoaeb Ext 4 Venue: Erf 313, Rundu Ext 4

Oshikuku Extension 7 Outapi Extension 8: Oshikuku Extension 4 **Date:** 31 May 2023 **Date:** 1 June 2023 Date: 1 June 2023 Time: 14h00 Time: 14h00 Time: 17h00

Venue: Erf 2539, Outapi Ext 8 Venue: Erf 1911 Oshikuku Ext 7 Venue: Erf 1566 Oshikuku Ext 4

Ondangwa Extension 6 Ondangwa Extension 8 **Date:** 2 June 2023 **Date:** 2 June 2023 Time: 14h00 Time: 17h00

Venue: Erf 2556, Ondangwa Ext 8 Venue: Erf 1789, Ondangwa Ext 6

PUBLIC PARTICIPATION - CONTACT DETAILS

Contact Person: Victoria Shikwaya +264 61 248 614 Tel: Fax: +264 61 238 586 Email: victorias@gcs-na.biz

Postal Address: PO Box 81808 Windhoek

5 REGISTRATION OF I&APS AND THEIR COMMENTS / CONCERNS

GCS Water & Environmental Consultants		ENVIRO	NMENT	AL I	MPACT	ASSE	SSMENT	FOR	THE	
		PROPOSED CONSTRUCTION OF TELECOMMUNICATION								
		TOWERS IN THE OSHANA, OTJOZONDJUPA AND OMUSATI								
		REGIONS, NAMIBIA								
		I&AP Comments Form								
			IMAP C	ommei	nts Fol	<u>rm</u>				
Name:			Surname	:						
Organisa	tion / interest:									
Postal / F	Residential address									
		Area:						Code:		
Contact of	details	Tel:	()					•	
		Fax:	()						
		Mobile:	()						
		Email:								
Please m	ark with an X to indica	te whether	you would	l like to	partici	pate in th	e proce	ess:		
Yes, I wo	uld like to participate ii	n this proces	s and rece	ive peri	odical u	pdates				
No, I am	not interested in partic	pating and o	do not wisl	n to rece	eive furt	her inforn	nation			
Preferre	d method of communic	ation		Emai	ι	F	ax		Post	
Date commented (DD / MM / YYYY)										
vate com			Please indicate any issues, comments and concerns with regards to the proposed project (feel free to use the additional space or attach additional pages, as required)							
Please in	dicate any issues, com			vith reg		,	sed pro	ject (feel	free to	use the
Please in	dicate any issues, com			vith reg		,	sed pro	oject (feel	free to	use the
Please in additiona	dicate any issues, com al space or attach addit	ional pages	, as requir	vith reg red)	ards to	the propo	sed pro	oject (feel	free to	use the
Please in additiona	dicate any issues, com	ional pages	, as requir	vith reg red)	ards to	the propo	sed pro	oject (feel	free to	use the
Please in additiona	dicate any issues, com al space or attach addit	ional pages	, as requir	vith reg red)	ards to	the propo	sed pro	vject (feel	free to	use the
Please in additiona	dicate any issues, com al space or attach addit	ional pages	, as requir	vith reg red)	ards to	the propo	sed pro	oject (feel	free to	use the
Please in additiona	dicate any issues, com al space or attach addit	ional pages	, as requir	vith reg red)	ards to	the propo	sed pro	oject (feel	free to	use the
Please in additional	dicate any issues, com al space or attach addit	ional pages	, as requir	vith reg	ards to	the propo		vject (feel	free to	use the
Please in additional	dicate any issues, com al space or attach addit dicate in which aspect	ional pages	, as requir	vith reg	ards to	the propo		oject (feel	free to	use the
Please in Please in	dicate any issues, com al space or attach addit dicate in which aspect	ional pages	require n	vith reg	ards to	the propo		oject (feel	free to	use the
Please in Additional Please in Please in Name:	dicate any issues, com al space or attach addit dicate in which aspect	ional pages	require n APs whom Surname	vith reg	ormation	the propo		oject (feel	free to	use the
Please in Additional Please in Name: Tel: Mobile: Email:	dicate any issues, com al space or attach addit dicate in which aspect dicate the contact deta () ()	s you would	require n APs whom Surname Fax:	vith reg	ormation	on ld be cont	tacted			
Please in Additional Please in Name: Tel: Mobile: Email:	dicate any issues, com al space or attach addit dicate in which aspect dicate the contact deta ()	s you would	require n APs whom Surname Fax:	you thi	ormation	on ld be cont	tacted			
Please in Additional Please in Name: Tel: Mobile: Email:	dicate any issues, com al space or attach addit dicate in which aspect dicate the contact deta () ()	s you would	require n APs whom Surname Fax: roject, fax on 9 Ju tact Person	you thi ; mail, cone 2023	ormation nk shou (or e-mai or to:	on ld be conf	tacted			
Please in Additional Please in Name: Tel: Mobile: Email:	dicate any issues, com al space or attach addit dicate in which aspect dicate the contact deta () ()	s you would	APs whom Surname Fax: roject, fax on 9 Ju tact Persor Tel: +26	you thi ; mail, cone 2023 a: Victor 4 61 248	ormation nk shou (or e-mai to: ia Shikw	on ld be conf	tacted			
Please in Additional Please in Name: Tel: Mobile: Email:	dicate any issues, com al space or attach addit dicate in which aspect dicate the contact deta () ()	s you would ails of any la	require n APs whom Surname Fax: roject, fax on 9 Ju tact Person	you thi ; mail, cone 2023 n: Victor 4 61 248 4 61 238 prias@gc	ormation nk shou (ia Shikwa 614 3 586 s-na.biz	the propo	tacted			

22-1081 May 2023 Page 6