

**SANRAL**  
SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LTD



BUILDING SOUTH AFRICA  
THROUGH BETTER ROADS

**THE SOUTH AFRICAN NATIONAL  
ROADS AGENCY SOC LIMITED**

**CONTRACT SANRAL X.002-184-2023/1**

**PROCUREMENT OF THE OPERATIONS AND MAINTENANCE OF AN OPEN  
ROAD TOLLING SYSTEM IN THE GAUTENG PROVINCE, SOUTH AFRICA,  
AND A NATIONAL TRANSACTION CLEARING HOUSE**

**VOLUME 3**

**PART C3 EMPLOYER'S REQUIREMENTS**

**PART C3.1.1 GENERAL OPERATIONS**

**SPECIFICATIONS**

**CHIEF EXECUTIVE OFFICER**

**SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED**

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**PRETORIA, 0184**

**NAME OF TENDERER:**

Set sequential number



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**FOR**

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**VOLUME 3**

**PART C3 EMPLOYER'S REQUIREMENTS**

**PART C3.3.1 GENERAL OPERATIONS  
SPECIFICATIONS**

COMPILED UNDER THE DIRECTION OF THE REGIONAL MANAGER: NORTHERN REGION

**SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED**

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## **LIST OF CONTRACT DOCUMENTS**

The following documents form part of this Contract:

Volume 1: The FIDIC Conditions of Contract for Design, Build and Operate Projects (September 2008), issued by the International Federation of Consulting Engineers, which the Tenderer shall purchase himself.

Volume 2: Not applicable.

Volume 3: The Project Document, containing the tender notice, Conditions of Tender, Tender Data, Returnable Schedules, general and particular conditions of contract, project specifications, Pricing Schedule, Form of offer and Site Information is issued by the Employer. The Employer's Form of Acceptance and any correspondence from the selected tenderer, performance security-demand guarantee and all addenda issued during the period of tender will also form part of this volume once a successful tenderer has been appointed.

The conditions of tender are the standard conditions of tender as contained in the South African Bureau of Standards, SANS 10845-3:2015, Construction procurement – Part 3: Standard conditions of tender, document, which the tenderer shall purchase himself.

Volume 4: Not applicable.

Volume 5: Not applicable.

Volume 6: Not applicable.

Volume 7: Not applicable.

The following documents form part of this Contract:

<b><u>Volume 1</u></b>	<b><u>The FIDIC Conditions of Contract for Design, Build and Operate Projects, First Edition 2008</u></b>
<b><u>Volume 2</u></b>	<b><u>Not Applicable</u></b>
<b><u>Volume 3</u></b>	<b><u>Project Document (Parts T1, T2, C1, C2, C3 and C4)</u></b>
<b><u>Part T1</u></b>	<b><u>Tender Procedures</u></b>
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## **GENERAL OPERATIONS SPECIFICATIONS**

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## **SECTION 1.      DOCUMENT OVERVIEW**

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## **1.1 DOCUMENT OVERVIEW**

### **1.1.1 Organisational Arrangements and Terminology**

There are two (2) primary Contracts relevant to the Project:

- 1.1.1.1 The first is this Contract, the ORT Operations Contract, which is for (inter-alia):
- (a) All operations and maintenance related to the Gauteng ORT tolling system, the national TCH, VPC and VAS functions,
  - (b) The supply and maintenance of a replacement Roadside System, when triggered,
  - (c) The supply and maintenance of all Toll System hardware for the new Toll Back Office System, once said system procurement is triggered.
- 1.1.1.2 The second Contract is a Toll Back Office System supply and support Contract, when triggered by SANRAL, for the supply of a new toll back office and billing system for the Gauteng ORT, national account hosting and transaction processing, and Violations processing, excluding that of hardware supply, which is the responsibility of the ORT Operations Contract;
- 1.1.1.3 Also forming part of the structuring going forward is a nominated subcontract for transitional operations and maintenance support services to the ORT Operations Contract, which subcontract is termed the Transitional Subcontract. The Transitional Subcontractor is the Incumbent Contractor.

The following table clarifies the organisational arrangements versus the appropriate terminology as is used in the Employer's Requirements:



**TABLE 1-1: ORGANISATIONAL ARRANGEMENT VS TERMINOLOGY**

Entity (vertical) / Contract (horizontal)	ORT Operations Contract	Transitional Subcontract	SI [New Toll Back Office System] Contract, if / when triggered by SANRAL
SANRAL	Employer	Principal Employer	Employer
ORT Contractor	Contractor	Employer	"Other Contractor" * of Employer under FIDIC Sub-Clause 4.6(b)
Transitional Subcontractor	Nominated Subcontractor	contractor	"Nominated subcontractor" * of ORT Contractor under FIDIC Sub-Clause 4.5
SI [New Toll Back Office System] Contractor	"Other Contractor" * of Employer under FIDIC, Sub-Clause 4.6(b)	"Other Contractor" * of Principal Employer under FIDIC, Sub-Clause 4.6(b)	Contractor



### 1.1.2 Use of FIDIC terms in this document

When a capitalized term [first letter(s)] is used in this book of the Employer's Requirements, and such term is not defined herein but defined in Part C1 of the Contract, the meaning ascribed to this capitalized term in Part C1 of the Contract shall apply.

### 1.1.3 General clarification

Where reference is made to "ORT Entity/ORT", "TCH Entity/TCH" and "VPC Entity/VPC" in this book of the Employer's Requirements, it is mainly for the purpose of clarifying boundaries. Any requirement, obligation or responsibility in relation to such a reference shall be deemed a requirement, obligation or responsibility to be complied with by the Contractor, unless specifically stated otherwise in the context thereof.

### 1.1.4 Purpose of document

1.1.4.1 The purpose of this document is to give a holistic overview of the general operational requirements within which the Contractor shall perform the Operation Service.

1.1.4.2 The Employer's Requirements applicable to the three main toll operational environments, namely the Open Road Tolling (ORT) Operations, the Transaction Clearing House (TCH) Operations and the Violations Processing Centre (VPC) Operations are described in general herein and shall be construed as additional to those operational requirements contemplated by Part C3.2.1 (Contract: Scope of Works).

1.1.4.3 The Value Added Services (VAS) environment operations are described in Part C3.5.4.

1.1.4.4 More specific requirements are given in the following books:

1.1.4.4.1 Part C3.3.2 – Open Road Tolling Operations Specifications;

1.1.4.4.2 Part C3.3.3 – Transaction Clearing House Operations Specifications; and

1.1.4.4.3 Part C3.3.4 – Violations Processing Centre Operations Specifications.

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## **SECTION 2.      OPERATIONAL ENVIRONMENT OVERVIEW**

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## **2.1 INTRODUCTION**

### **2.1.1 General**

2.1.1.1 This section gives the Contractor an overview of the inter-relationship and main functions of the primary role players in the toll environment only. The Value Added Services (VAS) environment operations are described in Part C3.5.4.

2.1.1.2 The Contractor shall apply best practices and principles in the planning, design, delivery and management of the Operation Service.

2.1.1.3 A primary aim of the Operation Service is to levy and collect toll in an electronic tolling environment Cost effectively using an integrated Toll System that automates, as far as possible, the capturing of data and Transaction Record processing.

2.1.1.4 The Toll System architecture that is employed to levy the toll in the free flow environment has been interlinked with the operational framework consisting of three main operating environments.

### **2.1.2 High level relationship between the main toll operations functions**

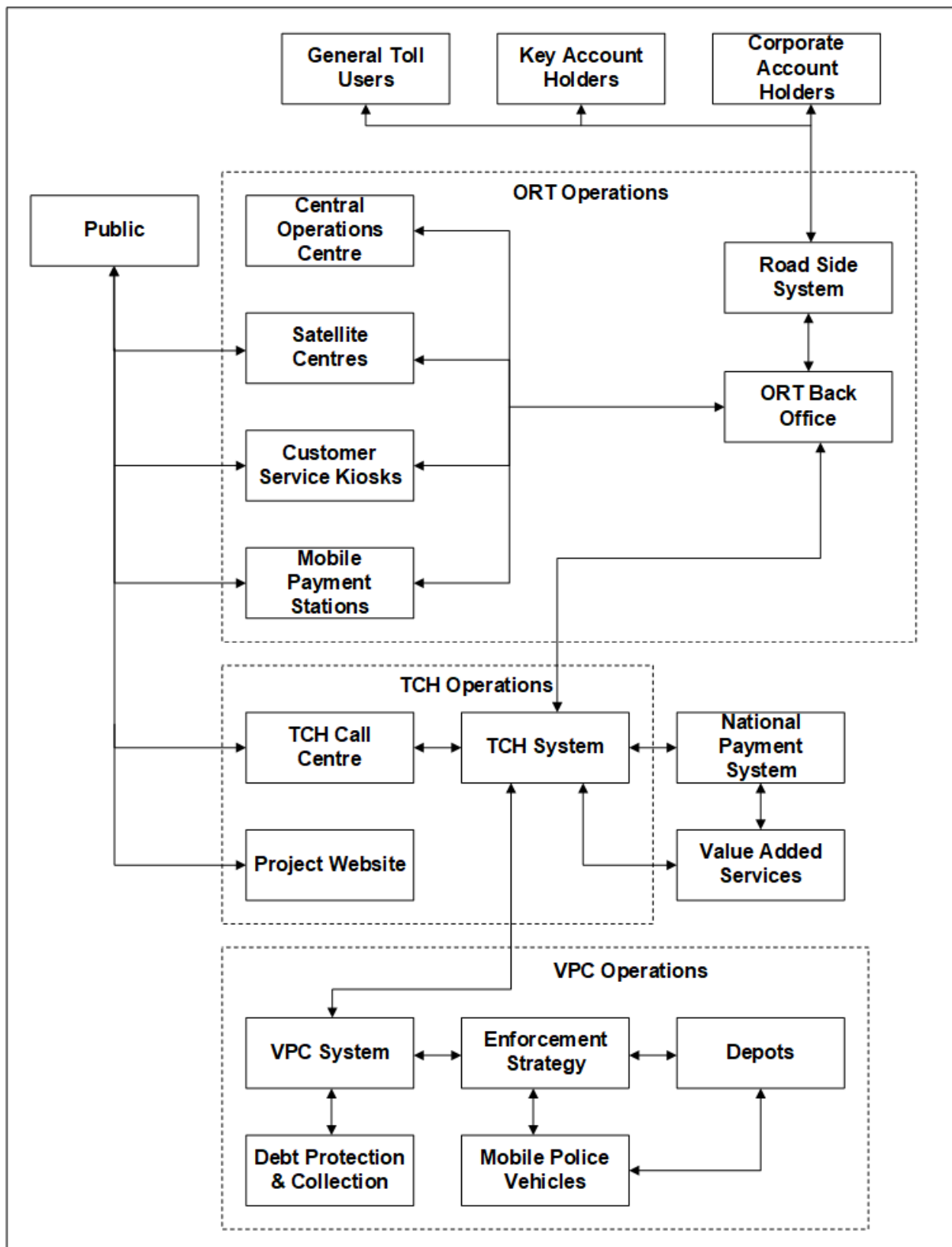
2.1.2.1 Figure 2-1, below, shows the relationship of the ORT Operations, TCH Operations, VPC Operations, the banks, Key Account Holders, Corporate Account Holders and general public, amongst other relationships not shown.

