




ECC-45-247-REP-05-D

ENVIRONMENTAL SCOPING REPORT

PROPOSED CONSTRUCTION OF PARATUS TELECOMMUNICATION (PTY) LTD BASE TRANSCEIVER STATION EAST OF BLOCK 55, TOWNLANDS NO. 41 IN SWAKOPMUND, ERONGO REGION

PREPARED FOR

PARATUS
Always Prepared

MARCH 2020

PO BOX 91193 Windhoek Namibia
Environmental Compliance Consultancy CC
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TITLE AND APPROVAL PAGE

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Confidentiality

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EXECUTIVE SUMMARY

Paratus Telecommunication (Pty) Ltd (herein referred to as Paratus or the proponent) is a multinational organisation and has established telecommunication services across Africa over the years. Paratus proposes to construct a Base Transceiver Station (BTS) east of Block 55, Townlands no. 41 in Swakopmund, Erongo Region. The proponent believes that owning its infrastructure is crucial to the delivery of the quality of service that matches the demands of its customers. The proposed project will improve, develop and promote effective information sharing by expanding network coverage, which will provide telecommunication services to the targeted society.

The proposed project triggers listed activities in terms of the Environmental Management Act, No. 7 of 2007 and Environmental Impact Assessment (EIA) Regulations, No. 30 of 2012, thus it requires an EIA to be conducted to obtain an environmental clearance certificate. An environmental scoping report and Environmental Management Plan (EMP) will describe the detailed potential environmental impact assessments and conditions or commitments, which will be adhered to by the proponent. The scoping report and EMP will be submitted to the competent authority as part of the decision-making process. The EIA was undertaken using a methodology developed by Environmental Compliance Consultancy (ECC), which is based on the International Finance Corporation (IFC) standard for environmental and social impact assessments. Through the scoping process, a review of the site and surrounding environment was completed by undertaking desktop reviews and a site assessment visit.

This assessment has evaluated the potential environmental impacts of the proposed project, which includes, but not limited to possible grievances or complaints, visual impacts, but also a health risk perceived by some of the identified stakeholders; however, there is a preference for the new development, which brings a fast, reliable and smart telecommunication service. Through the process, it was determined that the likely effects were not deemed significant due to the small magnitude of change from the baseline environment; the short duration of potential impacts; and the reversibility of effects once activities end. On this basis, it is the opinion of ECC that an environmental clearance certificate could be issued, on conditions that the management and mitigation measures specified in the EMP are implemented and adhered to.

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ABBREVIATIONS

BTS	Base Transceiver Station
DEA	Directorate of Environmental Affairs
ECC	Environmental Compliance Consultancy
ECNS	Electronic Communications Network Service
ECS	Electronic Communications Service
EIA	Environmental Impact Assessment
EMF	Electromagnetic Field
EMP	Environmental Management Plan
ICNIRP	International Commission on Non-Ionizing Radiation Protection
IFC	International Finance Cooperation
I&APs	Interested and Affected Parties
MET	Ministry of Environment and Tourism
MICT	Ministry of Information and Communication Technology
WHO	World Health Organization International

1 INTRODUCTION

1.1 BACKGROUND OF THE PROPOSED PROJECT

Paratus Telecommunication (Pty) Ltd, (herein referred to as Paratus or the proponent) is a multinational organization and has established telecommunication services across Africa over the years. Paratus is always prepared, and in order to meet the mobile services (voice and data) users' demand throughout Namibia, the Proponent proposes to construct a BTS on a portion of land located to the east of block 55 (Townlands No.41) in Swakopmund, Erongo Region (FIGURE 1). Paratus considers that using its infrastructure is crucial to the delivery of and compliance to the rigorous quality of service demands from its customers, thus it proposes to construct the BTS. The proposed project will improve, develop and promote effective information sharing by expanding network coverage, which will provide telecommunication service to the targeted society. Furthermore, with the current population increase in urban areas, the telecommunication service has experienced tremendous growth in terms of users, this includes advances in technology from 2G to 3G and 4G networks within the proposed area.

Namibia is one of the African countries that fully support information and communication technology; as such the government has encouraged the modernization of the global, market-related telecommunication service technology. In recent years, this led to Telecom Namibia constructing a fibre-based network to connect the central government to the administrative capitals of all regions in the country, in order to support the government efforts towards effective telecommunication service delivery to the wider public. There is a substantial growth in the number of telecommunication service users, especially with mobile communication, which supports and improves the socio-economic growth in the country, thus the need to construct a BTS to meet the demand with the fast and reliable network coverage.

The proposed project requires an EIA to be conducted as stipulated in the Environmental Management Act, No. 7 of 2007 and its regulations, to obtain an environmental clearance certificate. As such, an environmental scoping report and EMP will describe the detailed potential environmental impact assessments and conditions or commitments, which will be adhered to by the proponent. The scoping report and EMP will be submitted to the competent authority as part of the decision-making process.

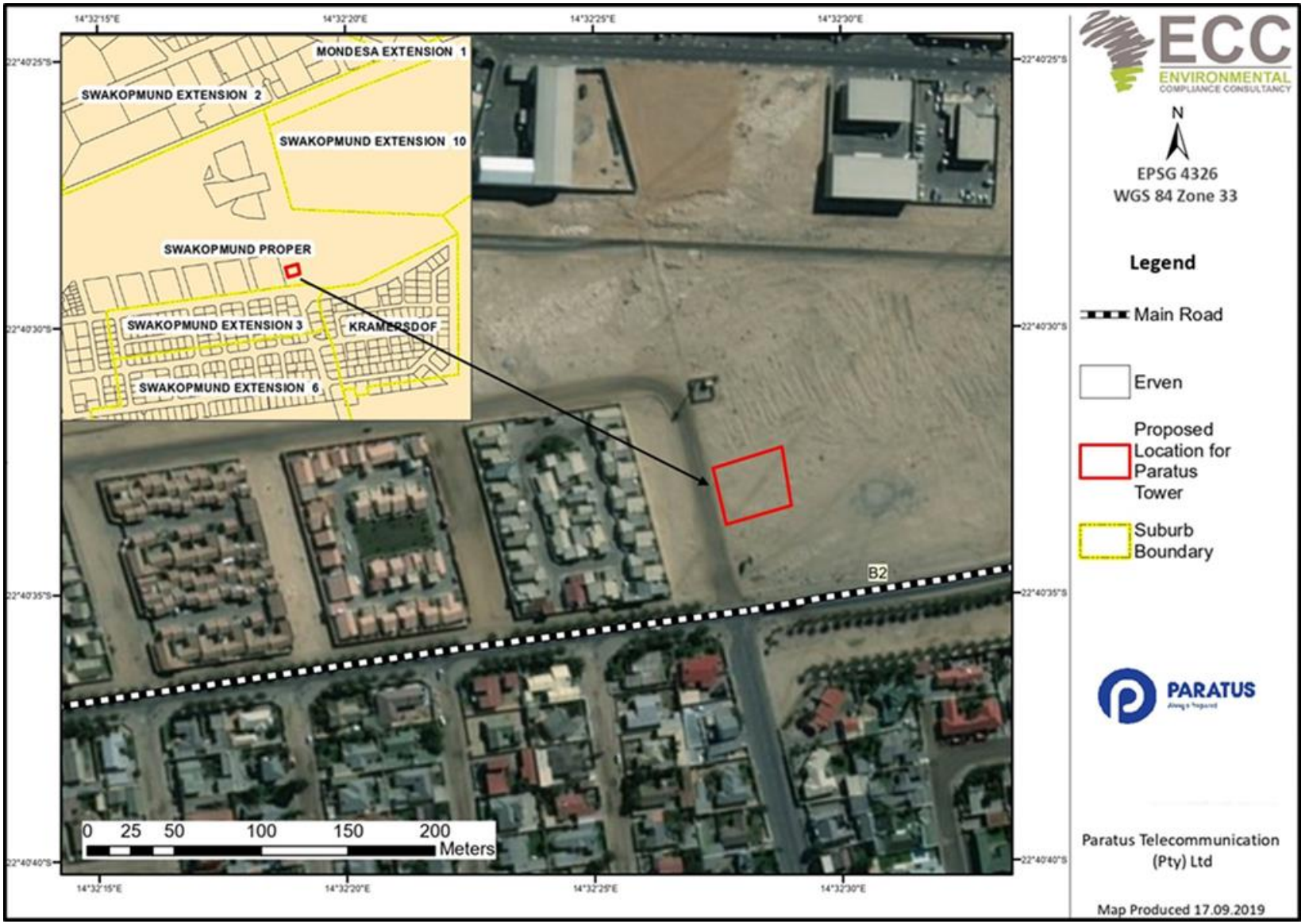

FIGURE 1 – A SATELLITE IMAGE SHOWING THE PROJECT LOCATION FOR THE PROPOSED BASE TRANSCEIVER STATIONS

1.2 PURPOSE OF THIS REPORT

Environmental Compliance Consultancy (ECC) has been appointed by Paratus Telecommunications (Pty) Ltd to undertake the EIA for the proposed construction of the BTS and associated infrastructure.

This report will present the findings of the EIA for the proposed construction of the BTS and associated infrastructure. It has been undertaken in terms of the requirements of the Environmental Management Act, No. 7 of 2007 and the EIA Regulations (No. 30 of 2012). This scoping report, plus assessment and appendices will be submitted to the Ministry of Information and Communication Technology (MICT) and the Directorate of Environmental Affairs (DEA) at the Ministry of Environment and Tourism (MET) for review as part of the application for an environmental clearance certificate.

This scoping report and EMP will address possible impacts, explore alternatives, develop technical recommendations and mitigation measures for the proposed construction of the BTS and its associated infrastructure.

ECC has identified potential environmental impacts through a project-specific environmental impact assessment, and suggested mitigation measures for the proposed project, as discussed within this report. To address these potential impacts, considering that the proposed site is located within an already disturbed footprint and Paratus will use previously assessed technology, further specialist studies were not deemed necessary. A desktop study and site assessment were conducted to identify areas of potential concern and propose mitigation measures to prevent environmental harm.

1.3 ENVIRONMENTAL LEGAL REQUIREMENTS

The Environmental Management Act, No. 7 of 2007 stipulates that an environmental clearance certificate is required to undertake listed activities in terms of the Act and its regulations. Listed activities triggered by the proposed project are as follows:

INFRASTRUCTURE

10.1 The construction of:

(g) Communication networks including towers, telecommunication, and marine telecommunication lines and cables.

1.4 THE PROPONENT OF THE PROPOSED PROJECT

Paratus Telecommunication (Pty) Ltd was founded in 2005, as the first privately and 100% wholly owned Namibian telecommunications operator. Paratus holds both a Class Comprehensive Telecommunications Service License (Electronic Communications Service (ECS) and Electronic Communications Network Service (ECNS)) and a Broadcasting Service License for Signal Distribution, thus becoming the first telecommunications operator able to fully provide converged services in Namibia. The proponent can provide national telecommunication network services through aggregated partner networks to offer a full end-to-end service to its customers. In Namibia, currently, Paratus has various access technologies such as Fiber, Microwave, Fixed LTE and Mobile LTE for customers. As such, customers can be assured that the

network is stable, reliable and has the ability to not only scale with capacity, but also provide redundancy, disaster recovery and route diversity to ensure maximum uptime. The contact details for the proponent is listed in Table 1.

TABLE 1 – CONTACT DETAILS OF THE PROPONENT

CONTACT PERSON	POSTAL ADDRESS	EMAIL ADDRESS	TELEPHONE
Robert Archer	Paratus Namibia Head Office, P O Box 90140, Klein Windhoek, 102-106 Nickel Street, Prosperita, Windhoek	robert.archer@paratus.africa	+264811276608

1.5 ENVIRONMENTAL CONSULTANCY

ECC, a Namibian consultancy (registration number Close Corporation2013/11401), has prepared this scoping report and impact assessment on behalf of the proponent. ECC operates exclusively in the environmental, social, health and safety fields for clients across Southern Africa, in both the public and private sectors. ECC is independent of the proponent and has no vested or financial interest in the proposed project, except for fair remuneration for professional services rendered. All compliance and regulatory requirements regarding this EIA report should be forwarded by email or posted to the following address:

Environmental Compliance Consultancy

P O BOX 91193
Klein Windhoek, Namibia
Tel: +264 81 6697608
Email: info@eccenvironmental.com

1.6 Report Structure

This scoping report is structured as per the contents set out in Table 2.

