

	<b>Request for Information Specification</b>	<b>Gauteng Cluster</b>
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Title: **Request for Information: GPS Tracking for Network Assets**

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Date: 2022-08-08

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## **1. Introduction**

Gauteng Cluster has been experiencing high theft incidents of network assets such as pole mounted transformers and miniature substations. Many of these incidents would leave customers without electricity supply for a prolonged period, which results in loss of production, loss of revenue, high replacement costs and compromised safety. In order to protect the network assets from theft, Gauteng Cluster has opted to deploy technology that would promptly alert the security desk to dispatch security officers to where theft incident is taking place to apprehend the thieves and recover the stolen asset.

Thus, the objective of this request for information is to find out from the market which Global Positioning System (GPS) tracking technology is available for network assets such as pole mounted transformers and miniature substations.

## **2. Supporting Clauses**

### **2.1 Scope**

#### **2.1.1 Purpose**

The objective of this request for information is to find out from the market which Global Positioning System (GPS) tracking technology is available for network assets such as pole mounted transformers and miniature substations.

#### **2.1.2 Applicability**

This document shall apply throughout Eskom Holdings Limited Divisions.

### **2.2 Normative/Informative References**

Parties using this document shall apply the most recent edition of the documents listed in the following paragraphs.

#### **2.2.1 Normative**

[1] ISO 9001 Quality Management Systems

### **2.3 Abbreviations**

<b>Abbreviation</b>	<b>Explanation</b>
GPS	Global Positioning System
SMS	Short Messaging Service

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### **3. Request for Information: GPS Tracking for Network Assets**

Gauteng Cluster intends to install the GPS tracking technology on the network assets to combat the theft of network asset as an early warning system as well as recovery system.

The following are the minimum requirements of the GPS tracking device:

- The GPS tracking device shall be self-powered with the battery lifespan of at least 10 years.
- The GPS tracking device shall be permanently attached to the network asset.
- The GPS tracking device shall be able to withstand high temperatures such as 80°C - 130°C.
- The GPS tracking device shall have accelerometer and gyro-meter that will trigger alerts for any disturbances of the network assets.
- The GPS tracking device shall send event logs of its current location, status updates and alerts on regular basis via SMS or email.
- The GPS tracking device shall allow remote diagnostic tests at any given time.

The following are the minimum requirements of the software that interface with GPS tracking device:

- The software shall have adequate cyber security to prevent theft network asset information.
- The software shall always be online to track the GPS tracking device.
- The software shall be accessible to Eskom security desk.
- The software shall back-up the event logs from GPS tracking device onto the Eskom cloud services.

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#### **4. Acceptance**

This document has been seen and accepted by:

<b>Name</b>	<b>Designation</b>
Mashangu Xivambu	Senior Manager: Maintenance & Operations
Sylvester Barei	Senior Manager: Asset Creation
Nonkululeko Nene	Senior Manager: Business Enablement
Ariseelan Moodley	Middle Manager: Network Engineering & Design
Kith Maitisa	Middle Manager: Safety, Health, Environmental, Quality & Security
Stephen Nkwane	Standard Implementation: Design Base & Operating Unit Support Manager

#### **5. Revisions**

<b>Date</b>	<b>Rev.</b>	<b>Compiler</b>	<b>Remarks</b>
August 2022	0	TL Mazibuko	Original document.

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## **Appendix A – Request for Information Schedule**

### **A.1 GPS Tracking for Network Assets**

<b>Requirement</b>	<b>Response</b>
Is the GPS tracking device self-powered with the battery lifespan of at least 10 years?	
Is the GPS tracking device permanently attached to the network asset?	
Is the GPS tracking device able to withstand high temperatures such as 80°C - 130°C?	
Does the GPS tracking device have accelerometer and gyro-meter that will trigger alerts for any disturbances of the network assets?	
Does the GPS tracking device send event logs of its current location, status updates and alerts on regular basis via SMS or email?	
Does the GPS tracking device allow remote diagnostic tests at any given time?	
Does the software have adequate cyber security to prevent theft network asset information?	
Is the software always online to track the GPS tracking device?	
Is the software accessible to Eskom security desk?	
Can the software send back-up of the event logs from GPS tracking device onto the Eskom cloud services?	
Provide the Indicative Price	
Ownership of the Intellectual Property	

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