



94 Mandela Avenue, Klein Windhoek, Namibia  
PO Box 81808, Windhoek, Namibia  
Tel: (+264) 61 248 614 Fax: (+264) 61 238 586 Web: [www.gcs-na.biz](http://www.gcs-na.biz)

Our Reference GCS Ref - 17-0079

Your Reference

25 August 2017

The Environmental Commissioner  
Ministry of Environment and Tourism  
Private Bag 13306  
Windhoek  
Namibia

Dear Mr Nghitila,

## **ERECTION OF MTC NETWORKS ACROSS NAMIBIA: REQUEST FOR EXEMPTION FOR CERTAIN ACTIVITIES**

### **1 BACKGROUND**

Mobile Telecommunications Ltd (“MTC” hereafter) aims to provide Namibia with a 100% network coverage within the next three to five years. In order to achieve this, MTC approached GCS Water Environmental Engineering Namibia (Pty) Ltd to assist with the Environmental Assessment process.

The current *Environmental Management Act, No. 7 of 2007* states that development of all “communication networks including towers, telecommunication and marine telecommunication lines and cables” require an EIA process for environmental clearance. This definition includes fibre optic lines, indoor antennae, antennae on existing infrastructure, temporary sites, as well as base transceiver stations (BTS) of various heights.

### **2 ENVIRONMENTAL SENSITIVITY**

During a meeting with your Department on the 29<sup>th</sup> of June 2017 (see minutes attached) the approach to a Strategic Environmental Assessment Process was presented which included the identification of some Telecommunication sites that are regarded as “*not environmentally sensitive*”. These sites were identified based on consultations with various specialists or experts in their fields namely:

- Birds (Mike and Ann Scott - African Conservation Services)
- Ecology (Carol Steenkamp - Private Consultant)
- Archaeology (Alma Nankela - National Heritage Council)
- Radiation (Joseph Eiman - Radiation Protection Authority of Namibia (Ministry of Health and Social Services))

- Civil Aviation (Department of Civil Aviation (Ministry of Works and Transport))
- Social Impact (Alex Maurtau Konstantinidi - Sociologist at GCS Water & Environmental Consultants)
- Visual (Prevlan Chetty - Visual Assessment and GIS specialist at GCS Water & Environmental Consultants).

This panel of specialists identified criteria that would define a non-sensitive site. It:

- is an antennae only and/or
- is less than 1m high and/or
- is a non-permanent (temporary) structure and/or
- is an underground cable within the road reserve and
- Conforms to the International Commission on Non-Ionising Radiation Protection (ICNIRP) standards for non-ionising radiation to which Namibia subscribes.

The sites identified as *not environmentally sensitive* falls in one or a combination of these criteria.

### 3 ACTIVITIES FOR WHICH ENVIRONMENTAL EXEMPTION IS REQUESTED

Under Section 28 of the Environmental Management Act (Act 7 of 2007) the Minister may grant an exemption in respect of an activity and may describe conditions to which such exemption may be granted.

Below is a list of network structures that are regarded as posing no to minimal environmental harm based on the criteria provided above:

- **Existing structure:** This refers to sites where equipment is installed on an existing structure (building, water tank, billboard, etc.). It is usually used in populated areas to provide localized coverage and typically consist of an antenna or antennae with the associated cables only. It does not require construction only installation and is in line with the requirement of the Communications Act (No 8 of 2009) regarding the sharing of infrastructure.



Figure 1: Example of equipment on existing structures (left - on top of a building) (right - inside a billboard). Photos from MTC.

- **Streetlights or lamp pole:** These sites are usually 15 m high. They are used to provide localized coverage in urban areas and consist of an antenna on top of a streetlight or lamp pole. It is less visible and provide infill coverage and additional capacity in areas where there are spots with no coverage e.g. below a mountain.
- **Indoor sites:** These sites provide localized coverage and are usually less visible. They are put up in shopping centers and airports to strengthen the signal and are designed to improve localized coverage. The antennae is installed on the wall or in the roof and provides infill coverage and additional capacity where there are a high number of users in a space.



*Figure 2: Streetlight or lamp pole site*



*Figure 3: Indoor antennae provides localized coverage in areas where there are a high number of users in a specific space e.g. a mall.*

- **Fiber optic cables:** The cables consist of thousands of small glass tubes that are put underground in trenches along existing road servitudes. It provides connectivity from one point to another and usually run in straight lines within town boundaries. Because it is in the road servitude the area is considered disturbed. Health and safety standards are in place for the construction of these cables in an urban area.



*Figure 4: Fibre optic cables are put in trenches in the existing road reserve.*

- **Temporary sites:** Temporary sites are put up in areas where temporary relief is required because of high congestion of existing networks before a permanent structure can be erected or in areas where coverage is only required for a short period, e.g. a sporting event. Temporary sites also provide localized coverage and consist of infrastructure that is not permanently constructed and that could be easily removed e.g. a van with antennae.

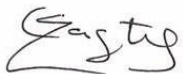
#### 4 CONDITIONS FOR ENVIRONMENTAL EXEMPTION

Based on these initial findings, GCS Namibia do not foresee any activity during the proposed development that may pose a significant environmental risk to the biophysical or social environment on these sites.

*However, it is recommended that, as a condition to the exemption MTC informs the applicable authorities (including the Directorate of Environmental Affairs), the landowner and the immediate neighbours to the site (where applicable) of the intent to erect/install the structure. This could be done as part of MTC's normal site acquisition process and should include a description of the technical information of the site (e.g. location, height, output, type of structure etc.).*

With this, MTC is kindly requesting your office to consider exemption for the proposed activities as described in this letter.

Yours Sincerely,



Eloise Carstens

Environmental Assessment Practitioner (GCS Namibia)