TABLE 2 – ENVIRONMENTAL SCOPING REPORT STRUCTURE

SECTION	TITLE	CONTENT
-	Executive Summary	Executive summary of the EIA.
-	Acronyms	A list of acronyms used during the report.
1	Introduction	This section introduces the EIA and provides background information on the proposed project, proponent and purpose of the report.
2	Regulatory Framework	This chapter describes the Namibian and international environmental regulatory framework applicable to the project and how it has been considered in the assessment and the scoping report and EMP.
3	Methodology and Approach	This chapter presents the methodology applied to the EIA.
4	Project Description	Presents a description of the proposed project and how the proposed project will be operated.
5	Environmental and Social Baseline	This chapter presents the predicted potential environmental and social effects arising from the proposed project, and the mitigation and management strategies to be applied to avoid or reduce the effects.
6	Environmental Assessment Findings and Mitigation	This chapter predicts the potential environmental and social impacts arising from the project, the assessment of impacts, including residual impact. This chapter also outlines the proposed management strategies for monitoring commitments to ensure the actual and potential impacts on the environment are minimised to "As Low As Reasonably Practicable" this informs the EMP.
7	Environmental Management Plan	This chapter provides a short description of the EMP used to take pro-active action by addressing potential problems before they occur and outline mitigation measures for each impact.t
8	Conclusions	Conclude the findings of the EIA.
	References	A list of references used for this report.
Appendices	Appendices A-D	A list of appendices used for this report – Appendix A: Environmental Management Plan – Appendix B: Non-Technical Summary – Appendix C: Evidence of Public Consultation, Site notice, Newspaper adverts, Project Registered Post – Appendix D: ECC CV's

2 REGULATORY FRAMEWORK

This chapter outlines the regulatory framework applicable to the proposed project. Table 3 provides a list of applicable national legislation and the relevance to the project.

2.1 NATIONAL REGULATORY REGIME

TABLE 3 – A LIST OF APPLICABLE NATIONAL LEGISLATION AND THE RELEVANCE TO THE PROJECT

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
Communications Act, No. 8 of 2009 and relevant regulations, subject to the Regulations Regarding Licence conditions for Telecommunications Service Licences as published in Government Gazette 5037, Notice No 308, 13 September 2012	The Act provides for the regulation of telecommunication services and networks; broadcasting, postal services and the use and allocation of radio spectrum; the establishment of an independent Communications Regulatory Authority of Namibia (CRAN); to make provision for its powers and functions; the granting of special rights to telecommunications licensees; the creation of an Association to manage the internet domain namespace; and for matters connected therewith.	Compliant with this act and relevant Regulations including license conditions for Telecommunication Service Licenses.

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
The Aviation Act, No. 74 of 1962 and Namibian Civil Aviation Regulations Part 139	Provides effect to certain International Aviation Conventions and makes provision for the control, regulation and encouragement of flying within the Republic of Namibia and for other matters incidental thereto.	Provides the regulations for setting up cellular structures e.g. on obstacle limitation and marking such as no obstacle higher than 45 m above mean level of the landing area will be erected or be allowed to come into existence, within a distance of 15 km measured from the aerodrome reference point of any aerodrome, unless the plans for such erection or coming into existence have been approved by the executive director.
Local Authorities Act, No. 23 of 1992	To provide for the determination, for purposes of local government, of local authority councils; the establishment of such local authority councils; and to define the powers, duties and functions of local authority councils; and to provide for incidental matters.	Municipality of Swakopmund is responsible Local Authority who should be consulted to ensure that the proposed project is compliant with the act, its regulations and their by-laws.

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
Environmental Management Act, No. 7 of 2007 and its regulations, including the Environmental Impact Assessment Regulations, No. 30 of 2012	The act aims to promote sustainable management of the environment and the use of natural resources by establishing principles for decision-making on matters affecting the environment. It sets the principles of environmental management as well as the functions and powers of the Minister. The act requires certain activities to obtain an environmental clearance certificate before project development. The act states an EIA may be undertaken and submitted as part of the environmental clearance certificate application. MET is responsible for the protection and management of Namibia's natural environment. DEA - MET is responsible for the administration of the EIA process.	This environmental scoping report and EMP documents and the findings of the environmental assessment undertaken for the proposed project, which will form part of the environmental clearance application. The assessment and report have been undertaken in line with the requirements of this act and associated regulations.
Soil Conservation Act, No. 76 of 1969	Makes provision for the prevention and control of soil erosion and the protection, improvement and the conservation, improvement and manner of use of the soil and vegetation.	There will be minimal soil disturbance during construction e.g. trenches.
National Heritage Act, No. 27 of 2004	The act provides provision of the protection and conservation of places and objects with heritage significance. Section 55 stipulates that exploration companies must report any archaeological findings to the National Heritage Council after which a heritage permit needs to be issued.	The initial desktop assessment did not identify any areas of potential concern with regards to heritage. However, if any heritage sites are discovered during the project phases a "chance finder procedure" will be used.
The Atomic Energy and Radiation Protection Act, No. 5 of 2005	This act provides for adequate protection of the environment and of people in current and future generations against the harmful effects of radiation by controlling and regulating the production, processing, handling, use, holding, storage, transport and disposal of radiation sources and radioactive materials, and controlling and regulating prescribed non-ionising radiation sources.	The act ensures protection against non-ionising radiation. The proposed BTS has the potential of emitting minimal non-ionising radiation.

2.2 INTERNATIONAL REGULATORY REQUIREMENT

The following legal documents are applicable to this development:

- The World Health Organization (WHO) International Electromagnetic Fields (EMF) Project
  - The EMF project aim is to assess the scientific evidence of possible health effects of EMF in the frequency range from 0 to 300 GHz

- The International Commission on Non-Ionizing Radiation Protection (ICNIRP)
    - Published guidelines on limiting exposure to EMF, to protect against all known adverse health effects, and
    - This publication resulted from a thorough review of the scientific literature and assessed all health risks to both the general public and workers.

2.3 PERMITS AND LICENCES

Table 4 below lists the permits and licenses that are required for the proposed project.

TABLE 4 – PERMITS AND LICENCES REQUIRED BY PARATUS FOR THIS PROJECT

PERMIT/LICENCE	RELEVANT AUTHORITY	VALIDITY
Class Comprehensive Telecommunications Service License (ECS &ECNS)	Communications Regulatory Authority of Namibia	5 Years
Spectrum Use Licenses	Communications Regulatory Authority of Namibia	1 Year
Broadcasting Service License for Signal Distribution	Communications Regulatory Authority of Namibia	5 Years

3 METHODOLOGY AND APPROACH

3.1 PURPOSE OF THE ENVIRONMENTAL IMPACT ASSESSMENT

The EIA process in Namibia is governed and controlled by the Environmental Management Act, No. 7 of 2007 and the EIA Regulations, No. 30 of 2012, which is administered by the office of the environmental commissioner through the DEA of the MET.

The purpose of the EIA is to identify, predict, evaluate and mitigate the potential impacts of a proposed project on the natural and human environment. Besides, the scoping assessment, EIA process and subsequent reports are to apply the principles of environmental management to the proposed activities; reduce the negative and increase the positive impacts arising from a project; provide an opportunity for the public to consider the environmental impacts of a proposed project through meaningful consultation; and to provide a vehicle to present the findings of the assessment process to competent authorities for decision making. Furthermore, the assessment process helps to determine the spatial and temporal scope; and identify the assessment methodology which is most applicable for use.

The scope of the assessment was determined through undertaking a preliminary assessment of the proposed project against the receiving environment, obtained through a high-level desktop review and a site visit, which was conducted on the 24th September 2019.

3.2 THE ASSESSMENT PROCESS

The EIA methodology applied to this assessment has been developed using the IFC standards and models, in particular, Performance Standard 1: 'Assessment and management of environmental and social risks and impacts' which establishes the importance of (IFC, 2012):

- Integrated assessment to identify the environmental and social impacts, risks, and opportunities of projects
- Effective community engagement through disclosure of project-related information and consultation with local communities on matters that directly affect them, and
- The client's management of environmental and social performance throughout the life of the project.

Furthermore, the Namibian Draft Procedures and Guidance for EIA and EMP (Republic of Namibia, 2008) as well as the international and national best practice documents to our disposal and over 25 years of combined EIA experience, were also drawn upon in the assessment process.

This impact assessment is a formal process in which the effects of certain types of development on the biophysical, social and economic environments are identified, assessed and reported so that the effects can be taken into account when considering whether to grant development consent or to provide financial support.

Final mitigation measures and recommendations are based on the cumulative experience of the consulting team and the client, taking into consideration the potential environmental and social impacts. The process followed through the basic assessment is illustrated in Figure 2 and detailed further in the following sections.

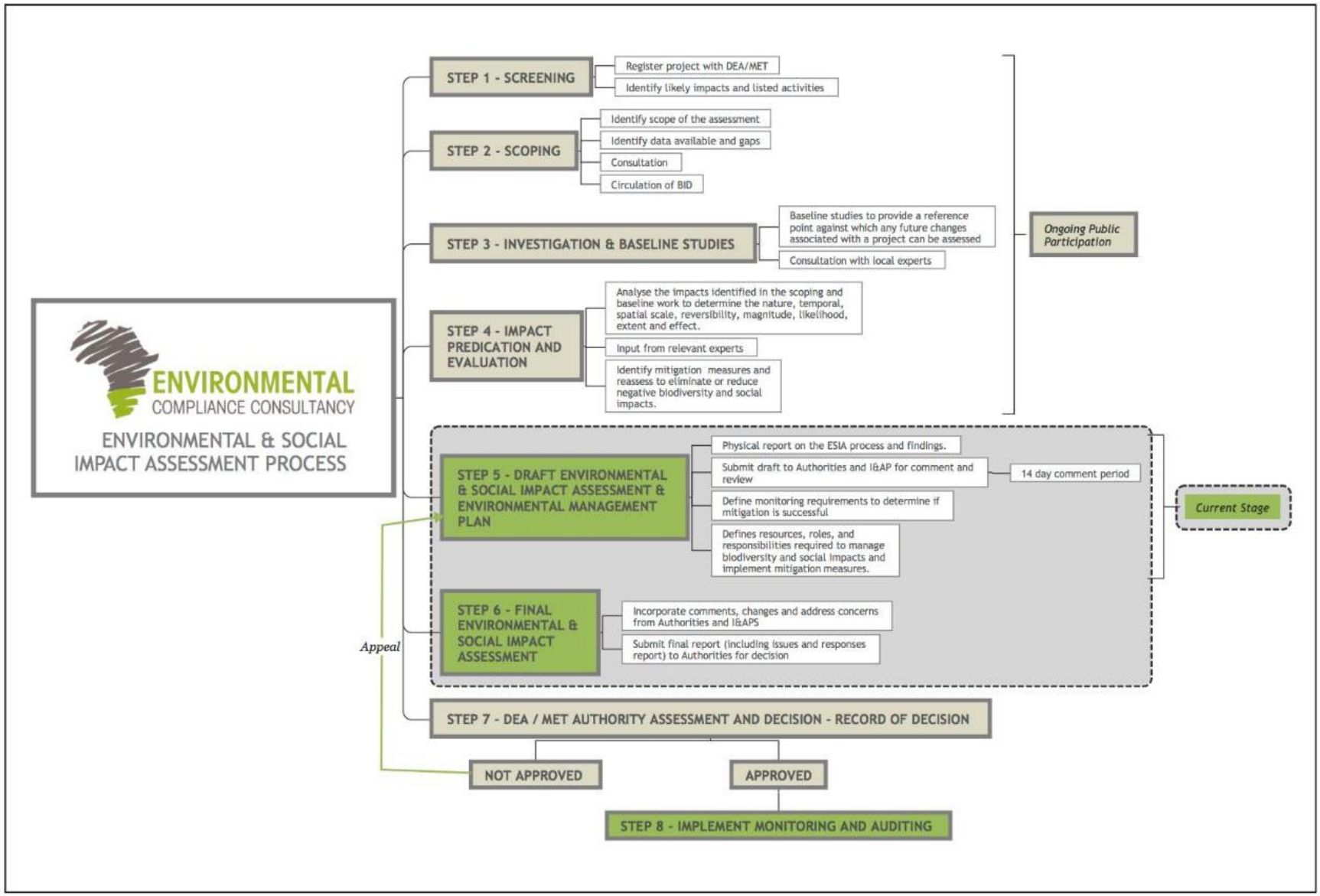

FIGURE 2 – A DIAGRAM DEPICTING THE ECC SCOPING PROCESS

3.3 METHODOLOGY FOR THE IMPACT ASSESSMENTS

ECC's methodology for environmental impact assessments was used and is based on models for environmental and social impact assessments set out by the IFC Principal 1: 'Assessment and management of environmental and social risks and impacts'. Furthermore, the impact assessment for the proposed project was undertaken in accordance with Namibian legal requirements.