2.1.2.2 The major components of the ORT Operations shown are Satellite Centres, the ORT Back Office, Road Side System, Mobile Payment Stations and Customer Service Kiosks.

2.1.2.3 The major components of the TCH Operations shown are the TCH System, TCH Call Centre, TCH website and Key Account Holders interface and Corporate Account Holders interface.

2.1.2.4 The major components of the VPC Operations shown are the VPC System, debt recovery process and enforcement programmes.

2.1.2.5 The details of these relationships are further given in Part C3.3.2, C3.3.3 and C3.3.4 for the ORT BO, TCH and VPC, respectively.


**FIGURE 2-1: RELATIONSHIP BETWEEN THE MAIN OPERATIONAL AREAS**

- 2.1.2.6 In essence, the ORT operation is responsible for processing all toll Transaction Records whose data is captured by the Road Side System, before transferring to the TCH System.
- 2.1.2.7 The TCH shall receive Transaction Record files from the ORT Back Office (BO) as well as other Toll Agencies and allocate Transaction Records to Customer Accounts.
- 2.1.2.8 The TCH shall receive Customer payments via banking and/or POS interfaces, which POS interfaces are operated on behalf of the TCH Entity by the ORT at Customer Service Facilities where Road Users can interact personally with a Customer Service representative.
- 2.1.2.9 The TCH shall ensure that the system identifies Transaction Records from unregistered users and / or non-paying Customers and passes them to the VPC for Violations processing, subject to the Employer's set Grace Period.
- 2.1.2.10 Violation processing shall only take place for the Opt-in Toll Agencies (TA), which are Toll Agencies that have selected the VPC to do the Violation processing for all Potential Violations they encounter. The Gauteng ORT has been opted-in to the VPC since Toll Commencement.
- 2.1.2.11 Customer Accounts not adhering to the agreed payment terms shall be transferred to the VPC for debt recovery when the Employer's set Grace Period has elapsed.

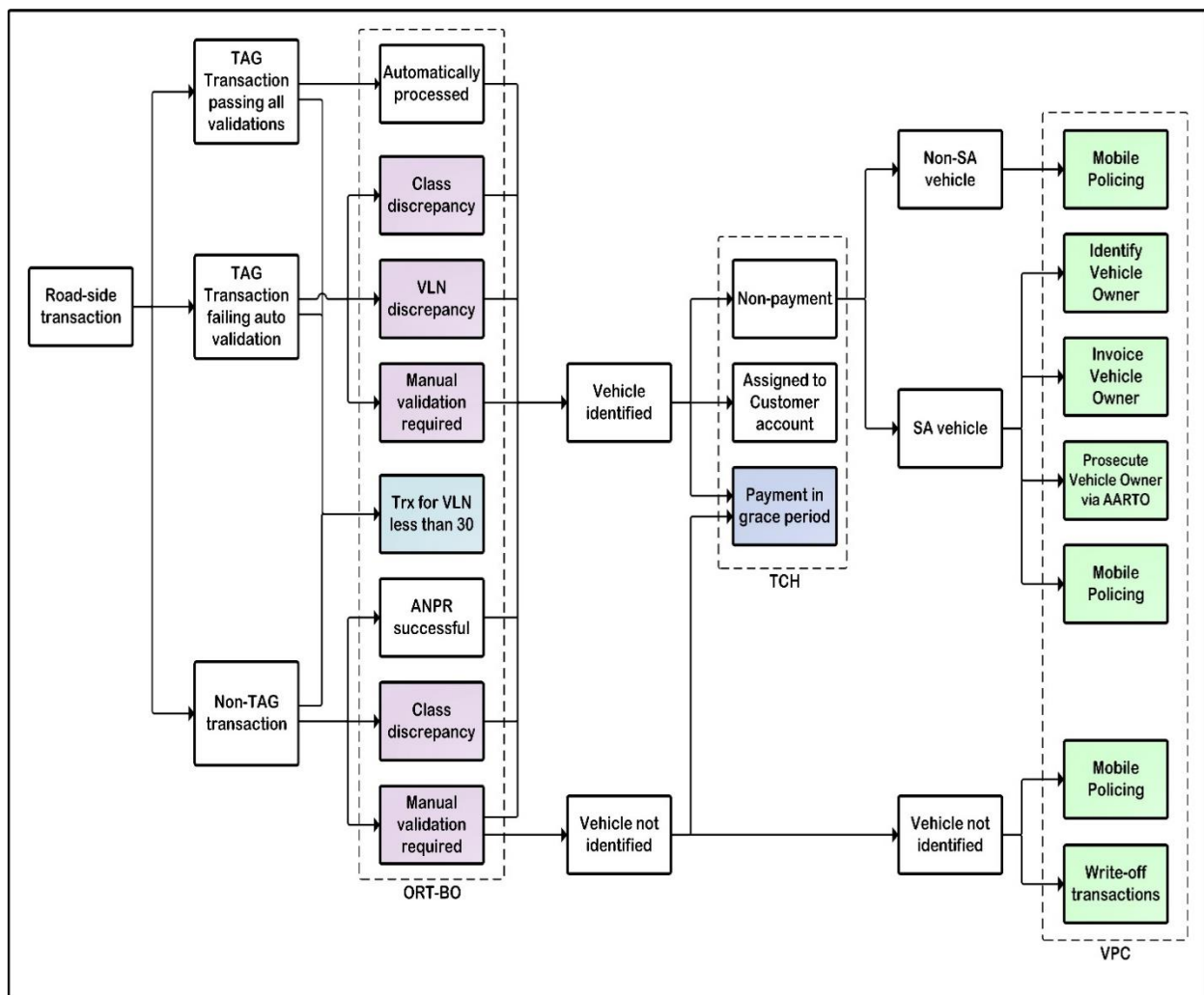
### **2.1.3 High level Transaction Record flow through Entities**

- 2.1.3.1 In Figure 2-2, below, the sequential flow through the main Entities is shown as dependent on the type of transaction and information available at the time when Transaction Records are captured.
- 2.1.3.2 As soon as different or conflicting information in relation to a Transaction Record becomes evident, its status and routing through the flow diagram will change and re-processing of the Transaction Record shall be required, which is not indicated in FIGURE 2-2.
- 2.1.3.3 As soon as a Road Side Transaction Record is captured, it shall be classified automatically as a "Tag transaction passing all validations" or "Tag transaction failing automatic validation" or a "non-Tag transaction".
- 2.1.3.4 The "x first transactions" of a Vehicle Licence Number (VLN), in a configurable retention period (e.g. during a fiscal year), will reside in the ORT Back Office until the  $x+1^{th}$  transaction occurs. As soon as there is more than x (predefined number) Transaction Records per VLN, the Transaction Records, including the first x Transaction Records, are ready for further processing.
- 2.1.3.5 The ORT BO processes the Transaction Record and the Transaction Record gets linked to a "vehicle identified" or a "vehicle is not identified". In the latter case the Transaction Record

gets passed directly via the TCH to the VPC for processing after the legislated Grace Period for unregistered users has lapsed.

2.1.3.6 When the ORT BO links the Transaction Record to a “vehicle identified”, the TCH shall allocate the Transaction Record either to a Customer Account or wait for the legislated Grace Period to allow the Road User to register a Customer Account in order to allocate the Transaction Record to that account and make payment.

2.1.3.7 When the TCH has assigned the Transaction Record to a registered Customer Account but with insufficient funds or no success to recover the outstanding monies within the legislated Grace Period allowed, the applicable Transaction Records plus those collected thereafter shall be transferred to the VPC Entity which shall attempt to recover the toll Revenue.



**FIGURE 2-1: HIGH LEVEL TRANSACTION RECORD FLOW THROUGH ENTITIES**

2.1.3.8 The VPC shall implement and monitor the Employer’s approved enforcement strategy with the assistance of Mobile Policing. The Contractor shall further assist with and provide inputs to the Employer’s enforcement strategy, where applicable.