Desktop studies on the national database are undertaken as part of the scoping stage to get information about the current status of the receiving environment. This provides a baseline where changes that can occur as a result of the proposed project, can be measured. This is then verified through site data collection.

The environmental and social topics that may be affected by the proposed project are described in this section. The baseline focuses on receptors which could be affected by the proposed project.

3.4 SCREENING OF THE PROPOSED PROJECT

The first stages in the EIA process is to register the project with the DEA/MET and undertake a screening exercise to determine whether it is considered as a listed activity under the Environmental Management Act, No. 7 of 2007 and associated Regulations and if significant impacts may arise from the project. The location, scale and duration of project activities will be considered against the receiving environment.

It was concluded that an EIA (e.g. scoping report and EMP) is required, as the proposed project is considered as a Listed Activity and there may be potential for significant impacts to occur.

3.5 SCOPING OF THE ENVIRONMENTAL ASSESSMENT

The purpose of the scoping stage in the EIA process is to identify the scope of assessment; undertake a high-level assessment to identify potential impacts and to confirm if further investigation is required; to assign the severity of potentially significant effects; and to allocate appropriate mitigation.

This report presents the findings of the scoping phase and high-level assessment, and it confirms that no further investigation is required. This conclusion is presented in Section 6.

3.6 BASELINE STUDIES

Baseline studies are undertaken as part of the scoping stage, which involves collecting all pertinent information from the current status of the receiving environment. This provides a baseline against which changes that occur as a result of the proposed project can be measured.

For the proposed project, baseline information was obtained through a desk-top study, focussing on environmental receptors that could be affected by the proposed project and were verified through site data.

A robust baseline is required to provide a reference point against which any future changes associated with a project can be assessed, and it allows for suitable mitigation and monitoring actions to be identified.

The existing environment and social baseline for the proposed project were collected through various methods:

- Site visit
- Desk-top studies
- Consultation with stakeholders (local authority's), and
- Door to door engagement with neighbouring residents (Appendix C).

3.7 IMPACT PREDICTION AND EVALUATION

The key stage of the EIA process is the impact prediction and evaluation stage. This stage is the process of bringing together project characteristics with the baseline environmental characteristics and ensuring all potentially significant environmental and social impacts are identified and assessed. Impact prediction and evaluation involve predicting the possible changes to the environment as a result of the proposed project. The recognized methodology was applied to determine the magnitude of impact and whether or not the impact was considered significant and thus warrant further investigation. The assessment considers all stages of the project's life cycle that is scoped into the assessment and are presented in this report. It is an iterative process that commences at project inception and runs through to the final design and project implementation (construction and operations). The impact prediction and evaluation stage were undertaken in October – December 2019 and the findings of the assessment are presented in Section 6.

3.8 EIA DETERMINATION OF SIGNIFICANCE

The evaluation and prediction of the environmental and social impacts require the assessment of the project characteristics against the baseline characteristics, ensuring all potentially significant impacts are identified and assessed.

The significance of an impact is determined by taking into consideration the combination of the sensitivity and importance/value of environmental and social receptors that may be affected by the proposed project; the nature and characteristics of the impact; and the magnitude of potential change. The magnitude of change (the impact) is the identifiable changes to the existing environment which may be negligible, low, minor, moderate, high or very high; temporary/short term, long-term or permanent; and either beneficial or adverse. These are described as follows and thresholds are provided in (**Error! Reference source not found.** – 7).

- The **sensitivity and value of a receptor** are determined by identifying how sensitive and vulnerable a receptor is to change, and the importance of the receptor (internationally, nationally, regionally and locally)
- The **nature and characteristics of the impact** are determined through consideration of the frequency, duration, reversibility and probability of the impact occurring, and
- The **magnitude of change** measures the scale or extent of the change from the baseline condition, irrespective of the value. The magnitude of change may alter over time; therefore, temporal variation is considered: short-term, medium-term; long-term, reversible, or irreversible.

TABLE 5 – A LIST OF DIFFERENT LEVELS OF SENSITIVITY AND VALUE OF RECEPTORS

SENSITIVITY AND VALUE	DESCRIPTION
High	Of value, importance or rarity on an international and national scale, and with very limited potential for substitution; and/or very sensitive to change, or has little capacity to

	accommodate a change.
Medium	Of value, importance or rarity on a regional scale, and with limited potential for substitution; and/or moderate sensitivity to change, or moderate capacity to accommodate a change.
Low	Of value, importance or rarity on a local scale; and/or not particularly sensitive to change, or has considerable capacity to accommodate a change.

TABLE 6 – A LIST OF DIFFERENT NATURES OF IMPACT

NATURE	DESCRIPTION
Positive	An impact that is considered to represent an improvement on the baseline or introduces a positive change.
Negative	An impact that is considered to represent an adverse change from the baseline, or introduces a new undesirable factor.
Direct	Impacts causing an impact through direct interaction between planned project activity and the receiving environment/receptors.
Indirect	Impacts that result from other activities that are encouraged to happen as a result/consequence of the Project. Associated with the project and may occur at a later time or wider area.
Extent / Geographic Scale	
On-site	Impacts that are limited to the boundaries of the proposed project site.
Local	Impacts that occur in the local area of influence, including around the proposed site and within the wider community.
Regional	Impacts that affect a receptor that is regionally important by virtue of scale, designation, quality or rarity.
National	Impacts that affect a receptor that is nationally important by virtue of scale, designation, quality or rarity.
International	Impacts that affect a receptor that is internationally important by virtue of scale, designation, quality or rarity.
Duration	
Short-term	Impacts that are likely to last for the duration of the activity causing the impact and are recoverable.
Medium-term	Impacts that are likely to continue after the activity causing the impact and are recoverable.
Long-term	Impacts that are likely to last far beyond the end of the activity causing the damage, but are recoverable over time.
Reversibility	
Permanent /Irreversible	Impacts which are not reversible and are permanent.
Temporary / Reversible	Impacts are reversible and recoverable in the future.
Likelihood	
Certain	The impact is likely to occur.
Likely	The impact is likely to occur under most circumstances.
Unlikely	The impact is unlikely to occur.

TABLE 7 – A LIST OF THE DIFFERENT LEVELS OF MAGNITUDE OF CHANGE

MAGNITUDE OF CHANGE	DESCRIPTION
Major	Loss of resource, and quality and integrity of resource; severe damage to key characteristics, features or elements; or Large scale or a major improvement of resources quality; extensive restoration or enhancement; major improvement of attribute quality.
Moderate	Loss of resource, but not adversely affecting its integrity; partial loss of/damage to key characteristics, features or elements; or Benefit to, or addition of, key characteristics, features or elements; improvements of attribute quality.
Minor	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (or maybe more) key characteristic, feature or element; or Minor benefit to, or addition of, one (or maybe more) key characteristic, feature or element; some beneficial effect on attribute quality or a reduced risk of a negative effect occurs.
Negligible	Very minor loss or detrimental alteration to one (or maybe more) characteristic, feature or element; or Very minor benefit to, or positive addition of, one (or maybe more) characteristic, feature or element.

The level of certainty has also been applied to the assessment process to demonstrate how certain the conclusions are and where there is potential for misinterpretation or a requirement to identify further mitigation measures, thereby adopting a precautionary approach. If there is a low degree of certainty, monitoring and management measures can be implemented to determine if the impacts are worse than predicted and support the identification of additional mitigation measures through the lifetime of the proposed project. TABLE 8 provides the levels of certainty applied to the assessment, as well as a description.

TABLE 8 – A LIST OF THE DIFFERENT LEVELS OF CERTAINTY

LEVEL OF CERTAINTY	DESCRIPTION
High	Likely changes are well understood. Design/information/data used to determine impacts is very comprehensive. Interactions are well understood and documented. Predictions are modelled, and maps based on interpretations are supported by a large volume of data. Design/information/data has very comprehensive spatial coverage or resolution.
Medium	Likely changes are understood. Design/information/data used to determine impacts include a moderate level of detail. Interactions are understood with some documented evidence. Predictions are modelled but not yet validated and/or calibrated. Mapped outputs are supported by moderate spatial coverage or resolution.
Low	Interactions are currently poorly understood and not documented. Predictions are not modelled, and the assessment is based on expert interpretation using

	little or no quantitative data. Design is not fully developed, or information has poor spatial coverage or resolution.

The significance of impacts has been derived using professional judgment and applying the identified thresholds for receptor sensitivity and magnitude of change (as discussed above), whilst guided by the matrix presented in TABLE 9. The matrix is applicable for impacts that are either positive or negative. The distinction and description of significance and whether the impact is positive or negative is provided in TABLE 10.

TABLE 9 – A GUIDE TO SIGNIFICANCE RATINGS

	Magnitude of Change			
	Negligible	Minor	Moderate	Major
High	Minor (3)	Moderate (6)	Major (9)	Major (12)
Medium	Low (2)	Minor (4)	Moderate (6)	Major (8)
Low	Low (1)	Low (2)	Minor (3)	Moderate (4)

Sensitivity

Significance is not defined in the Namibian EIA Regulations; however, the Draft Procedure and Guidance for EIA and EMP states that the significance of a predicted impact depends upon its context and intensity. Accordingly, definitions for each level of significance has been provided in TABLE 10. These definitions were used to check if the conclusions of the assessment of receptor sensitivity, nature of impact and magnitude of impact were appropriate.

TABLE 10 – A DESCRIPTION OF THE LEVELS OF SIGNIFICANCE

SIGNIFICANCE OF IMPACT	DESCRIPTION
Major (negative)	Impacts are considered to be key factors in the decision-making process that may have an impact of major significance, or large magnitude impacts occur to highly valued/sensitive resource/receptors. Impacts are expected to be permanent and non- reversible on a national scale and/or have international significance or result in a legislative non- compliance.
Moderate (negative)	Impacts are considered within accepted limits and standards. Impacts are long term, but reversible and/or have regional significance. These are generally (but not exclusively) associated with sites and features of national importance and resources/features that are unique and which, if lost, cannot be replaced or relocated.
Minor (negative)	Impacts are considered to be important factors but are unlikely to be key decision-making factors. The impact will be experienced, but the impact magnitude is sufficiently small (with and without mitigation) and well within accepted standards, and/or the receptor is of low sensitivity/value. Impacts are considered to be short term, reversible and/or localized in extent.
Low (negative)	Impacts are considered to be local factors that are unlikely to be critical to decision-making.
Low – Major (Beneficial)	Impacts are considered to be beneficial to the environment and society.

Colour coding has been applied to differentiate the impacts, the beneficial impacts are highlighted in green, whereas red indicates the major negative impacts (Table 10).

The significance of impacts has been derived using professional judgment and applying the identified thresholds for receptor sensitivity and magnitude of change, as well as the definition of significance. In most instances, moderate and major adverse impacts are considered as significant; however, there may be some instances where impacts are lower than this but are still considered to be significant. As such, the following thresholds were used to double-check if the assessment of significance had been applied appropriately. A significant impact would meet at least one of the following criteria:

- It exceeds widely recognized levels of acceptable change
- It threatens or enhances the viability or integrity of a receptor or receptor group of concern, and
- It is likely to be material to the ultimate decision about whether or not the environmental clearance certificate is granted.

3.9 EIA CONSULTATION

Public participation and consultation are a requirement stipulated in Section 21 of the Environmental Management Act, No. 7 of 2007 and associated regulations for a project that needs an environmental clearance certificate. Consultation is a compulsory and critical component in the EIA process in achieving transparent decision-making and can provide many benefits.

The objectives of the stakeholder engagement process are to:

- Provide information on the project: introduce the overall concept and plan
- Clarify responsibility and regulating authorities
- Listen to and understand community issues, concerns and questions
- Explain the process of the EIA and timeframes involved, and
- Establish a platform for ongoing consultation.

3.9.1 NON-TECHNICAL SUMMARY

The Non-Technical Summary (NTS) presents a high-level description of the proposed project; sets out the EIA process and when and how consultation is undertaken; and provides contact details for further project-specific inquiries to all registered Interested and Affected Parties (I&APs). The NTS was distributed to registered I&APs and can be found in Appendix B.

3.9.2 NEWSPAPER ADVERTISEMENTS

Notices regarding the proposed project and associated activities were circulated in February in the two newspapers namely the 'Namibian' and 'Informante' (Appendix C). The purpose of this was to commence the consultation process by informing the public about the project and enabling I&APs to register an interest with the project.

3.9.3 SITE NOTICES

A site notice ensures neighbouring properties and stakeholders are made aware of a proposed project. The notice was set up at the proposed site as illustrated in Appendix C.

4 PROJECT DESCRIPTION

4.1 NEED FOR THE PROPOSED PROJECT

With the current population increase, the telecommunication service has experienced tremendous growth in terms of the number of users. As such, Paratus has identified the need to provide increased telecommunication services and hence improve customers' satisfaction in cellular networks, by constructing a BTS within the proposed site. Additionally, the proposed site has the preferred topography with no significant land-use problems which are unlikely to limit the network coverage optimization efforts. The BTS is the most important element in the network as they provide the physical connection to the mobile devices.

4.2 ALTERNATIVES CONSIDERED

Considering the public need for telecommunication service, two sites have been identified and examined based on their availability, the area located on the east of Block 55 (Townlands No. 41) and on a portion of land adjacent to the Tamariskia cemetery (ERF 785) as indicated in Figure 3. Another alternative that was considered is placing the instrument on top of the highest building structure. As such alternatives considered did not meet the pre-screening requirements, which include increased coverage area for emergency responders; new technology which will support frequencies that improve/expand voice and/or data coverage; improve communication; enhance security; facilitate control; and use cost-effective measures, through leasing agreements.

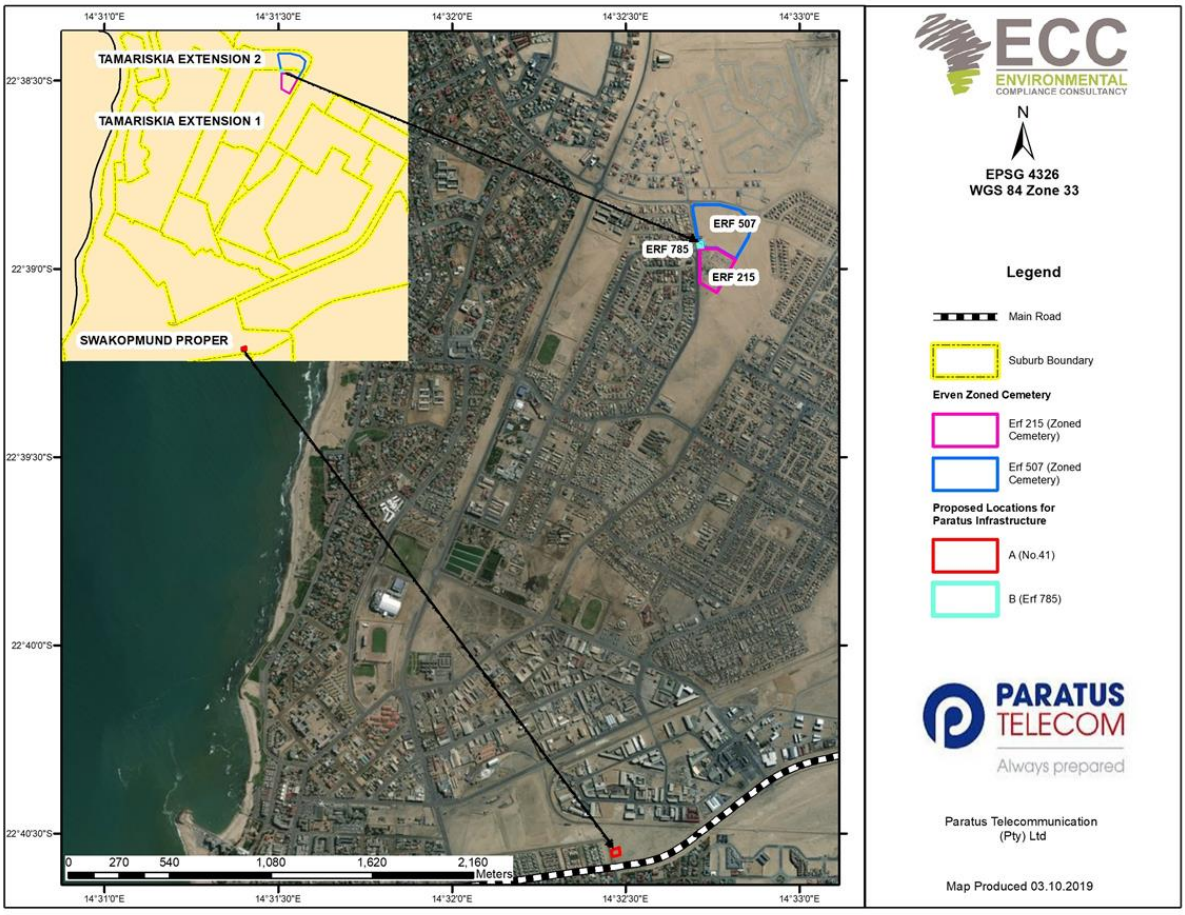

FIGURE 3 – LOCATION OF THE PROPOSED OF BTS IN TAMARISKIA AND TOWNLANDS NO.41

4.2.1 NO-GO ALTERNATIVE

The option of not constructing a new BTS would mean that Paratus will not be able to supply telecommunication services to cater for the increased demand for network coverage around the proposed site. As a result, poor reception and/or no network access for mobile phone users will occur. In that regard, the "no-go alternative" is not preferred, and as such, the project could positively contribute to economic growth and other development by providing market-related, fast and reliable telecommunication service with minimal negative impacts.

4.3 PROPOSED ACTIVITIES

4.3.1 PROPOSED BASE TRANSCEIVER STATION AND ASSOCIATED INFRASTRUCTURE

The first phase of the project will comprise of:

- The Proponent accept and adhere to standard lease conditions of the Swakopmund Municipality as resolved in the Council meeting on the 23rd May 2019
- The Swakopmund Engineering Services Department will provide a layout plan for the exact location on the identified erven to be used for the BTS
- Paratus will install their electrical meter so that any expenses and costs generated will, to them, and
- Following completion, Paratus will be responsible for the proper maintenance of the BTS and its associated infrastructure.

4.3.2 CONSTRUCTION PHASE

The proposed construction phase will include low-impact and non-intrusive activities. The following are envisaged during the proposed project:

- Staging area development
- Minor ground preparation (trenches and levelling) of the site
- Storage and stockpiling of material for the construction of the tower
- Construction of the tower
- Installation of cables and wiring
- Concrete casting
- Construction of parameter fencing, and
- Commissioning of transmitters.

4.3.3 EQUIPMENT AND MATERIAL

Equipment and material will be stockpiled for construction in staging areas, which are located near the proposed site. The preferred BTS height will be between 25 m – 30 m to provide 100% transmission and reception of telecommunication service signals. The typical BTS equipment would include 3G Access Power Solutions-APS6-400 Series, High-Performance Point-to-Point Microwave Antenna, FibeAir IP-20G Radio, Panel antenna and AirHarmony 4000/4200/4400. Delivery of construction material and equipment will require light-to-heavy transport vehicles, but no abnormal or hazardous loads will be used. Construction vehicles are to make use of the existing roads to transport equipment and material to the site.

4.3.4 WORKERS AND ACCOMMODATION

The proposed construction of the BTS and associated infrastructure will create over 10 employment opportunities to the local community, mainly from Swakopmund. All project employees will be accommodated in Swakopmund or Walvis Bay during the construction period.

4.3.5 RESOURCE USE AND WASTE MANAGEMENT

All waste that will be generated on-site, including general household waste, timber (pallets, paints and electrical solvents from construction etc.) and plastics will be disposed of in the nearest appropriate dumping site e.g. Rent-A-Drum skip removal.

4.3.6 OPERATIONAL PHASE

During operation, the BTS and associated infrastructure will require minimal intervention and maintenance. However, periodic inspections (monthly and yearly) and general maintenance of the equipment, such as rust or corrosion management will be done by the proponent.

4.3.7 DECOMMISSIONING PHASE

Should the proposed BTS and associated infrastructure no longer be required, all the equipment would be removed, followed by rehabilitation and/or reclamation of the area. Alternatively, and with the agreement of interested or identified stakeholders, the BTS and associated infrastructure could remain to be leased for future telecommunication service use.

5 ENVIRONMENTAL AND SOCIAL BASELINE

5.1 INTRODUCTION

The detailed environmental and socio-economic baseline assessment of the proposed project are provided in this report. Baseline studies aim to assess possible project impacts (positive, negative and cumulative), thus ensure input into the project designs, which avoid, reduce or mitigate the potentially adverse environmental and social risks. This section provides an overview of the existing biophysical environment through the analysis of the available baseline data regarding the receiving environment. Desktop studies, followed by site verification on the national database are undertaken as part of the scoping process to get information about the current status of the receiving environment. This provides a baseline where changes that occur as a result of the proposed project can be measured.

5.2 PROJECT SITE LOCATION AND SURROUNDING ENVIRONMENT

The proposed project is located on a portion of land located to the east of block 55 (Townlands No.41) in Swakopmund, Erongo Region (Figure 1). Swakopmund has been identified as a key tourist attraction area with high potential economic opportunity for business as well as a growth point for the mining industry; as such good telecommunication service is of a high priority to ensure efficient and effective communication at all times.

The selected site has existing telecommunication service infrastructure and Paratus has considered sharing as required by the Communication Act of 2009; however, this was not possible because their operating capacity is full. Paratus will be willing to share the infrastructure with other telecommunication service providers in the near future for the proposed project.

5.3 CLIMATE

The proposed site is within the Namib desert climatic zone, with nearly no rainfall throughout the year. Swakopmund's climate is characterised by mild summers and cool winters with the mean temperatures ranging between 10˚C and 24˚C. Fog is the most common precipitation within the project site, with a mean of about 60 days with fog events per year. Wind can occur any time of the day, with the predominant winds from the W – SSW, NW – NNE and NE – E with some seasonal variations in wind speed and direction (Mendelsohn et al., 2002).

5.4 FAUNA AND FLORA

No endemic, threatened or rare fauna and flora species occur at the proposed area.

5.5 LANDSCAPE, GEOLOGY AND SOILS

The proposed project is within the Kalahari and Namib sand geology, which is comprised of natural flat landscape with Petric Calcisols soil formations, old crystalline rocks that form the basement to the Permo-Triassic Karoo Sequence and the young deposits of the Namib Desert. The crystalline basement consists of rocks of Abbabis Metamorphic Complex and Swakop Groups of the Damara Sequence (Schreiber, 1996).

5.6 RADIATION BACKGROUND

Radiation is the emission of energy as electromagnetic waves or as moving subatomic particles and it is part of our everyday environment (Clegg *et al*,.2019). Exposure to radiation can be from cosmic rays, as well as to radioactive materials found in the soil, water, food and air. There are two types of radiation namely; ionizing and non-ionizing radiation. Ionizing radiation is types of energy released by atoms that travel in the form of electromagnetic waves such as gamma or x-rays or particles (e.g. neutrons, beta or alpha). Non-ionizing radiation is part of the electromagnetic spectrum where there is insufficient energy to cause ionization, such as in the case of electric and magnetic fields, radio waves, microwaves and optical radiation (ITU-T, 2014).

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). Everyday sources of radiofrequency electromagnetic fields include telecommunications, broadcasting antennas and microwave ovens. Humans have been exposed to natural electromagnetic fields throughout their lifetime; however, sources of electromagnetic fields have increased in the past century, especially with the development of technology and radio communications (Clegg *et al*,.2019). Radiofrequency electromagnetic fields from BTS are perceived to possibly have effects on human health from exposure; however, there is no substantiated evidence that the proposed project would cause such harm (ITU-T, 2014).