- 2.1.3.9 The VPC shall measure performance, report and make recommendations for changes to the Employer's policy and the legal framework in order to ensure optimal performance of the debt recovery and prosecution process associated with non-payers. For reporting requirements refer to the other books in the Part C series of the Employer's Requirements and 4.17 in this document.
- 2.1.3.10 The VPC shall by all reasonable means trace and recover debts and shall hand appropriate Transaction Records(s) over to the LEA for the purpose of prosecution in terms of the AARTO legislation and other legal processes.
- 2.1.3.11 Only after all economically viable avenues have been exhausted to recover unpaid debts may these transactions be written off subject to approval by the Employer.

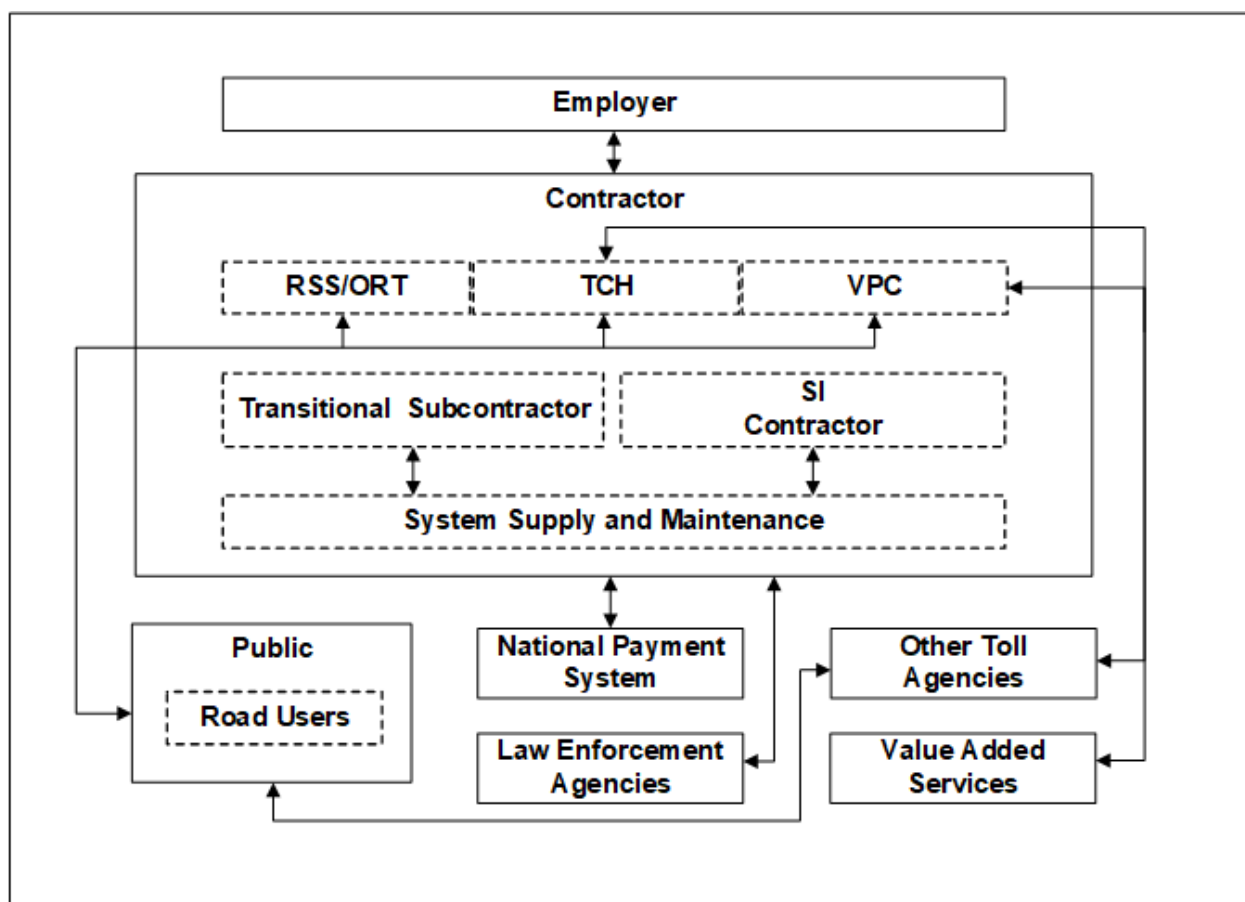


## 2.1.4 Role players

### 2.1.4.1 General

2.1.4.1.1 The key responsibilities of the primary role players are given in this section. More requirements are covered by Part C3.2.1 – Contract: Scope of Works and the Operations Specifications for the ORT, TCH and VPC, respectively.

2.1.4.1.2 The relationship between the operational areas is illustrated in FIGURE 2-1 and FIGURE 2-3 illustrates the relationships of different role players during the Contract Period.



**FIGURE 2-3: RELATIONSHIP OF ROLE PLAYERS**

2.1.4.1.3 During the Contract Period the Contractor shall take full responsibility for ORT, TCH and VPC Operations, including maintenance and support function through the Transitional Subcontractor.

### 2.1.4.2 Employer

- 2.1.4.2.1 The Employer shall perform that as detailed in Section B3.2.1 of Part C3.2.1 Contract: Scope of Works.
- 2.1.4.3 The Employer is a commercially driven organization whose Strategic Objectives and approach to governance, is described in Section B4.2.1 of Part C3.2.1 Contract: Scope of Works:
- 2.1.4.4 The primary tasks of the Contractor are described in Section B3.2.2 of Part C3.2.1 Contract: Scope of Works. Further, the Contractor shall:
  - 2.1.4.4.1 Provide the operations of a national interoperable Transaction Clearing House in accordance with the South African ETC interoperability framework principles. These principles include the centralisation of auditable, efficient operations and the application of common technologies and standards to deliver a consistently acceptable Service Level to all Road Users, within prevailing and applicable legislation and regulations;
  - 2.1.4.4.2 Provide the operations of a local Open Road Tolling System and Violations Processing Centre in accordance with the Employer's Requirements;
  - 2.1.4.4.3 Ensure smooth operations;
  - 2.1.4.4.4 Perform all operation and maintenance tasks necessitated by and associated with the Employer's Facilities and Employer's Equipment provided and handed over to him by the Employer pursuant to the Contract;
  - 2.1.4.4.5 Perform all operation and maintenance tasks necessitated by and associated with the Works in order to perform a compliant Operations Service;
  - 2.1.4.4.6 Provide appropriate, adequate and sufficient Contractor's Equipment to enable the performance of a compliant Operations Service;
  - 2.1.4.4.7 Perform all operation and maintenance tasks necessitated by and associated with the Plant, Materials, Contractor's Documents, Employer's Facilities and any other things necessary to be delivered by the Contractor in order to complete the Design-Build Sections pursuant to the Contract;
  - 2.1.4.4.8 Perform all operations and maintenance tasks necessitated by and associated with the mobilization and establishment of his entire organization & resources during the Section 1 Design Build Period, and associated Transitional Period where the transfer of operations from the Transitional Subcontractor to the Contractor takes place as per the pre-scribed Ramp-down / Ramp-up Plan;
  - 2.1.4.4.9 Perform all operations and maintenance tasks necessitated by and associated with the Trial Operations where applicable and required prior to the issue of Design-Build Section Commissioning Certificates and the Commissioning Certificate;

- 2.1.4.4.10 Perform all operations and maintenance tasks necessitated by and associated with the services required during the Transitional Period; including the supervision and management of the Transitional Subcontractor obligations;
- 2.1.4.4.11 Perform all operations and maintenance tasks necessitated by and associated with his Operations and Maintenance Plan and procedural manuals;
- 2.1.4.4.12 Deliver a complete and compliant ORT, TCH and VPC operations and maintenance service during the Contract Period, including the management of those services attributable to the Transitional Subcontractor, as per that outlined in Parts C3.2.1 and C3.2.2;
- 2.1.4.4.13 Provide all transport, labour, Materials, administration, management, co-operation and anything else necessary to ensure a compliant and efficient Operation Service in accordance with the provisions of the Contract;
- 2.1.4.4.14 Perform all operations and maintenance tasks necessitated by and associated with the Hand Back processes prior to the issue of Contract Completion Certificates pursuant to the provisions of the Contract; and
- 2.1.4.5 ORT Entity
  - 2.1.4.5.1 The Contractor shall operate and maintain the entire Toll System (together with the Transitional Subcontractor in terms of his obligations) and shall therefore be responsible for the following key activities and associated tasks:
    - (a) The operation of the RSS in order to capture all Transaction Records;
    - (b) Facilities maintenance of all Employer's Facilities, including the Central Operations Centre, Dalpark Recovery Centre, Satellite Centres, Customer Service Kiosks, Gantries and Technical Shelters;
    - (c) Timeous payments of rental space for the Customer Services Kiosks and to ensure that the lease agreements are reported on in terms of IFRS 16 as per Part C3.5.3 - Financial Management;
    - (d) ORT Back Office operations, data validation and automated Transaction Record administration, processing and packaging;
    - (e) Transferring of Transactions Records to the TCH for account assignment, and further processing;
    - (f) Customer Service operations, including the website, Call Centre, face to face contacts at Customer Service outlets, the SANRAL App, and all communications (paper, email, SMS);
    - (g) Toll system support and maintenance, through the Transitional Subcontractor; and

- (h) Interfacing to the TCH System and TCH Operations for central account management and Transaction Record management purposes.
- (i) The Contractor, as system supplier for the replacement RSS, when triggered, and any other sub-systems as may be applicable, e.g. a new CRM, or BI tool:
  - i. Shall ensure that his system supply and system integration obligations are adhered to and executed in such a way that it supports all operational requirements and associated activities as detailed in the Employer's Requirements.
  - ii. Shall provide, implement and maintain appropriate and sufficient protocols to ensure continuous and effective interfaces between system supply and operational activities.