5.7 SOCIO-ECONOMIC

In Namibia, telecommunications service, especially mobile communications, have created a significant positive socio-economic outcome over the past decades. As a result, telecommunication service has a significant positive impact on economic growth; employment; and local and regional development. An example of this is where some communities currently have found online business opportunities through improved connectivity.

5.7.1 GOVERNANCE

Since independence in 1990, Namibia is led by a democratically-elected and stable government to date. The country ranked top 5 out of 54 African countries in the Ibrahim Index of African Governance in 2015 for the indicators including the quality of governance and the government's ability to support human development; sustainable economic opportunity; rule of law and human rights; and development of smart information and communication technology to access information for socio-economic growth (National Planning Commission, 2017).

As a result of sound governance and stable macroeconomic management, Namibia has experienced rapid socio-economic development. Namibia has achieved the level of 'medium human development' and ranks 125th on the Human Development Index out of 188 countries (National Planning Commission, 2017).

The Namibian constitution provides for the establishment of Local authorities by law under the Municipal Ordinance, 1963 (Ordinance 13 of 1963) and the Local Authorities Act, No. 23 of 1992. As such the Local Authorities have the power to pass by-laws for the effective administration of their Municipalities and Communities; therefore, Paratus will adhere to the Swakopmund Municipality By-Laws and Regulations.

5.7.2 Demographic Profile

Namibia is one of the least densely populated countries in the world, with a population of 2.3 million. Life expectancy is 65 years and expected years at schooling is 11.7 (National Planning Commission, 2017). Namibia's population is expected to increase from an estimated 2.11 million in 2011 to 3.44 million by 2041 (63%). It is predicted that urbanisation will continue, with an increase from 43% population in urban areas in 2011 to 67% in 2041. The populations of Khomas and Erongo are projected to increase the most with over a third of Namibia's population to live in these two regions (Namibia Statistics Agency, 2011). In Erongo region, Swakopmund and Walvis Bay are the main towns expected to have an increase in urbanisation, mostly due to economic activities resulting from mining, tourism and the fishing industry.

In the 2011 Census, the population of the Erongo Region was 150 809, with a growth rate of 28.6% since 2001. The population of Namibia has been growing steadily; the population growth rate between 2001 and 2011 (the two census) was 1.4%, with urban areas growing quicker than rural areas. The highest growth rate in Namibia was recorded in the Erongo region (3.4%). This was mainly influenced by in-migration; more than 40% of residents in these regions were born elsewhere. Situated in the central Namib Desert, Swakopmund is a fourth-largest populated town in Namibia and the capital of the Erongo region administrative district with 44 725 inhabitants (Namibia Statistics Agency, 2011).

5.7.3 Employment

The Erongo Region is one of the most affluent regions in Namibia, with the second-highest per capita income in Namibia at N$16 819 per annum. The labour force participation rate is the proportion of the economically active people in a given population group, which is calculated as the number of economically active people divided by the total population in the same population group. The labour force participation for the country was 64%, and 79% for the Erongo Region. The unemployment rate in the Erongo Region was around 30% (with Swakopmund contributing about 24%, of which the majority is the youth), lower than the national rate of 37% (Namibia Statistics Agency, 2011).

5.7.4 Economic Activities

The Namibian economy has grown on average by 4.6% per year between 2012 and 2016; however, slowed down in 2016 to 0.2% due to a reduction in productivity in the farming industry. The growth rate over the years has not reduced unemployment; in 2016 nearly 18% of the population lived in poverty. A lack of industrialisation and infrastructure has contributed to Namibia's economic imbalance. The 5th Namibian NDP (National Development Plan (Planning Commission 2017) states that, by modernising and industrialising of the major sectors of agriculture, fisheries, manufacturing, mining and tourism, and by providing trading opportunities so that workers can upgrade their skills,

Namibia will create jobs in a diverse range of industries which will improve economic growth. As such, there is a potential causative effect between the proposed development (or telecommunication service in general) and economic activities; therefore, it is expected that the proposed project will significantly enhance and stimulate economic growth effectively in Swakopmund.

5.7.5 Cultural Heritage

Swakopmund is known as a historic town, for this reason, heritage resources are significant aspects of the society. These include historical or cultural sites, structures, buildings, or objects associated with important historical events or people, with potential tourism value. Consequently, the proponent will ensure that the proposed BTS does blend in with the background environment as practically as possible, to minimise or mitigate visual impacts.

5.7.6 Noise and Vibrations

The proposed location is in an urban area with related activities; therefore, the noise would be minimal and no vibrations expected to result from the project. There would be a minimal temporary increase in localised noise generated during the construction activities of the BTS; however, the impact will be short term and will occur during normal working hours (e.g. 7:00 am – 5:00 pm).

ENVIRONMENTAL ASSESSMENT FINDINGS AND MITIGATION

5.8 SCOPING ASSESSMENT FINDINGS

The proposed project site was found to be sensitive to receptors (e.g. nearest neighbours and tourists) due to the possible visual impacts, but also a health risk perceived by some of the identified stakeholders; however, there is a preference for the new development, which brings a fast, reliable and smart telecommunication service. Paratus will comply with all the national and international regulatory frameworks and regulations as indicated in Section 2.

5.9 LIMITATIONS AND UNCERTAINTIES

Limitation and uncertainty were identified during the EIA process. In line with EIA best practice, assumptions have been made based on realistic worst-case scenarios, thereby ensuring that the worst-case potential environmental impacts are identified and assessed. Table 11 indicate the assumptions and uncertainties that were identified during the assessment process.

TABLE 11 – A LIST OF LIMITATIONS AND ASSUMPTIONS OF THE ASSESSMENT

LIMITATION / UNCERTAINTY	ASSUMPTION
The project construction phase detailed method statement is not available.	It is assumed that a trench about 5 meters deep will be dug and then filled with concrete for laying a foundation. The BTS structure will be assembled on-site i.e. bolt the structure, and fasten the antennae before installation. A concrete plinth will be used to anchor it for stability.

The findings of the scoping assessment are summarized in Table 12.

TABLE 12 – A SUMMARY OF THE FINDINGS OF THE SCOPING ASSESSMENT

ACTIVITY	RECEPTOR	IMPACT	NATURE OF IMPACT	VALUE & SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	MITIGATION MEASURES	SIGNIFICANCE OF IMPACT (POST MITIGATION)
Erection of BTS structure	Community	- Increase the probability of grievances or complaints due to the construction of the BTS structure - A nuisance to nearest neighbours and community - Social discomfort/anxiety to the nearest neighbours - Health and safety risk to workers and the surrounding community	- Adverse - Direct - Reversible - Negligible - Short-term - Local - Likely	Low	Negligible	Low (1)	- Engage with the surrounding communities and/or all stakeholders, especially the nearest neighbours about the construction - Minimize and mitigate the use of heavy and nuisance causing machinery when possible - Use correct PPE, when required - Comply with all applicable national regulations and laws to minimize risks at the workplace - Ensure appropriate supervision of activities - If necessary, provide site inductions to workers about health and safety	Low (1)

ACTIVITY	RECEPTOR	IMPACT	NATURE OF IMPACT	VALUE & SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	MITIGATION MEASURES	SIGNIFICANCE OF IMPACT (POST MITIGATION)
Compensation to the municipality for leasing the land	Local Authority (Municipality of Swakopmund)	- Financial sustainability or economic growth to the local authority	- Beneficial - Direct - Reversible - Negligible - Temporary - Local - Likely	Minor	Negligible	Low (2)	- Negotiate acceptable and lawful land lease price with the local authority	Low (1)
Creation of new employment opportunities to the local community	Community	- Creation of 10 jobs	- Beneficial - Direct - Reversible - Negligible - Temporary - Local - Likely	Minor	Negligible	Low (2)	- Inform the local communities about the employment opportunities and required skills. - Provide job opportunity for the local community	Low (1)

ACTIVITY	RECEPTOR	IMPACT	NATURE OF IMPACT	VALUE & SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	MITIGATION MEASURES	SIGNIFICANCE OF IMPACT (POST MITIGATION)
Procurement of goods and services from local business	Local and regional business	- Sourcing of goods and services from local or regional business could increase economic benefits	- Beneficial - Direct - Reversible - Negligible - Temporary - Local - Likely	Minor	Negligible	Low (2)	- Provide opportunities to local and regional enterprise to participate in the tender process - Where possible, procurement of good and service should be sourced from local or regional businesses	Low (1)
Operation of the BTS instrument	Community	- Possible adverse health effect of non-ionising electromagnetic fields to the surrounding neighbours, thus creating social discomfort/anxiety	- Adverse - Direct - Partly Reversible - Minor - Short-term - Local - Rare	Medium	Minor	Low (2)	– In partnership with relevant stakeholders, provide awareness campaigns about the effects of non-ionising electromagnetic fields on human health	Low (2)

ACTIVITY	RECEPTOR	IMPACT	NATURE OF IMPACT	VALUE & SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	MITIGATION MEASURES	SIGNIFICANCE OF IMPACT (POST MITIGATION)
Fast, reliable telecommunication service e.g. improved network coverage and good internet access	Community	- Increased number of telecommunication service users and no service complaints - Progressively use of social media platforms which will improve economic growth for online enterprise	- Beneficial - Direct - Reversible - Negligible - Temporary - Local - Likely	Minor	Negligible	Low (2)	– Continue providing and upgrading the telecommunication service that will ensure zero grievances or complaints about the services and if there are any complaints, it should be addressed as soon as possible – Ensure reasonable and affordable prices are set to allow the use of telecommunication service	Low (1)
Poor or loss of telecommunication service and end-users	Community	- No access to mobile communication and internet connection - Significant negative impact on community such as business owners and other organisations, which will lead to an increase in service delivery complaints	- Adverse - Direct - Reversible - Negligible - Temporary - Local - Likely	Minor	Negligible	Low (2)	– Engage all users and stakeholders about the decommissioning of the project and its impacts on time – Ensure that all users are aware of the loss of Paratus telecommunication service for the area before decommissioning the BTS	Low (1)

6 ENVIRONMENTAL MANAGEMENT PLAN

The EMP for the proposed project is presented in Appendix A. It provides detailed environmental management options to ensure that the impacts of the proposed project are avoided, minimised or mitigated. An EMP is a tool used to take pro-active action by addressing potential problems before they occur. This should limit the impacts on the environment and reduce the number of corrective measures needed during project execution.

The management measures should be adhered to during all stages of the project activities. All persons involved in the proposed activities should be made aware of the measures outlined in the EMP to ensure activities are conducted in an environmentally responsible manner.

The objectives of the EMP are:

- To include all components of the development and operations of the project
- To prescribe the best practicable control methods to lessen the environmental impacts associated with the project
- To monitor and audit the performance of operational personnel in applying such controls, and
- To ensure that appropriate environmental training is provided to responsible operational personnel.

7 CONCLUSIONS

ECC's EIA methodology was used to undertake the environmental assessment for the proposed project to identify if there is potential for significant effects to occur as a result of the proposed project. Through the scoping process, it was determined that there was no potential environmental risk that requires further specialist studies and assessment. The identified impacts on the environment were found to be minor. Various mitigation measures have been identified and listed for implementation in the EMP to avoid and/or reduce impacts as far as reasonably practicable, as well as to ensure the environment is protected and unforeseen effects and environmental disturbances are avoided.

On this basis, it is the opinion of ECC that an environmental clearance certificate could be issued, on condition that the management and mitigation measures specified in the EMP are implemented and adhered to.

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APPENDIX A – EMP

APPENDIX B – NON-TECHNICAL SUMMARY

APPENDIX C – EVIDENCE OF PUBLIC CONSULTATION

The proposed project was published in The Namibian newspaper on the 26th February 2020 and 4th March 2020 and in the Informante newspaper on the 27th February 2020 and 5th March 2020 (online newspaper). Consent letter from the neighbours was obtained on 4th February 2020 and the site notices were set up at the proposed site in February 2020.

Evidence of public consultation in The Namibian newspaper.

REHOBOTH TOWN COUNCIL

Tel: (062) 521800, Private Bag 2500, Fax (062) 522090,
Rehoboth, Namibia, Email: towncr eh@mweb.com.na

FINAL NOTICE

TO SUCCESSFUL APPLICANTS WITH MINISTERIAL AND COUNCIL APPROVAL TO OCCUPY THE AGRICULTURAL SMALL HOLDING PLOTS

The Rehoboth Town Council has noted with great concern that some successful applicants who received Ministerial and Council approval to occupy the agricultural small holding plots have not occupied or commenced with the activities on the allocated plots.