#### 2.1.4.6 TCH Entity

2.1.4.6.1 The Contractor shall provide the following key operational functions and associated tasks:

- (a) Hosting of Customer Accounts and ensuring accurate Transaction Record processing, invoicing and settlement;
- (b) Hosting of Key/Corporate Account Holder Accounts and ensuring accurate and timeous files processing, transfer, invoicing and settlement through KARS;
- (c) Notifying defaulting Customers when submitting Transaction Records or balances to the VPC for debt recovery;
- (d) Ensuring the highest standard Customer Service to all Road Users;
- (e) Manage the Tag procurement process which shall be procured in terms of the Tag supply Contract in accordance with Part C3.2.1 – Contract: Scope of Works;
- (f) Managing Tag stock, distribution, warehousing, returns and re-issue process, reporting, recall, handling warranty claims and issuing Tags to general Road Users, Key Account Holders, Corporate Account Holders, Tag Distributors, Toll Agencies and other Appointed Agents for onward distribution from a central base;
- (g) Managing the account settlement processes between the various participating Key Account Holders, Corporate Account Holders and Toll Agencies;
- (h) Interfacing to the ORT System regarding toll Tariff and specific TA related issues; and

- (i) Interfacing to the VPC System for the status of Customer Accounts during the debt recovery process at the VPC.

2.1.4.6.2 Within all applicable legislation, regulation, toll Policies, enforcement Policies and Business Rules, the Operational Objectives relating to the TCH include:

- (a) To support the Employer's delivery of national ETC interoperability by providing centralized, secure and auditable Customer Account issuing and Customer Account management services in a Cost-effective way;
- (b) To accept payments from Customers into their Customer Accounts and reconcile with Transaction Records received from Toll Agencies relating to vehicles associated with those accounts;
- (c) For Transaction Records received from Opt-in Toll Agencies for vehicles not associated with a current Customer Account, to provide the VPC with sufficient evidence, as provided by the TA's, to prosecute further, on a cost-effective basis to such Toll Agencies;
- (d) To provide high quality, seamless and efficient Customer Service and communication through multiple channels to enable Road Users to learn more about the tolling and enforcement regime, applicable accounts, how to register for a Customer Account and to pay all fees due;
- (e) To develop and implement a tactical marketing programme, in support of the Employer's marketing strategy. Refer to Section B5.6 of Part C3.2.1 – Contract: Scope of Works;
- (f) To efficiently manage DSRC Tags as a secure means of Customer Account identification throughout their complete lifecycle and to provide and operate a national security key regime for such Tags and related charging infrastructure; and
- (g) To ensure scalability and flexibility to support increased demand for its operations, organizational growth and provision of services to additional Opt-in Toll Agencies.

2.1.4.7 VPC Entity

2.1.4.7.1 The Contractor shall provide the following operational functions:

- (a) Processing of Violation Transaction Records to recover unpaid toll fees;
- (b) Co-ordinating of enforcement Strategies with LEA's;
- (c) Monitoring of service delivered by Mobile Policing and implement changes to enhance the unit's effectiveness;

- (d) Monitoring and optimisation of the Debt collection process, which shall include AARTO and other legal proceedings where applicable;
- (e) Keeping of accurate records of Violation Transaction Records;
- (f) Ensuring accurate transaction processing, ensuring that Discounts are allowed in terms of legislation and invoicing and settlement are dealt with in an efficient way;
- (g) Managing and streamlining the Debt protection and debt recovery processes; and
- (h) Maintenance of the operational depots, Mobile Payments Stations (MPS) and Mobile Policing Vehicles (MPV).

2.1.4.7.2 Within all applicable legislation, regulation, enforcement Policies and Business Rules, the Operational Objectives relating to the VPC include:

- (a) To support the Employer's delivery of national ETC interoperability by providing a secure and auditable Violation processing service to the ORT and all Opt-in Toll Agencies;
- (b) To minimize the toll Violation Rate by accurately and efficiently performing Violation processing, Debt collection and supporting enforcement processes to ensure a sufficient level of deterrent to non-payment;
- (c) To cost-effectively collect the maximum toll Revenue from Debtors through effective targeting, resource planning and other mechanisms;
- (d) To optimize the Violation Rate through efficient Customer contact channels, including those operated by the ORT and/or other Toll Agencies on behalf of the VPC;
- (e) To provide operations support systems and intelligence for Mobile Policing activities;
- (f) By means of qualified resources, to collect, prepare and provide acceptable evidence to initiate and support the AARTO prosecution process and other legal processes, and also to support the courts to recover Revenue, fines and other related fees; and
- (g) To enable scalability to support increased demand on its operations, including Variations in detected non-compliant activity and provision of services to future Opt-in Toll Agencies.

2.1.4.8 Law Enforcement Agencies (LEA)

2.1.4.8.1 The current enforcement entity is the GDSCS but other envisaged LEA's that may assist the VPC to enforce and prosecute Violators on Employer's approval, in order to recover debt for Violations are listed:

- (a) Road Traffic Infringement Agency (RTIA);
- (b) Road Traffic Management Corporation (RTMC);
- (c) Cross-Border Road Traffic Agency (CBRTA); and
- (d) Other appointed parties that may be tasked to assist the VPC.

#### 2.1.4.9 Banks

2.1.4.9.1 The Contractor shall interact with the Employer's nominated bank(s) and system operators as and when required and in order to:

- (a) Ensure that the proceeds of payment transactions submitted to the bank for collection are deposited to SANRAL's designated bank accounts;
- (b) Ensure that reconciliation of payment transactions received in SANRAL's designated bank accounts to customer toll accounts held in the TCH and VPC account hosting systems takes place daily;
- (c) Monitor the accuracy of and the ongoing status of queries regarding bank charges, settlement of Transaction Records, merchant agreements and related issues; and
- (d) Make available sufficient resources for the speedy resolution of disputed and rejected transactions.

## 2.2 SERVICE CHANNELS

### 2.2.1 General

2.2.1.1 The Customer Service channels described in this sub-section shall be provided by the Contractor.

### 2.2.2 Customer Services

2.2.2.1 All Customer Services shall be provided by the Contractor through the ORT and shall generally include:

2.2.2.1.1 Services at Satellite Centres along the routes;

2.2.2.1.2 Services at Customer Service Kiosks, which shall typically be located at shopping centres;

2.2.2.1.3 Services at Customer Service Centres located at Toll Plazas on the South African National Routes, where applicable;

2.2.2.1.4 Services at Mobile Payment Stations;

2.2.2.1.5 Services via the Call Centre, SANRAL App, email, letters and SMS;

2.2.2.1.6 Third parties e.g. banks, Post Office, cell phone companies, etc, may be appointed by the Contractor on the Employer's approval, to assist with the processing of Customer queries and payments at their own respective retail outlets. The Contractor shall train and provide access to the relevant parts of the Toll System to these third parties on the Employer's instruction in order for them to deliver the Customer Service; and

2.2.2.1.7 The TCH shall monitor the TCH System, which shall facilitate the Customer Account registration process at Customer Service Facilities, while the ORT shall monitor and ensure that the ORT BO performs according to requirements and the VPC shall monitor and manage the VPC System as it relates to Customer Service.

### 2.2.3 Telephone support

2.2.3.1 General

2.2.3.1.1 All telephone support operations shall be handled through the existing single Call Centre located at the Central Operations Centre until such time that a National Call Centre has been triggered by the Employer in accordance with Part C3.2.1, at which point said operations will be transferred to another Contract.



- 2.2.3.1.2 There is currently one Call Centre used to interact with Road Users and the Contractor should refer to Part C 3.3.2, 3.3.3 and 3.3.4 for all operational requirements of the Call Centre for the ORT, TCH and VPC, respectively.
- 2.2.3.1.3 The Contractor shall attend to telephone calls in an effective and efficient way based on best practice in terms of Customer Service principles, in compliance to Target Service Levels as stated in Part C3.5.1 – Contract Performance Measurement.
- 2.2.3.1.4 All calls shall be handled by an Interactive Voice Response (IVR) system.
- 2.2.3.1.5 The Contractor shall utilize an IVR or similar system to monitor call volumes, route calls, and measure performance and automate standard responses amongst other functions required.
- 2.2.3.2 Telephone support shall be provided by the ORT and other Toll Agencies to answer route-specific and related telephone queries that are not part of the defined Frequently Asked Questions (FAQs).
- 2.2.3.2.1 It shall be the responsibility of the TA to resolve non-FAQs on their specific routes as quickly as possible to the satisfaction of the Road User.
- 2.2.3.3 Telephone support provided by the TCH
- 2.2.3.3.1 The TCH shall monitor and ensure accurate call routing from the Call Centre Telephone Number to the TCH, VPC, appropriate TA or other Party.
- 2.2.3.3.2 The TCH shall provide and manage the TCH Call Centre and provide telephone interaction with Customers regarding Customer Accounts and other general queries inclusive of VAS queries, FAQs, registration of Customer Accounts and processing of instructions for payment of Customer Accounts, Violations and fines over the telephone.
- 2.2.3.4 Telephone support provided by VPC
- 2.2.3.4.1 The VPC shall provide and manage the VPC Call Centre and provide telephone interaction with Road Users regarding FAQs and queries relating to Violations.
- 2.2.3.4.2 VPC functionality shall be provided to process instructions from Customers for payment of Violations and fines over the telephone.

## 2.2.4 Websites

- 2.2.4.1 SANRAL website
- 2.2.4.1.1 This website ([www.sanral.co.za](http://www.sanral.co.za)) provides information on the development of the national road network and related information. The website content is maintained and provided by the Employer.

- 2.2.4.1.2 The Contractor shall ensure that the SANRAL website is easily accessible from the TCH website via a hyperlink or other suitable means.
- 2.2.4.2 Toll Agency website(s)
- 2.2.4.2.1 The content of the Toll Agency website(s) is provided and maintained by the Toll Agency.
- 2.2.4.2.2 The Contractor shall ensure that relevant Toll Agency website(s) are accessible from the TCH website via a hyperlink or other suitable means.
- 2.2.4.3 Project website
- 2.2.4.3.1 This is a central website that shall be operated and maintained by the Contractor and advertised to the public via the marketing campaign directed by the Employer. The development and maintenance of the content, management system and E-Commerce Gateway shall be provided, maintained and supported by the Contractor and appropriate System User access to relevant pages or content shall be given by the Contractor to the Toll Agencies, the TCH and VPC to update content as and when required, which will include for the development of a new website as and when instructed by the Employer.
- 2.2.4.3.2 The ORT and other Toll Agencies, TCH and VPC Entities shall ensure that the content relating to their operations is updated regularly, while the TCH shall ensure that the content is integrated and presented in such a way to support the marketing plan.
- 2.2.4.3.3 The ORT and other Toll Agencies shall provide information and manage the website content relating to their specific routes, office hours, Tariffs and Discounts and any other information required by the Employer for publication purposes.
- 2.2.4.3.4 The TCH shall provide information and manage the website content relating to general Customer Service, office hours, Call Centre telephone number, directions to Customer Service Facilities, Frequently Asked Questions (FAQs), Customer Accounts and the account registration processes, Customer controlled access to Customer Account information, payment processing capability and any other information required by the Employer for publication purposes.
- 2.2.4.3.5 The VPC shall provide information and manage the website content relating to Violations for all Opt-in Toll Agencies and give Customer controlled access to their traffic offences, information relating to Dispute procedures, access to a gateway for payment of Violations and any other information required by the Employer for publication purposes.
- 2.2.4.3.6 This website shall be designed in such a way to permit e-mail communication via appropriate forms or other means that can be easily monitored by the TCH and distributed efficiently.
- 2.2.4.3.7 The Contractor shall utilize electronic forms as the default communication method where practical and manage such communication in a structured and effective way.

- 2.2.4.3.8 The Contractor shall utilize SMS functionality, with the user's consent. SMS communication may be used to verify a user's details during the Customer Account set up process or to communicate urgent information to the Customer, such as low Customer Account balances, faulty Tags, Customer Account blocked, Violations that occurred, etc.
- 2.2.4.3.9 The use of Customer data for purposes other than the management of Customer Accounts shall be permissible only to the extent allowed in terms of the Customer Agreement. The Contractor shall ensure that Customer data are not disclosed to any third Party outside this project and that the storage of Customer data is regulated and controlled in terms of The Protection of Personal Information (POPI) Act, No 4 of 2013.

## 2.3 CUSTOMER SERVICES

### 2.3.1 General

- 2.3.1.1 This section describes the need for a cost-effective Customer Service and the specific objectives of the Employer.
- 2.3.1.2 The Contractor shall, when applicable, link multiple Tags and/or multiple VLNs on one Customer Account.
- 2.3.1.3 The Contractor shall implement efficient Customer Account administration and payment processes.
- 2.3.1.4 The Contractor shall provide sufficient technical support on Tag installation, maintenance, repairs and replacements.

### 2.3.2 Requirements from Employer's perspective

- 2.3.2.1 The Employer Requirements defined in the suite of documents in Part C, together with the following objectives shall be targeted by the Contractor during the Operation Service Period:
- 2.3.2.1.1 Maximization of the Income for the Employer;
- 2.3.2.1.2 Minimization of the Costs to be borne by the Employer; and
- 2.3.2.1.3 Provision of Customer Service that exceeds the Customer's expectation. To this extent the Contractor shall employ well trained and competent personnel for Customer Services.

### 2.3.3 Service Delivery

- 2.3.3.1 The Contractor's responsibilities shall be divided but not limited to the following functions:
- 2.3.3.1.1 The key functions to be performed by the ORT include, amongst others, the following responsibilities:
- (a) Interaction with the Customers on a face to face basis at all Customer Service Facilities;
  - (b) Registration/opening of new Customer Accounts and the update of Customer Account details when requested. These and related Customer Services are provided by the ORT on behalf of the TCH;
  - (c) Handling all Road User queries on a face to face basis at all Customer Service Facilities;

- (d) The Contractor shall ensure that the services provided at the Customer Service Facilities are optimised and additional resources can be provided to handle VAS operations with regards to car license renewals, driver's license renewals, Mobility Services, etc;
- (e) Receipt of Customer Account payments and recording thereof at Customer Service Facilities counters;
- (f) Issuing Tags to Customers on behalf of the TCH at the Customer Services Facilities;
- (g) Handling any other Road User queries at Customer Service Facilities;
- (h) Maintaining a list of FAQs and updating and exchanging this list on a regular basis between the ORT (other TAs), the TCH and VPC for training and use by personnel;
- (i) Identify vehicle passages, record Transaction Records accurately along the GFIP road network's Tolling Points and timely make these Transaction Records available to the TCH for further processing;
- (j) The Contractor shall provide financial reports as defined in Part C3.3.2– Open Road Tolling Operations Specifications;
- (k) Support and maintain the ORT BO and interfaces to other Toll Agencies together with the TCH and VPC System; and
- (l) Maintaining a total Disaster Recovery system for the ORT BO and interfaces to other Toll Agencies, the TCH System and VPC System at the Rivonia Satellite Centre.

2.3.3.1.2 The key functions to be performed by the TCH include, amongst others, the following responsibilities:

- (a) Managing the central Customer Call Centre and handling queries received via telephone, website interface and the SANRAL App;
- (b) Registering/opening new Customer Accounts and updating Customer Account details from the central basis as and when required;
- (c) Providing Call Centre Customer Service to Road Users;
- (d) Managing the KARS and providing Customer Service to Key Account Holders and Corporate Account Holders Accounts;
- (e) Maintaining a list of FAQs and updating and exchanging this list on a regular basis between the ORT (and other TA's), the TCH and VPC for training and quick reference by personnel;

- (f) Transferring calls from Violators to the VPC and other unanswered route specific queries to Toll Agencies when required;
- (g) Administration in respect of central Customer Account processing and financial record keeping;
- (h) Maintaining a central Customer Account data warehouse and the assurance of data integrity;
- (i) Operating and maintaining a website for all TCH Customer Services;
- (j) Maintaining good relations with key suppliers, including banks, system operators, Key Account Holders, Corporate Account Holders, Tag Distribution Agents and Top Up Agents;
- (k) Receive and process Transaction Records and create Validation Lists as and when required;
- (l) Sending messages to Customers via e-mail, SMS, SANRAL App or other preferred communication method regarding Customer Account related matters;
- (m) Attempting recovery of outstanding amounts from Customers before transferring same to the VPC; and
- (n) Maintaining a TCH operational Disaster Recovery centre at Dalpark, ready-to-operate and to continuously meet the performance standards specified in Part C3.5.1 – Contract Performance Measurement.

2.3.3.1.3 The key functions to be performed by the VPC include, amongst others, the following responsibilities:

- (a) Processing queries relating to Infringements;
- (b) Monitoring the Violation status of Road Users;
- (c) Interacting/communicating with Road Users as part of the Debt collection process before transferring Violation information into AARTO processes and other legal processes;
- (d) Performing Debt protection and Debt collection for outstanding amounts on Customer Accounts and Violations;
- (e) Encouraging and assisting Road Users to register a Customer Account at the TCH;
- (f) Accepting payment for Violations and related Customer Services;

- (g) Managing and monitoring the entire debt recovery process, including applicable AARTO processes and other legal processes;
- (h) Efficient handling of Infringement and invoice queries;
- (i) Maintaining a list of FAQs, including the update and exchange of this list on a regular basis between the ORT (and other TA's), the TCH and VPC for training and use by personnel purposes; and
- (j) Maintaining a VPC operational Disaster Recovery centre at Dalpark, ready-to-operate and to continuously meet the performance standards specified in Part C3.5.1 – Contract Performance Measurement.

## **2.3.4 Account registration services**

### **2.3.4.1 General**

2.3.4.1.1 The Contractor shall design, develop, implement, maintain and continuously improve guidelines, Business Rules and procedures within the operational framework for the registration of Customer Accounts. The Employer's Requirements for the different stages of processing, management and maintenance of these accounts are included in the following books:

- (a) Part C3.3.2 – Open Road Tolling Operations Specifications,
- (b) Part C3.3.3 – Transaction Clearing House Operations Specifications, and
- (c) Part C3.3.4 – Violations Processing Centre Operations Specifications.

### **2.3.4.2 Discounts**

2.3.4.2.1 All Discounts shall be applied at the ORT Back Office before transmitting the Transaction Record to the TCH for processing.

2.3.4.2.2 The following generic Discounts shall be offered to Road Users:

- (a) Time and traffic density Discount
  - i. The ORT Back Office and associated operations and maintenance shall allow for a discounted Tariff for all Road Users travelling on the Toll Road during low congestion periods (off-peak Tariffs) in order to attract traffic in these periods. The Contractor shall allow for any configurable number of periods to apply this Discount(s). The low congestion periods and applicable Discounts shall be as per the Government Gazette. The responsibility to update Customer communication, forms, etc. under the Contractor's direct control shall remain

the Contractor's responsibility. Communication via a marketing message(s) may be utilised at the Employer's discretion to inform Road Users of price changes.