Rehoboth Town Council would like to give a finl notice and to inform the successful applicants that the grace period has been extended from **Thursday, 27th February 2020 to Friday, 20th March 2020**, for all successful applicants to express their interest in writing that they are still interested in carrying out the activities that they were approved for.

All expression of interest should reachthe Offic before or on **Friday, 20th March 2020**. Failure to do so, Council will reserve the rights to withdraw the allocation of the lease.

The expression of interestshould be forwarded to:

The Chief Executive Officr
Rehoboth Town Council
Private Bag 2500
Rehoboth

Enquiries: Ms. Justina Shidolo
Tel: +264 (62) 521830

NOTICE OF ENVIRONMENTAL ASSESSMENT & PUBLIC PARTICIPATION PROCESS IN THE PROPOSED CONSTRUCTION OF PARATUS TELECOMMUNICATION (PTY) LTD BASE TRANSCEIVER STATION AND ASSOCIATED INFRASTRUCTURE, ERONGO REGION, NAMIBIA

Environmental Compliance Consultancy (ECC) hereby gives notice to the public that an application for an Environmental Clearance Certificate in accordance with the Environmental Management Act, No.7 of 2007 will be made as per the following:

Applicant: Paratus Telecommunication (Pty) Ltd
Environmental Assessment Practitioner (EAP): Environmental Compliance Consultancy
Location: Erongo Region, Namibia

Project: Construction of Paratus Telecommunication (Pty) Ltd Base Transceiver Stations and associated infrastructure in the Erongo Region, Namibia.

Proposed Activity: Paratus Telecommunication (Pty) Ltd propose to construct Base Transceiver Stations and associated infrastructure on two locations in Swakopmund, Erongo Region. The first location is east of Block 55 (Townlands No. 41) and the second location on a portion of land adjacent to the Tamariskia cemetery (ERF 785). The preferred Base Transceiver Stations height will be between 25 to 30 meters' to provide adequate transmission and reception of telecommunication service signals. The typical Base Transceiver Station equipment would include 3G Access Power Solutions-APS6-400 Series, High-Performance Point-to-Point Microwave Antenna, FibeAir IP-20G Radio, Panel antenna and AirHarmony 4000/4200/4400.

Application for Environmental Clearance Certificate: In terms of the Environmental Management Act, No.7 of 2007, ECC has been engaged by Paratus Telecommunication (Pty) Ltd to act on their behalf in applying for an Environmental Clearance to the Ministry of Environment and Tourism for the above-mentioned project.

Review Period: The review and comment period are effective from **26/02/2020** to **11/03/2020**

How you can participate: To ensure that all potential issues and concerns are included in the assessment, Interested and Affected Parties (I&APs) and stakeholders are requested to register for the project using the link to ECCs website provided: https://eccenvironmental.com/projects/

Environmental Compliance Consultancy Close Corporation
Registration Number: CC/2013/11404
Members: Mr JS Bezuidenhout and Mrs J Bezuidenhout
PO Box 91193, Klein Windhoek
Tel: +264 816 697 608
E-mail: info@eccenvironmental.com
Website: https://eccenvironmental.com/projects/
Project ID: ECC-45-247-ADT-04

NAMFISA
NAMIBIA FINANCIAL INSTITUTIONS SUPERVISORY AUTHORITY

PROCUREMENT NOTICE

TO: **ALL MICROLENDERS**
CIRCULAR LETTER: **MC/CC/1/2020**
EFFECTIVE DATE: **27 JANUARY 2020**
SUBJECT: **INDUSTRY FORUM INVITATION**

The industry is herewith invited to the upcoming Industry Forum for 2020 that will take place in March.

Kindly take note of the meeting dates and places where it will take place. The venuesnwill be confire d in due course with the agenda topics.

The meetings will take place at the places and dates as indicated underneath: Kindly note that the meetings start at 09:00 a.m.

No.	Place	Date
1.	Windhoek	Monday, 9 March 2020
2.	Keetmanshoop	Wednesday, 11 March 2020
3.	Ongwediva	Friday, 13 March 2020
4.	Swakopmund	Monday, 16 March 2020

The microlenders are invited to propose agenda topics for the Authority's consideration. However, kindly take note that not all topics proposed will be discussed. The agenda for all the meetings are the same and microlenders have the option of deciding which meeting to attend. Microlenders are encouraged to only attend one (1) of the meetings, depending on its proximity to their operational outlets.

Kindly note that, no industry meeting will take place in Tsumeb this year and instead we have moved the meeting to Ongwediva. This is in accordance with the commitment made to the industry in previous meetings that the Authority will reconsider hosting a meeting in one of the central northern towns due to the high turnout of microlenders from the central northern regions.

*Only **two persons** per microlending entity will be allowed to attend the meeting and attendance is strictly by confira t ion. Unfortunately, microlenders that do not confir their attendance will not be allowed to attend the meeting. For logistical purposes, pleasenconfir your attendance on or before **Friday, 28 February 2020,** with the following person(s):*

Ms. Marion Shumane	(mshumane@namfis. com na)	(061) 290 5118
Ms. Ngajozikue Ndjoze	(nndjoze@namfis. com na)	(061) 290 5162
Ms. Suoma Kapadhi	(skapadhi@namfis. com na)	(061) 290 5114
Ms. Lucrecia Lombardt	(llombardt@namfis. com na)	(061) 290 5130
Mr. Samuel Zeraua	(szeraua@namfis. com na)	(061) 290 5058

Kindly provide at the time of confiri ng attendance, the full names of **the people that will be attending** the meeting and an indication of which meeting they will be attending. Furthermore, all microlenders are urged to observe the restriction on the number of representatives that are allowed at each meeting.

We count on your usual co-operation in the matter and look forward to seeing you at the Forum.

Hilka Alberto
General Manager: Market Conduct **DATED: January 2020**

NOTICE OF ENVIRONMENTAL ASSESSMENT & PUBLIC PARTICIPATION PROCESS IN THE PROPOSED CONSTRUCTION OF PARATUS TELECOMMUNICATION (PTY) LTD BASE TRANSCEIVER STATION AND ASSOCIATED INFRASTRUCTURE, ERONGO REGION, NAMIBIA

Environmental Compliance Consultancy (ECC) hereby gives notice to the public that an application for an Environmental Clearance Certificate in accordance with the Environmental Management Act, No.7 of 2007 will be made as per the following:

Applicant: Paratus Telecommunication (Pty) Ltd
Environmental Assessment Practitioner (EAP): Environmental Compliance Consultancy
Location: Erongo Region, Namibia

Project: Construction of Paratus Telecommunication (Pty) Ltd Base Transceiver Stations and associated infrastructure in the Erongo Region, Namibia.

Proposed Activity: Paratus Telecommunication (Pty) Ltd propose to construct Base Transceiver Stations and associated infrastructure on two locations in Swakopmund, Erongo Region. The first location is east of Block 55 (Townlands No. 41) and the second location on a portion of land adjacent to the Tamariskia cemetery (ERF 785). The preferred Base Transceiver Stations height will be between 25 to 30 meters' to provide adequate transmission and reception of telecommunication service signals. The typical Base Transceiver Station equipment would include 3G Access Power Solutions-APS6-400 Series, High-Performance Point-to-Point Microwave Antenna, FibeAir IP-20G Radio, Panel antenna and AirHarmony 4000/4200/4400.

Application for Environmental Clearance Certificate: In terms of the Environmental Management Act, No.7 of 2007, ECC has been engaged by Paratus Telecommunication (Pty) Ltd to act on their behalf in applying for an Environmental Clearance to the Ministry of Environment and Tourism for the above-mentioned project.

Review Period: The review and comment period are effective from **26/02/2020** to **11/03/2020**

How you can participate: To ensure that all potential issues and concerns are included in the assessment, interested and Affected Parties (I&APs) and stakeholders are requested to register for the project using the link to ECCs website provided: https://eccenvironmental.com/projects/

Environmental Compliance Consultancy Close Corporation
Registration Number: CC/2013/11404
Members: Mr JS Bezuidenhout and Mrs J Bezuidenhout
PO Box 91193, Klein Windhoek
Tel: +264 816 697 608
E-mail: info@eccenvironmental.com
Website: https://eccenvironmental.com/projects/
Project ID: ECC-45-247-ADT-04

REPUBLIC OF NAMIBIA
MINISTRY OF AGRICULTURE, WATER AND FORESTRY

NAMIBIA AGRICULTURAL MECHANISATION AND SEED IMPROVEMENT PROJECT (NAMSIP)

SPECIFIC PROCUREMENT NOTICE (SPN)
INTERNATIONAL COMPETITIVE BIDDING (ICB)

INVITATION FOR BIDS

Date: 27 February 2020
Loan No: 2000200001951
IFB No: G/ICB/NAMSIP/20-04/2019/2020

1. This Invitation for Bids follows the General Procurement Notice (GPN) for this Project that appeared in UNDB online AfDB368-03/19 of 16th March 2019 on-line and on the African Development Bank Group's Internet Website.
2. The Ministry of Agriculture, Water and Forestry received Financing from the African Development Bank in various currencies towards the cost of Namibia Agricultural Mechanization and Seed Improvement Project (NAMSIP). It is intended that part of the proceeds of this Loan will be applied to eligible payments under the contracts for the **Supply and delivery of Ten (10) 80-90kw Tractors with matching implements.**
3. The Ministry of Agriculture, Water and Forestry (MAWF) now invites sealed bids from eligible bidders for the **Supply and delivery of Ten (10) 80-90kw Tractors with matching implements**
4. Interested eligible bidders may obtain further information from and inspect the bidding document at the office of Procurement Management Unit (PMU), **Enquiries: Maria.Booi s@mawf.gov.na, Tel: +264 81 145 8786, +264 61 208 7007**
5. A complete set of bidding documents may be purchased by interested bidders on the submission of a written application to the above and upon payment of a non-refundable fee of **NAD 300.00.**
6. The provisions in the Instructions to Bidders and in the General Conditions of Contract are the provisions of the African Development Bank Standard Bidding Document: Procurement of Goods.
7. Bids must be delivered to the above office on or before **11:00 hours, Wednesday, 15 April 2020** and must be accompanied by a **Bid Security.**
8. Bids will be opened in the presence of bidders' representatives who choose to attend at **11:30 hours** after bid closing **(15 April 2020), Procurement Management Unit, New Building East Wing, 2nd Floor, Luther Street, Eros, Windhoek, NAMIBIA**

REPUBLIC OF NAMIBIA
MINISTRY OF AGRICULTURE, WATER AND FORESTRY

NAMIBIA AGRICULTURAL MECHANISATION AND SEED IMPROVEMENT PROJECT (NAMSIP)

SPECIFIC PROCUREMENT NOTICE (SPN):
OPEN INTERNATIONAL COMPETITIVE BIDDING (ICB)

INVITATION FOR BIDS

Date: 27 February 2020
Loan No: 2000200001951
IFB No: G/ICB/NAMSIP/20-01/2019/2020

1. This Invitation for Bids follows the General Procurement Notice (GPN) for this Project that appeared in UNDB online AfDB368-03/19 of 16th March 2019 on-line and on the African Development Bank Group's Internet Website.
2. The Ministry of Agriculture, Water and Forestry received Financing from the African Development Bank in various currencies towards the cost of Namibia Agricultural Mechanization and Seed Improvement Project (NAMSIP). It is intended that part of the proceeds of this Loan will be applied to eligible payments under the contracts for the Supply and delivery of Eight (8) Certified Seed Pre-Cleaning Machines and fourteen (14) Prototype Pearl Millet/Cowpea/Maize Thresher.
3. The Ministry of Agriculture, Water and Forestry (MAWF) now invites sealed bids from eligible bidders for the **Supply and delivery of Eight (8) Certified Seed Pre-Cleaning Machines and fourteen (14) Prototype Pearl Millet/Cowpea/Maize Thresher.**
4. Interested eligible bidders may obtain further information from and inspect the bidding document at the **Office of Procurement Management Unit (PMU), Enquiries: Maria.Booi s@mawf.gov.na, Tel: +264 81 145 8786, +264 61 208 7007**
5. A complete set of bidding documents may be purchased by interested bidders on the submission of a written application to the above and upon payment of a non-refundable fee of **NAD 300.00.**
6. The provisions in the Instructions to Bidders and in the General Conditions of Contract are the provisions of the African Development Bank Standard Bidding Document: Procurement of Goods.
7. Bids must be delivered to the above office on or before **11:00 hours, Wednesday, 15 April 2020** and must be accompanied by a **Bid Security.**
8. Bids will be opened in the presence of bidders' representatives who choose to attend at **11:30 hours** after bid closing **(15 April 2020), Procurement Management Unit, New Building East Wing, 2nd Floor, Luther Street, Eros, Windhoek, NAMIBIA**

Online advert in the Informante newspaper.