- ii. Time and traffic density Discounts shall be based on the time stamp and applicable rate on the time of the Transaction Record.
- iii. The ORT Back Office system and associated operations and maintenance shall make provision for variable Tariffs on any calendar day.

(b) Frequent user Discount

- i. Frequent user Discount shall be based on the frequency of usage of the Toll Road.
- ii. Frequent user Discount shall be applicable to all Road Users.
- iii. Frequent user Discount shall be determined and applied per vehicle and not on usage per Customer Account.
- iv. Frequent user Discount shall differ between Vehicle Classes.

(c) Identifier Discount: A discounted rate may for example be granted to Road Users with registered Tags.

(d) Free Transactions for Infrequent Road Users

- i. In order to accommodate Road Users, who travel on the GFIP network once or twice a year, the "x first transactions" of a Vehicle Licence Number will not be charged within a configurable retention period (e.g. during a fiscal year), until the  $x+1$  Transaction Record occurs.
- ii. Subsequently these Transactions Records, as well as the first x (configurable) transactions, shall be charged.

2.3.4.2.3 Discounts for qualifying Road Users:

- (a) In addition to the above, Discount may be granted to qualifying Road Users as per the SANRAL Regulations and published in the Government Gazette from time to time. These Discounts are route specific and does not apply to all national roads. Discounts such as the following shall be granted to qualifying Road Users:
  - i. Free Passage Discount, i.e. 100% Discount shall be applied to qualifying emergency vehicles, traffic Officers, ambulances and medical response/rescue vehicles:



- ii. Public transport Discount shall be applied to qualifying registered Commuter Public Transport vehicles, including minibus taxis and buses. Discount can be allocated to its licensed route or can apply to all routes on the GFIP network.
  - iii. Local Discount shall be applied to qualifying registered NGO's, NPO's or disabled Road Users with adapted vehicles.
- (b) Rebates shall be applied to Class A2 vehicles for conveying Persons with disabilities.
- (c) Exempt Discount shall be applied to the vehicles of the SAPS, SANDF and the Metro Police as per their legislation.

### **2.3.5 Provision of Facilities**

- 2.3.5.1 Facilities that will be provided by the Employer for the purpose of operation and maintenance by the Contractor are described in Part C3.2.1 –Contract: Scope of Works and further detailed under Part C4 – Site Information.

### **2.3.6 Call Centre service**

- 2.3.6.1 There is currently one Call Centre which handles all Customer interactions with regards to Customer Account registrations, general enquiries, queries, complaints, account management and transferring of calls for route specific queries to other Toll Agencies.
- 2.3.6.2 Whilst the Call Centre operations are centralised, the TCH and VPC shall provide for a fully functional Call Centre service to deal effectively with Customers and related queries, while the ORT and other Toll Agencies shall handle all route-based queries as defined above.
- 2.3.6.3 The current IVR system is available in English and any future improvements and/or upgrades shall be implemented only in English, unless otherwise instructed or approved by the Employer for other official languages of the Republic of South Africa, as applicable.
- 2.3.6.4 The Contractor shall ensure that the Call Centre services are optimised and can provide for additional manpower to handle all VAS related operations with regards to payments, general enquires, queries and complaints which will include, amongst others, for the SANRAL App, car license renewals, driver's license renewals, ASOD, Mobility Accounts, etc

### **2.3.7 Communication skills of personnel**

- 2.3.7.1 The Contractor shall ensure appropriate language skills and training standards in relation to personnel. Such skills and standards shall comply with the SAQA Unit Standards. All the Contractor's Personnel shall be initially trained on basic communication etiquette and best practice, with follow-up "refresher" training at regular intervals, at least once a year.

- 2.3.7.2 The Contractor shall ensure compliance to the minimum standards of language skills for personnel dealing with the public as defined in TABLE 2-1: MINIMUM LANGUAGE SKILLS REQUIRED.

**TABLE 2-1: MINIMUM LANGUAGE SKILLS REQUIRED**

Personnel group	Minimum language skills per Person	Minimum language skills per shift
Personnel dealing with Customer Service and interacting with the public	English (Read, Write and Speak)	One fluent speaker in isiZulu, Afrikaans, English and one other official language nominated by the Employer.

- 2.3.7.3 The Contractor shall ensure that all written communications are proofread and corrected by a Person having the language of the communication, as main language, before distribution to any Customer or the public.
- 2.3.7.4 The Contractor shall implement the use of standard templates for written communication as much as practically possible to ensure the correct use of language in normal day-to-day business communication with Customers.

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## **SECTION 3. MOBILIZATION REQUIREMENTS**

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### **3.1 INTRODUCTION**

#### **3.1.1 General**

- 3.1.1.1 This section contains that part of the Employer's Requirements that relate to the mobilization required pursuant to the provisions of the Contract. These mobilization requirements include all mobilization activities necessary to establish the organization and all resources needed, this as part of the Design Build Section 1 delivery, and during the parallel Transitional Period, and prior to the Operations Service Period. Mobilisation shall be executed in accordance with the Contractor's approved programme and Operation and Maintenance Plan.
- 3.1.1.2 The mobilization phase shall commence at the Commencement Date and will occur as part of the Design Build Section 1 delivery and will occur in parallel to the Transitional Period.
- 3.1.1.3 The Contractor shall, as and when required, review and update his comprehensive mobilization programme which shall comply with these requirements and shall be integrated with the relevant interface milestones of his Design-Build programme.
- 3.1.1.4 The most recently approved revision of the Contractor's mobilization programme shall be used to measure progress, performance, delays and other provisions of the Contract.
- 3.1.1.5 The Contractor's mobilization programme shall be part of the Contractor's programme pursuant to the provisions of the Contract and shall adopt the same software program as used for management of the Design-Build programme in order to ensure that synchronisation of the programme is possible.
- 3.1.1.6 The Contractor shall convene and administer fortnightly progress meetings with the Employer's Representative during the mobilization phases, or at such other intervals as may be agreed.

#### **3.1.2 Contractor's mobilization functions**

- 3.1.2.1 The mobilization functions to be performed by the Contractor, during the Design Build Section 1 Period and prior to the commencement of the Operations Service Period, shall include all those necessary to manage, administer, implement and ensure successful, satisfactorily and timely completion of all required activities included in, but not limited to, the functions below.

#### **3.1.3 Mobilization of management team**

- 3.1.3.1 A mobilization of a management team(s), which shall be able to perform the following minimum functions, shall be established:
- 3.1.3.1.1 Resource procurement;
- 3.1.3.1.2 Programme management;

3.1.3.1.3 Quality control;

3.1.3.1.4 Health and Safety implementation;

3.1.3.1.5 Environmental implementation;

3.1.3.1.6 Training; and

3.1.3.1.7 Any others necessitated by and associated with the provisions of the Contract.

### **3.1.4 Document development**

3.1.4.1 The Contractor shall as a minimum perform the following functions and associated tasks pursuant to the Employer's Requirements and provisions of the Contract:

3.1.4.1.1 Delivery of a complete and comprehensive Documentation Management System design and updating thereof whenever necessary. The Document Management System shall be aligned to the Employer's Document Management System which is currently OpenText Content Server and any future changes will be subject to a Variation under the Contract

3.1.4.1.2 Transfer of all documents to the Employer's document management system;

3.1.4.1.3 Development and implementation of the Contractor's Operations and Maintenance Plan;

3.1.4.1.4 Development and implementation of general Operation Service procedures;

3.1.4.1.5 Development and implementation of specific and comprehensive operations and maintenance procedural manuals, including but not limited to management manuals, supervisory manuals, administration manuals, Customer Service manuals, cash collection manuals, general and electrical and mechanical maintenance and management procedures, systems maintenance and management procedures, electronic toll clearing and billing interface procedures, Health, Safety and Environmental manuals, Tag lifecycle management manuals (Tag fulfilment), etc;

3.1.4.1.6 Development and implementation of appropriate training manuals;

3.1.4.1.7 Design, development and procurement of pre-printed documentation and stationery;

3.1.4.1.8 Development and implementation of quality assurance systems, plans and procedures;

3.1.4.1.9 Development and implementation of marketing plans, procedures and input in relation to the Employer's strategy;

3.1.4.1.10 Participation and input in the preparation of Employer's medium-term management plans; and

3.1.4.1.11 Development and implementation of asset registers and management systems.

### **3.1.5 Recruitment of Human Resources**

3.1.5.1 The Contractor shall perform the following functions and all associated tasks pursuant to the Employer's Requirements and provisions of the Contract:

3.1.5.1.1 Development of conditions of employment;

3.1.5.1.2 Development of letter of appointment for personnel;

3.1.5.1.3 Performance of advertising and recruiting;

3.1.5.1.4 Performance of interviewing; and

3.1.5.1.5 Appointment of management, supervisory, Customer Service, administration, cash control, technical and any other personnel needed to meet the Employer's Requirements.

3.1.5.2 The Contractor shall develop and set the minimum skills and knowledge required per job profile, of which the results shall be verifiable in terms of acceptable and appropriate HR practices by using a skills audit that shall contain the following minimum information:

3.1.5.2.1 List of positions, key skills, knowledge and competencies required per job profile;

3.1.5.2.2 List of candidates for each position in the entire operation;

3.1.5.2.3 Detailed description of a standard scoring mechanism per job profile or position; and

3.1.5.2.4 Reporting of overall competency levels per position and an overall quantified summary to demonstrate readiness for operations.

3.1.5.3 The Contractor shall define and get approval for its proposed skills audit process and procedures from the Employer's Representative prior to auditing of employees' skills for purposes of this Contract.

3.1.5.4 The skills or competency level of personnel may be verified independently in whole or partly by the Employer at any stage during the Contract by giving the Contractor 14 days written Notice thereof.