Proposed Activity: Paratus Telecommunication (Pty) Ltd propose to construct Base Transceiver Stations and associated infrastructure on two locations in Swakopmund, Erongo Region. The first location is east of Block 55 (Townlands No. 41) and the second location on a portion of land adjacent to the Tamariskia cemetery (ERF 785). The preferred Base Transceiver Stations height will be between 25 to 30 meters' to provide adequate transmission and reception of telecommunication service signals. The typical Base Transceiver Station equipment would include 3G Access Power Solutions-APS6-400 Series, High-Performance Point-to-Point Microwave Antenna, FibeAir IP-20G Radio, Panel antenna and AirHarmony 4000/4200/4400.

Application for Environmental Clearance Certificate: In terms of the Environmental Management Act, 2007 (No 7 of 2007), ECC has been engaged by Paratus Telecommunication (Pty) Ltd to act on their behalf in applying for an Environmental Clearance to the Ministry of Environment and Tourism for the above-mentioned project.

Site notice at the area located on the east of Block 55 (Townlands No. 41).

Consultation with the Municipality of Swakopmund

MUNICIPALITY OF SWAKOPMUND

(064) 4104214
088 614 514
53 Swakopmund
NAMIBIA
www.swkmun.com.na
nkandjengo@swkmun.com.na

Ref No: 13/3/1/5

Enquiries: Ms Ndiili Kandjengo

24 May 2019

Paratus Telecommunication (Pty) Ltd
P O Box 90140
Klein Windhoek
10012

Att: Mr Andrew Hall ☎ +26483 300 1000

Dear Sir

APPLICATION FOR AN ERF

Following your letter dated **15 April 2015** regarding the above subject matter, Council at its meeting of **23 May 2019** under item 11.1.24 resolved:

(a) That a portion of land measuring 400m² located on the Remainder of Portion B of the Farm Swakopmund Town and Townlands No. 41. (located to the east of block 55), be leased to Paratus Telecommunication (Pty) Ltd.

(b) That Messrs Paratus Telecommunication (Pty) Ltd adheres to the following requirements:

- *A maximum height of 25m*
- *Consent letter from the neighbours*
- *Environmental Impact Assessment (EIA)*

(c) That the following standard lease conditions be applicable to the leasing of the lease portion in (a) above.

(i) Lease period of 9 years and 11 months, pending the subdivision of the lease area.
(ii) That building plans of all proposed buildings must be submitted to the Engineering Services Department.
(iii) That the portion of land is leased on the explicit condition that the lessee indemnifies Council against any claim for damages resulting from its occupation by the lessee.
(iv) That the lease be at the current tariff of N$ 33.68/m²per month with an annual escalation of 10% every July (first being 1 July 2019).

(d) That the Engineering Services Department provides a lay-out plan for the exact location on the identified erf to be used for the tower.

(e) That Messrs Paratus Telecommunication (Pty) Ltd installs their own electrical meter so that any expenses and costs generated be allocated to Messrs Paratus.

(f) That the proposed lease of the site be published in terms of Local Authorities Act 23 of 1992 as amended.

All correspondence must be addressed to the Chief Executive Officer

(g) That Council's standard lease conditions be made applicable to the lease.

(h) That all costs relating to the lease, including, but not limited to advertising costs, be for the account of the lessee.

(i) That the following conditions be made applicable in addition to points (b) to (h) above to the lease:

(i) That Council will not reimburse Paratus Telecommunication (Pty) Ltd for any costs relating to the installation or removal of its properties or any other expense incurred during or after the termination of the lease agreement.

(ii) That any damages that may be caused to the lease site be for the account of Paratus Telecommunication (Pty) Ltd and shall be repaired at their cost and on demand.

(iii) That Paratus Telecommunication (Pty) Ltd will be responsible for the proper maintenance of the equipment and should such equipment not be well maintained and thus rust and become unsightly, the lease be cancelled and equipment removed at the cost of the lessee.

You are kindly requested to indicate in writing on / before Friday, 21 June 2019, whether you accept the above conditions.

Upon acceptance of the above, Council's intention to lease a portion of land measuring 400m² located on the Remainder of Portion B of the Farm Swakopmund Town and Townlands No. 41 (located to the east of block 55), will be published for possible objections as required in terms of section 63 of the Local Authorities Act 23 of 1992.

Kindly note that a payment of N$ 3 500.00 is required for this publication (attached is Council's banking details).
Please email proof of payment to: nkandjengo@swkmun.com.na

Should no objections be received, approval still has to be obtained from Minister of Urban and Rural Development, whereafter a lease agreement will be forwarded to you for signing. If objections are received, such will be submitted to Council for consideration; whereafter a motivation to proceed with the transaction will be submitted to the Ministry of Urban and Rural Development for consideration.

Should you have enquiries in this regard, please contact Ms N Gustaf at ☎ 064-4104214.

Yours faithfully

Mr M P C Swarts
General Manager: Corporate Services & HR

/ng


Untitled Map
Write a description for your map.
Google Earth
Image © 2019 Maxar Technologies

MUNICIPALITY OF SWAKOPMUND

(064) 4104400
(064) 4104125
Fax2email: 0886519137
53 Swakopmund
NAMIBIA
www.swkmun.com.na
townengineer@swkmun.com.na

Ref No: T 507

Enquiries: J Angolo

12 March 2018

Messrs Internet Technologies Namibia
P O Box 90140
Klein Windhoek
WINDHOEK
Namibia

info@internet.na

Attention: Mr. J. D'Alton

Dear Sir

APPLICATION FOR THE SUBDIVISION OF ERF 507, TAMARISKIA INTO PORTION A AND REMAINDER AND SUBSEQUENT REZONING OF PORTION A OF ERF 507, TAMARISKIA FROM "*CEMETERY*" TO "*LOCAL AUTHORITY*"
(C/M 2017/08/31 - T 507)

RESOLVED:

(a) That subject to an Environmental Impact Assessment, Council approves the rezoning of Portion A of Erf 507, Tamariskia, from "*Cemetery*" to "*Local Authority*".

Given the above decision, kindly appoint an Environmental Practitioner to undertake the Environmental study of the area, in order to conclude the lease agreement between yourself and Council, for BTS site.

Yours faithfully

AD Duvenhage
GENERAL MANAGER: ENGINEERING SERVICES

JA/vrb

Reply from Eng.
9th May submit to Council
24th May we will have feedback.
Johanna Angolo
064 410 4418

All correspondence must be addressed to **Chief Executive Officer**

PARATUS
ALWAYS PREPARED

19 August 2019

ATT: Corporate Services & HR
Mr M P C Swartz
Municipality of Swakopmund
P. O. Box
Swakopmund
Namibia

RE: ACCEPTANCE OF REQUIREMENTS ON PORTION OF LAND MEASURING 400M LOCATED ON THE REMAINDER OF PORTION B OF THE FARM SWAKOPMUND TOWN AND TOWNLANDS NO. 41 (LOCATED TO THE EAST OF BLOCK 55)

Dear Mr. Swartz,

The above-mentioned matter bears reference, and your correspondence to our office dated 24 May 2019

Paratus Telecommunications hereby accepts the requirements as laid down in the correspondence dated 24 May 2019.

We trust that this meets with your approval.

Yours faithfully,

Gert Duvenhage
Executive: Infrastructure

PARATUS TELECOMMUNICATIONS (PTY) LTD
PO Box 90140, Klein Windhoek, Namibia
t +264 83 300 1000
f +264 83 300 1485

Company Reg. No: 2007/0100
Directors: BRJ Harmse / SLV Erasmus / A Hall / IB Amuenje / H Jansen van Vuuren* / JJ Esterhuyse*
* South African

Acknowledgement and consent from the neighbours

3

ACKNOWLEDGEMENT AND CONSENT FORM

I Frans Otto !GAOSEB

On behalf of: Frans Otto !GAOSEB

Hereby acknowledge receipt of the attached letter informing key stakeholders and neighbours of the proposed construction of a BTS and associated infrastructure on the illustrated portion of land

~~"I hereby give my consent"~~ / I hereby do not give my consent* for the proposed construction of a BTS and associated infrastructure on the illustrated portion of land.

**strikethrough whichever is not applicable*

Received on the 04 / 02 / 2020

Signature:

Date 04/02/2020

ACKNOWLEDGEMENT AND CONSENT FORM

I HEIDI HÖPFNER

On behalf of: SANTORINI COURT

Hereby acknowledge receipt of the attached letter informing key stakeholders and neighbours of the proposed construction of a BTS and associated infrastructure on the illustrated portion of land. RECEIVED

I hereby give my consent* / I hereby do not give my consent* for the proposed construction of a BTS and associated infrastructure on the illustrated portion of land. TO BE DISCUSSED AT BODY CORPORATE MEETING.

**strikethrough whichever is not applicable*

Received on the 4TH / FEBR. / 2020

Signature: H Höpfner

Date 4/2/2020

ACKNOWLEDGEMENT AND CONSENT FORM

I PHILIP ANCOAT STRYDOM

On behalf of: SWAKOPMUND CONGREGATIONAL CHURCH

Hereby acknowledge receipt of the attached letter informing key stakeholders and neighbours of the proposed construction of a BTS and associated infrastructure on the illustrated portion of land.

I hereby ~~give my consent*~~ / I hereby do not give my consent* for the proposed construction of a BTS and associated infrastructure on the illustrated portion of land.

**strikethrough whichever is not applicable*

Received on the 04 / 02 / 2020

Signature:

Date 04/02/2020

APPENDIX D – ECC CVS

CURRICULUM VITAE

STEPHAN BEZUIDENHOUT

Name of Consultant:	Stephan Bezuidenhout
Position / Profession:	Managing Director & Senior Environmental Practitioner
Date of Birth:	11 April 1989
Nationality:	Namibian
Professional Memberships:	EAPAN, FSC Environmental Chamber. NCE, NCA
Email:	stephan@eccenvironmental.com
Website:	www.eccenvironmental.com
Contact:	+264 81 262 7872

QUALIFICATIONS:

University of Pretoria:	**2011 – 2012**	Postgraduate Degree in Environmental Management and Analysis
University of Stellenbosch:	**2007 – 2010**	Bachelor of Applied Science

PROFILE:

ECC's proudly Namibian Principal leads the ECC team as the lead Environmental Practitioner with a strong and dedicated environmental background. Mr Bezuidenhout has leading practice experience in Identifying and applying legislative requirements to proposed projects. Identifying impacts and mitigations for projects within different sectors, including mining, energy, agriculture and construction.

KEY AREAS OF EXPERTISE:

Environmental Management	-	Project Management Environmental Information Systems (EIS) Environmental Management Systems (EMS)
Environmental (and social) Impact Assessments (EIAs) (ESIAs)	-	Conducting and managing various small to large scale EIAs &ESIAs Compiling EIA Reports and EMPs Coordinate and review specialist studies Review EIA reports
Environmental feasibility studies	-	Environmental pre feasibilities and feasibilities studies Bankable feasibility studies

LANGUAGES:

	Read	Write	Speak
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent

SUMMARY OF EXPERIENCE AND CAPABILITY:

Since 2010, Stephan has been working as an environmental assessment practitioner. Stephan has a strong ecological background and has gained more than ten years' experience in the environmental industry. As a lead practitioner, Stephan has successfully driven environmental impact assessments and compliance assessments within Southern Africa. His hands on and practical experience and knowledge of international standards, such as FSC, IFC and World Bank standards allows Stephan to advise his clients and teams constructively and effectively.

PROJECT EXPERIENCE

PROJECT	DATE	ROLE
Best Practice Guide: Environmental Principles for Mining in Namibia	2017 - 2019	Team member
Biophysical Rehabilitation Plan for ML 42, 43, 44 and 45 as well as an overarching 5-year Biophysical Rehabilitation Plan for Namdeb	2018 - 2019	Finance manager and team member
ESIA amendment for B2Gold Namibia Mining Licence (ML 169) to developed underground working for the the Otjikoto (gold mine)	2018 - 2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, PPP and report review).
Kunene Regional Counsel sustainable water supply Pipeline and Ancillary works	2017 - 2018	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, PPP and report review).
ESIA application for B2Gold Namibia 10.8 megawatt PV solar upgrade to the B2Gold Power Plant	2017 - 2018	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, PPP and report review).
EIA application for sand removal on Farm Okakango Nord No58	2018	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, PPP and report review).
EIA application for Uris Irrigation scheme	2018 - 2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, PPP and report review).
MAWF permit application for Water Abstraction and Discharge for Uris Irrigation scheme	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, PPP and report review).
EIA application for University of Namibia (UNAM) Katima Mulilo Campus Expansion	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, PPP and report review).
EIA application for B2Gold exploration activities for various EPLs	2017 - present	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, PPP and report review).
ESIA application for farm Tsumore 761 Unit B Irrigation Project	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, PPP and report review).

MAWF permit application for Water Abstraction and Discharge for Tsumore 761 Unit B Irrigation Project	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, PPP and report review).
ESIA application for Otjiwarongo Waste Water Treatment and Bulk Water Supply	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, PPP and report review).
ESIA for the Waste Water Treatment facilities for Gondwanan Collection	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, PPP and report review).
MAWF permit application for Water Abstraction and Discharge for Gondwanan Collection	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, PPP and report review).
EIA application for various exploration activities for Votorantim Metals Namibia Pty Ltd	2018 - Present	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement, PPP and report review).
Abengoa Solar SA, Kaxu Solar One 100MW Concentrating Solar Plants (CSP) Trough	2015 - 2017	Environmental Control Officer during commissioning and rehabilitation phases
Konkoonsies II PV Solar Energy Facility, On-site substation and a 132kV power line Northern Cape, South Africa	2015 - 2017	Environmental Assessment Practitioner during EIA process
Abengoa Solar SA Paulputs CSP (Pty) Ltd. 150 MW CSP Trough Northern Cape, South Africa	2015 - 2017	Environmental Assessment Practitioner during EIA Process
Abengoa Solar SA, Xina Solar One 200 MW CSP Trough Northern Cape, South Africa	2015 - 2017	Environmental Control Officer during construction phase
Abengoa Solar SA, Khi Solar One (50 MW) CSP Tower	2015 - 2017	Environmental Control Officer during commissioning and rehabilitation phases
Soil Remediation and Commissioning report of NGALA Camp for Isondlo Project Support (IPS) (Pty) Ltd Gauteng, South Africa	2015	Lead consultant and project manager.
Berekisanang Empowerment Farm, 315 kV power line and agriculture expansion project Northern Cape, South Africa	2016	Environmental Assessment Practitioner during EIA Process and project manager
375 km 26-inch natural gas installation for SASOL & ROMPCO Mozambique representing Worley Parsons (Pty) LTD. South Africa	2013 - 2015	Environmental Coordinator and Manager
Department of Water Engineering (working on a catchment management project for the Municipality of Stellenbosch)	2011 - 2012	Intern at Aurecon South Africa

PUBLICATIONS

N.S., et al., Some ecological side-effects of chemical and physical bush clearing in a southern African rangeland ecosystem, Southern African Journal of Botany (2015), http://dx.doi.org/10.1016/j.sajb.2015.07.012

The FSC National Forest Stewardship Standard of Namibia (Draft V 4). Co-authored by S Bezuidenhout, P Cunningham, A Ashby, F Detering, W Enslin & D Honsbein

CERTIFICATION:

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and experience.

DATE: ____/_____/____20__

FULL NAME OF CONSULTANT

ENVIRONMENTAL
COMPLIANCE CONSULTANCY

Jessica Mooney

Environment & Safety Specialist

Hello! :)

ABOUT ME

Name
Jessica Mooney

Born
24 October 1984

Phone
+264 81 653 1214

Email
Jessica@eccenvironmental.com

Website
www.eccenvironmental.com

Contact me!

How to reach me!

+264 81 653 1214

Jessica.mooney7

+264 81 653 1214

Jessica Mooney

Education & Qualifications

Federation University Australia
2003-2006

Bachelor of Applied Science -Environmental Management

Additional Qualifications

Management Systems Leadership
ICAM - Incident Cause Analysis Method
Certificate II in Metalliferous Mining core safety and risk management
Certificate III in Mine Emergency Response & Rescue
Level 3 – HLTFA402B Apply Advanced first Aid
Emergency Rope Rescue
Level 2 - 21593VIC First Aid level 2
Bonded Asbestos Removal >10m2
Leading and Managing People – Brisbane North Institute of TAFE

Experience & Work History

Current

Environment and Safety Specialist

Environmental Compliance Consultancy
Providing professional consulting services to clients in Namibia with particular focus on approvals, ECCs, reporting and compliance.

- ECC Approvals
- Mine Closure Plans
- Rehabilitation
- Pipeline projects
- Cultural Change programmes
- IMS (ISO14001 and 18001)

Group HSE Manager

Weatherly Mining Namibia
An exciting role covering the breadth of two operational underground mines (Otjihase and Matchless) and the construction of a new open pit mine (Tschudi) working for Weatherly Mining in Namibia, Africa.

- Managed company's SHEQ portfolio
- Full scale construction of new greenfield mine into operational copper mine
- Reduced LTIFR by 90% from 23.1 to 2.4 in 22 months!
- Implemented integrated management system
- Approvals, ECC renewals and EMPs
- Established the first mining environmental forums in Namibia
- Implemented SAFE COPPER cultural change programme

ENVIRONMENTAL
COMPLIANCE CONSULTANCY

Jessica Mooney

Environment & Safety Specialist

References

Feel free to ask the boss :)

MR CRAIG THOMAS
Managing Director
Weatherly Mining

MR COLIN BULLEN
Managing Director
Imerys (client)

Group Manager Lihir Gold
MR NICK CURREY
Director at Sustainable Mining Strategies

Or ask those who have worked for me?

Ms Asteria Salmon
Worked as Control Room Operator
WMN

Mr. Hermanus Lamprecht
Paramedic Safety Officer

Professional Associations

- Chamber of Mines Namibia
- Women on Boards
- The Chamber of Minerals and Energy of Western Australia Industry Member – Mining, Minerals and Resources

Fun Facts:

- I can deadlift 135kg
- To keep fit I Olympic weight lift
- I run ultra Marathons & the longest run yet the fish river Canyon 65km
- I am one of 6 children - do you think that means 4 of us suffer middle child syndrome?

Words I live by:

'The journey will bring you happiest, not the destination'

Experience & Work History

Environmental Consultant

Ensolve Pty Ltd - Australia
In February 2013 an opportunity came about to launch my own business, Blue Wren Environmental Services.

During this time I have worked alongside Ensolve Pty Ltd to deliver several environmental projects including:

- A mine closure project taking an operating mine site into the rehabilitation and closure phase. This project involved the full development of a mine closure plan, facilitation of the government approvals, stakeholder engagement and technical environmental studies to inform the mine closure plan
- Sustainability reporting in accordance with the Global Reporting Initiative
- Rehabilitation of historic exploration sites and obtaining associated government approvals for relinquishment of bonds.

Site Environmental Manager

Panoramic Resources – Australia

- Brought the site into full compliance with the Environmental Licence within 1 year.
- Managed projects relating to the expansions of the current mine tailings dams including obtaining approvals under the Mining Act 1978 and Environmental Protection Act 1986.
- Managed the environmental and community aspects of three operations; Savannah Nickel Mine, Copernicus Nickel Mine (currently in care and maintenance) and the operations at Wyndham Port
- Responsible for the environment, sustainability and social reporting portfolio
- Developed productive working relationships with local government environmental agencies and non-government agencies, which assisted with the approvals process.
- Developed strategies for the recruitment and retention of local Indigenous personnel

Environmental Systems Coordinator

Lihir Gold Limited – Australia
Working on site to provide technical environmental and community advice to ensure all regulatory and licence obligations were met or exceeded

- Regulatory Approvals (State and Federal Government)
- Environment and social aspects of the international cyanide management code
- Operational budgeting and bond management for mine closure
- Compliance with the legislative framework
- Community engagement

Titus Shuuya

SENIOR SCIENTIST ENVIRONMENTAL PRACTITIONER

Hello! :)

ABOUT ME

Name
Titus Shuuya

Born
14 April 1983

Email
titus@eccenvironmental.com

Website
www.eccenvironmental.com

Contact me!

How to reach me!

+264 85 301 3777
+264 85 301 3777

References

JESSICA MOONEY
Environmental and Safety Consultant

DR. GILLIAN MAGGS-KÖLLING
Executive Director
Gobabeb Research and Training Centre

Words I live by:

'A slow movement of a cheetah is not a mistake but a calculated accuracy'

Education & Qualifications

Namibia University of Science and Technology, Namibia
2016

Master of Science in Natural Resources Management

University of Namibia, Namibia
2013

Bachelor of Science in Integrated Environmental Science

Experience & Work History

Current

Senior Scientist Environmental Practitioner

Environmental Compliance Consultancy
- Providing professional consulting services to clients
- Environmental Assessment activities
- Participate in environmental requirements of projects, including licences, monitoring and reporting
- Field work and on-site support
- Conduct training

Jul 2012 -Jul 2019

Senior Researcher

Gobabeb Research and Training Centre
- Managing all planning and logistical implementation of field projects, particularly with reference to the Biodiversity Research and Monitoring Program
- Data analysis and report writing
- Develop long-term ecological monitoring program for the uranium mines in fulfilment of their EMP requirements

Dec 2015 - Apr 2016

Ecologist

Cheetah Conservation Fund of Namibia (CCF)
- Assist in all aspects of CCF's ecology research
- Write research proposals and scientific publications
- Coordinate the de-bushing project and harvest and horticulture activities

ENVIRONMENTAL
COMPLIANCE CONSULTANCY

Emerita Lyapaka Ashipala
Environmental Graduate

Hello! :)

ABOUT ME

Name
Emerita Lyapaka Ashipala

Born
15 February 1994

Phone
+264 81 701 6851

Email

emerita@eccenvironmental.com

Website
www.eccenvironmental.com

Education & Qualifications

Glasgow Caledonian University, UK
2017 - 2018

Master's Degree in Environmental Management (Oil & Gas) (Distinction)

University of Namibia
2013 -2016

Bachelors in Environmental Biology

Experience & Work History

Current

Environmental Graduate

Working with Environmental Compliance Consultancy Providing professional consulting services to clients in Namibia with particular focus on:

- Drafting EIA adverts and NTS documents
- Assisting in the development of scoping reports and
- Environmental Management Plans for exploration projects

Intern

Community-Based Natural Resource Management (CBNRM) Project, GIZ Namibia
Roles and Responsibilities:

- Managed a high-volume workload within a deadline-driven environment.
- Responsible for weekly press review.
- Compilation and analyses of data collected from field for baseline study of projects.
- Assists in project management activities.
- Ensure work ethics is compliant with approved codes and standards.
- Even/workshop assistance planner.
- Engaged in clients and stakeholders' meetings.
- Provides overall project management support throughout the entire life cycle of projects.

Team Leader (*Ad hoc Registration Official)*

Electoral Commission of Namibia
Roles and Responsibilities:

- Kit operator
- Printing of registration cards
- Responsible for keeping order and safe guarding of all equipment

ENVIRONMENTAL
COMPLIANCE CONSULTANCY

Emerita Lyapaka Ashipala

Environmental Graduate

References

Feel free to ask the boss :)

JESSICA MOONEY
Environment & Safety Specialist

STEPHAN BEZUIDENHOUT
Managing Director

Or ask those who have worked with me?

Prof Jim Baird
Programme Leader
Glasgow Caledonian University
j.baird@gcu.ac.uk

Experience & Work History

Undergraduate Internship

South African Science Of Climate Change and Adaptive Land Management (SASCCAL), Namibia
Role and Responsibilities:

- Compilation of news in all regions, for newsletter publication
- Using qGIS to digitise map drawings
- Organising various task research portfolios

Fun Facts:

- *I am an adventurous*
- *Passionate on learning more about Oil and Gas*

Words I live by:

"Be willing to go all out, in pursuit of your dream. Ultimately it will pay off. You are more powerful than you think you are."