3.1.5.5 The Contractor shall assess the skills readiness level of personnel involved with Customer Services, at least 30 days before assuming the full responsibilities for Customer Service in accordance with the Ramp-down/Ramp-up Transitioning and then ensure Continuous Improvement the entire Transitional Period and Operations Service Period. The skills readiness level shall be determined using the skill audit referred to in 3.1.5.3.

### **3.1.6 Establishment of subcontracts**

3.1.6.1 The Contractor shall ensure the timely development and set up of all subcontracts, arrangements and interfacing protocols which shall include, amongst other agreements, arrangements and interfacing protocols identified and needed in relation to the Operation Service:

3.1.6.1.1 Commercial agreements with applicable role players for the Transitional Period and Operations Service Period;

3.1.6.1.2 Cash transport and "cash-in-transit insurance" service agreements;

3.1.6.1.3 Utility transfer arrangements (electricity, water, etc); and

3.1.6.1.4 All other agreements or arrangements necessitated by and associated with the Operation Service and those needed in order to comply with the provisions of the Contract.

### **3.1.7 Asset and consumable procurement**

3.1.7.1 The Contractor shall be responsible for the on-time procurement and commissioning of the following Contractor's Equipment and other assets:

3.1.7.1.1 Traffic control equipment (e.g. cones, signs, delineators, safety vests, etc), where necessary;

3.1.7.1.2 Finance and administration equipment (e.g. photocopy, facsimile and coin counting facilities, PC's and peripherals, etc);

3.1.7.1.3 Contractor's Equipment (e.g. waste bins, tools, battery lights, first aid kits, ladders, etc.);

3.1.7.1.4 Employer's office furniture (e.g. desks, chairs, cabinets, kitchen equipment, etc.), including furniture for offices for the use of the Employer and Employer's Representative, where applicable;

3.1.7.1.5 Contractor's vehicles, trailers, etc.;

3.1.7.1.6 Stationery and consumables; and

3.1.7.1.7 All other items needed and to be provided pursuant to the provisions of the Contract.

3.1.7.2 The Contractor shall be responsible for the on-time procurement and commissioning of facilities which amongst others shall include the following:

3.1.7.2.1 Equipment and facilities requiring design, manufacture and commissioning by the Contractor;

3.1.7.2.2 Satellite Centres, Customer Service Kiosks, Mobile Payment Stations, etc, if applicable; and

3.1.7.2.3 Any other equipment and facilities as specified in Part C3.2.1 – Contract: Scope of Works.

### **3.1.8 Training and takeover**

3.1.8.1 The Contractor shall provide training of personnel to the satisfaction of the Employer's Representative on the operational subjects listed below and shall perform all functions necessary in relation to the takeover subjects listed below:

3.1.8.1.1 Public relations training;

3.1.8.1.2 Supervisory training;

3.1.8.1.3 Administration training;

3.1.8.1.4 Cash collection training;

3.1.8.1.5 Customer Services;

3.1.8.1.6 Debt Protection and Debt Collection;

3.1.8.1.7 Systems training: the use and operation and maintenance of hardware and software for the current system as well as training for the new Toll Back Office System, when triggered;

3.1.8.1.8 Third Party liaison/interfaces training;

3.1.8.1.9 Telephone Call Centre systems and operation training;

3.1.8.1.10 Electrical and mechanical system operations and maintenance training;

3.1.8.1.11 General facilities provided by Employer: operational and maintenance training;

3.1.8.1.12 Takeover of the Employer's Facilities such as the Central Operations Centre, The Dalpark Operations Centre, Satellite Centres, Gantries at the Tolling Points and Technical Shelters, Customer Services Kiosks, Mobile Operations Depots and vehicles;

3.1.8.1.13 Takeover of all parts of the Site;

3.1.8.1.14 Takeover of the electrical and mechanical systems; and

3.1.8.1.15 Takeover of all other Employer's Equipment and Facilities contemplated by the provisions of the Contract.



### **3.1.9 Contractor's general liaison functions**

3.1.9.1 The Contractor shall provide and perform the following supporting functions:

3.1.9.1.1 Continuously support the Employer and the Employer's Representative during the implementation of the Project;

3.1.9.1.2 Participation, input, liaison, support and advisory services in relation to the marketing Strategies and plans, including those of the Employer and all other functions necessary to comply with the Employer's Requirements;

3.1.9.1.3 Offer continuous input, liaison, support and advisory services in relation to the enforcement and Violation Debt collection Strategies and plans of the Employer and all other functions necessary to comply with the Employer's Requirements;

3.1.9.1.4 Deliver extensive and effective efforts and implementation actions in order to maximize the ETC Customer Account penetration, especially those related to registered usage accounts and all other functions necessary to comply with the Employer's Requirements;

3.1.9.1.5 Launch effective efforts towards the distribution of Tags and registration of Customer Accounts, Value Added Services and all other functions necessary to comply with the Employer's Requirements;

3.1.9.1.6 Assist the Employer and Employer's Representative during testing, inspection and commissioning of operations and all other mobilization activities needed for a successful project implementation;

3.1.9.1.7 Manage and supervise all the Transitional Subcontractor's activities in accordance with the Contract; and

3.1.9.1.8 Provide suitable and adequate resources towards the issue of Section Commissioning Certificates and timely and successful implementation of Trial Operations, where applicable and possible.

## **3.2 MOBILIZATION PROGRAMME REQUIREMENTS**

### **3.2.1 Documentation development**

- 3.2.1.1 This mobilization programme forms part of the Contractor's programme.
- 3.2.1.2 The mobilization programme of the Contractor shall indicate the planned durations, start dates and end dates of all the Contractor's mobilization activities.
- 3.2.1.3 The mobilization programme shall indicate all Contractual related documentation submission milestones and activities pursuant to the Conditions of Contract (such as Letter of Award, Dispute Adjudication Agreement, guarantees and securities, insurance, signing of the Contract Agreement, supporting evidence submissions and the like).
- 3.2.1.4 All document submissions to be reviewed, commented on or approved by the Employer's Representative as indicated in the Contract Data shall be detailed in the mobilization programme.
- 3.2.1.5 The Contractor shall allow 21 days for review of each document submission that is subject to approval.
- 3.2.1.6 The final documentation submissions after review shall also be indicated in the programme.

### **3.2.2 Recruitment of human resources (HR)**

- 3.2.2.1 The mobilization programme shall indicate the planned durations, start dates and end dates of all the Contractor's activities associated with the human resource procurement processes.
- 3.2.2.2 The mobilization programme shall allow for time for the Employer to review the job profile and skills requirements of the Contractor's key personnel.
- 3.2.2.3 The mobilization programme shall reflect the duration for verification of skills (Contractor's skills audits) of all human resources during the Transitional Period and prior to commencement of the full Operations Service Periods.

### **3.2.3 Establishment of sub-supply agreements**

- 3.2.3.1 The mobilization programme shall indicate the planned durations, start dates and end dates of all the Contractor's activities relating to the establishment of sub-supply agreements, arrangements and associated interfacing protocols, taking into account the Ramp-down/Ramp-up Transitioning in accordance with Part C3.2.1 – Contract: Scope of Works.
- 3.2.3.2 The mobilization programme shall reflect the planned dates of submission of evidence to the Employer's Representative that all sub-supply service agreements, arrangements and

associated interfacing protocols needed are in place and in conformance with good industry practices.

### **3.2.4 Asset procurement**

- 3.2.4.1 The mobilization programme shall indicate the planned durations, start dates and end dates of all the Contractor's activities relating to procurement of assets.
- 3.2.4.2 The mobilization programme shall state the order dates as well as delivery dates of the Contractor's asset supplies at the Site. In the case of operational Plant (such as Customer Service Kiosks, Mobile Payment Stations and Mobile Policing Vehicles, etc) that requires design, testing, inspection, commissioning and the like, the programme shall also indicate these sub-activities, where applicable.
- 3.2.4.3 The mobilization programme shall reflect the submission date(s) to the Employer's Representative of comprehensive asset registers, Contractor's Equipment and minimum stock levels applicable during the Operation Service Period.

### **3.2.5 Training and takeover**

- 3.2.5.1 The mobilization programme shall indicate the planned durations, start dates and end dates of all the Contractor's activities relating to training and takeover.
- 3.2.5.2 The mobilization programme shall distinguish between off-site and on-site training and include the training needs and requirements of other TAs forming part of the scheme, as and when required.
- 3.2.5.3 The mobilization programme shall distinguish between theoretical, simulation and practicable training activities.
- 3.2.5.4 The mobilization programme shall reflect the Contractor's earliest and latest start dates, for training on each module of the system(s) such as operations and maintenance related training in relation to the Employer's Facilities.
- 3.2.5.5 The mobilization programme shall reflect the availability dates of all training resources, manuals and procedures required prior to the commencement of training.
- 3.2.5.6 The mobilization programme shall state the planned dates of issue and signing of training certificates indicating the satisfactory completion of all training to all personnel.
- 3.2.5.7 The mobilization programme shall indicate proposed dates, which shall be in accordance with the dates stated in the Employer's Requirements, for the takeover of all critical and non-critical facilities to be provided by the Employer.

- 3.2.5.8 The mobilization programme shall specifically indicate all proposed activities pertaining to takeover of all Plant to be procured by the Contractor and Employer's Equipment/facilities.

**3.2.6 Co-operation and other Contractor's functions**

- 3.2.6.1 The mobilization programme shall be construed as part of the Contractor's programme pursuant to the Conditions of Contract.
- 3.2.6.2 The mobilization programme shall follow and be adapted to synchronize with the Contractor's programme for the Design-Build Section 1.
- 3.2.6.3 The mobilization programme shall indicate the dates of at least monthly or as otherwise agreed co-ordination and liaison meetings to be arranged by the Contractor with the Employer's Representative.
- 3.2.6.4 The Contractor shall allow in his mobilization programme for all interfacing activities of other Contractors of the Employer that may be on Site during the Contract Period.
- 3.2.6.5 The Contractor shall make an allowance for time to participate in meetings and related projects activities initiated and co-ordinated by the Employer.

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## **SECTION 4. OPERATIONS DURING THE TRANSITIONAL PERIOD AND THE OPERATIONS SERVICE PERIOD**

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## **4.1 INTRODUCTION**

### **4.1.1 General**

- 4.1.1.1 The Operation Service to be performed by the Contractor shall include operations and maintenance services during the relevant Design-Build Sections pursuant to the Contract.
- 4.1.1.2 That part of the Operation Service to be performed by the Contractor consists of mobilization services pursuant to section 3 herein, the performance of Trial Operations, where possible, associated with the Design-Build Sections and all services associated with the Transitional Period and the Operations Service Period, all-inclusive of related services as detailed in the Contractor's plans, procedures and programmes.
- 4.1.1.3 Between the commissioning and completion of Design-Build Sections, the Contractor shall perform all operations and maintenance services necessary to ensure the maximization of Customer Account registration and shall effectively perform all associated services to achieve this objective. The Contractor shall perform all associated services that are contemplated by and could be derived as pursuant to the relevant provisions of Part C3.2.1 - Scope of Works, consequent plans, procedures and programmes in relation thereto.
- 4.1.1.4 That part of the Operation Service to be performed by the Contractor post Commencement Date shall include all operation and maintenance services in relation to the Works, the Contractor's Equipment, Employer's Equipment and facilities provided by the Employer pursuant to the Contract. These are the ongoing operations and maintenance services associated with the Operation Service Period and include the services during the Transitional Period and hand back phases pursuant to section 5 herein.
- 4.1.1.5 The entire Operation Service shall be performed by the Contractor in accordance with the Operation Management Requirements of the Contract. The Operation Management Requirements shall include all operation and maintenance management requirements contemplated by and derived at pursuant to:
- (a) Part C3.2.1 – Contract: Scope of Works,
  - (b) Part C3.3.1 – General Operations Specification,
  - (c) Part C3.3.2 – ORT Operations Specification,
  - (d) Part C3.3.3 – TCH Operations Specification,
  - (e) Part C3.3.4 – VPC Operations Specification,
  - (f) Part C3.5.4 – VAS Operations, and
  - (g) Any other parts of the Employer's Requirements

- 4.1.1.6 The entire Operation Service shall be performed in accordance with the Contractor's latest approved revisions of his Operations and Maintenance Plan pursuant to clause 4.2 hereunder.
- 4.1.1.7 The entire Operation Service shall be performed in accordance with the Contractor's latest accepted revisions of his operations & maintenance manuals. The Contractor's operation and maintenance manuals shall be developed and focused towards personnel positions and 'tasks to be performed' & 'procedures to be followed' per personnel position in order to allow the Contractor to measure personnel performance and to permit training per personnel position. It shall further be comprehensive and of sufficient quality, detail and level of completeness to permit any new personnel member to perform his work competently and efficiently by reading and applying the procedures contained in a manual. Each manual shall further contain all subjects necessary to safeguard the Contractor's compliance to the Employer's Requirements.
- 4.1.1.8 The entire Operation Service shall be performed in accordance with the Contractor's latest approved revisions of those parts of his Design-Build programme that relate to the mobilization phases, the Transitional Period, the Trial Operations phases, the Operations Service Period and the hand back phases pursuant to the Contract. These Operation Service programmes shall be developed, reviewed and adhered to by the Contractor and shall be subject to the Employer's Representative's approval and progress monitoring.
- 4.1.1.9 The Contractor shall continuously seek, identify, record, implement and monitor improvements to all the Contractor's Documents pertaining to the Operation Service in order to ensure Continuous Improvement of his personnel's competency and the level of service.
- 4.1.1.10 The Contractor agrees that the Employer's Representative may, at his election, use any of the Contractor's Documents associated with the Operation Service to measure and determine the Contractor's performance, progress and compliance in relation thereto for the purpose of applying the provisions of the Contract.

## 4.2 OPERATIONS AND MAINTENANCE PLAN (O&M PLAN)

### 4.2.1 General

- 4.2.1.1 The Contractor's O&M Plan shall be comprehensive and of sufficient quality and detail to enable and permit the Employer's Representative to perform their duties diligently under the Contract.
- 4.2.1.2 The Contractor shall ensure adequate interfacing and alignment of his O&M Plan to his programmes pursuant to clause 4.3 herein.
- 4.2.1.3 The Contractor shall ensure that his O&M Plan and any revisions thereof are submitted timely for review and approval by the Employer's Representative.
- 4.2.1.4 The subjects addressed in the O&M Plan shall be reviewed, improved and/or expanded every 12 months or when such needs have been identified for the purpose of meeting the Employer's set objectives in the Contract.
- 4.2.1.5 The Contractor shall continuously seek, identify, record, implement and monitor improvements to his O&M Plan in order to ensure Continuous Improvement towards meeting the Employer's objective's stated in the Contract.
- 4.2.1.6 The Contractor shall every 3 months or when requested to do so, submit a status report to the Employer's Representative in relation to the aforementioned improvements.
- 4.2.1.7 When the Contractor is reasonably required to expand or review and update any part of his O&M Plan, the Contractor agrees to do so and to implement all such associated activities promptly.

### 4.2.2 Additional Requirements

- 4.2.2.1 The minimum requirements in terms of the content of the Contractor's O&M Plan are:
  - 4.2.2.1.1 The O&M Plan shall address all key subjects as contained in the initial Contractor's Proposal at the Commencement Date;
  - 4.2.2.1.2 The O&M Plan shall contain all activities that will be needed to meet the requirements associated with the Transitional Period.
  - 4.2.2.1.3 The O&M Plan shall be updated to include all improvements identified during the performance of the Operation Service;
  - 4.2.2.1.4 The O&M Plan shall include a specific detailed strategy on how the Contractor shall practically deal with his organizational and resource scaling during the Ramp-down/Ramp-up Transitioning situations after the Commencement Date. This strategy shall be of sufficient



detail to enable an accurate calculation of Cost implications on all levels of the Contractor's organization;

- 4.2.2.1.5 The O&M Plan shall include a specific detailed strategy on how the Contractor shall ensure the maximization of Toll Revenue to the Employer;
- 4.2.2.1.6 The O&M Plan shall include a specific strategy on how the Contractor plans to minimize the number of Violations on the Project;
- 4.2.2.1.7 The O&M Plan shall include a detailed strategy on how the Contractor shall mitigate his risks pursuant to the provisions of Part C1 of the Contract;
- 4.2.2.1.8 The O&M Plan shall include a specific detailed strategy on how the Contractor shall ensure the minimization of Employer's risks, save for Potential Violation losses addressed above, pursuant to the provisions of Part C1 of the Contract;
- 4.2.2.1.9 The O&M Plan shall address the strategy with regards to the Employer taking over parts of the Operation Service which include, amongst others, the Facilities Maintenance and the National Call Centre, as and when triggered in accordance with Part C3.2.1 – Contract: Scope of Works; and
- 4.2.2.1.10 The O&M Plan shall include a specific detailed management plan during the hand back phases of the Contract. The Contractor shall ensure that these plans focus on the successful, timely, smooth and effective transfer and training needs of a succeeding operator, including the transfer of the Contractor's Documents and personnel.

#### **4.2.3 Business continuity plan (BCP)**

- 4.2.3.1 General
  - 4.2.3.1.1 The Contractor shall identify potential risks for partial or complete system and/or operational failure or stoppage. These risks shall be documented in a risk matrix that identifies events with a high probability of causing an unpredicted disruption in operations.
  - 4.2.3.1.2 The risk matrix document shall be presented to the Employer 6 months from the Commencement Date and an updated version at least every 6 months thereafter.
  - 4.2.3.1.3 The Contractor shall develop and implement the business continuity plan 6 months after Commencement Date, consisting of a detailed System Disaster Recovery plan and operational Disaster Recovery plan, of which the key Contractor's Personnel should be familiar with to implement effectively when an unpredicted disruption of operations, or a so-called "disaster" occurs.
  - 4.2.3.1.4 The ORT shall maintain a total Disaster Recovery system for the ORT BO and interfaces to other Toll Agencies; the TCH and VPC Systems at the Rivonia Satellite Centre.

- 4.2.3.1.5 The TCH shall maintain an operational Disaster Recovery centre for the TCH at Dalpark, together with the VPC, which shall maintain an operational Disaster Recovery centre for the VPC, both ready-to-operate when required in accordance with the performance standards specified in Part C3.5.1– Contract Performance Measurement.
- 4.2.3.2 System Disaster Recovery plan
- 4.2.3.2.1 For requirements of the System Disaster Recovery plan, refer to Part C3.4.2 – General Systems Specifications.
- 4.2.3.3 The Operational Disaster Recovery (ODR) plan shall consist at least of the following:
- 4.2.3.3.1 A list of people trained to take charge of a particular situation (life threatening, operational, system failure, etc.);
- 4.2.3.3.2 A plan to provide a safe environment for personnel and the public in case of a fire, robbery or similar life-threatening event that shall include an action plan to attend to medical emergencies quickly;
- 4.2.3.3.3 A register/report on the status of people present at the facility, assets and systems;
- 4.2.3.3.4 An action plan to implement for different scenarios of disruptions that could have a huge impact on the environment, financial and operation performance;
- 4.2.3.3.5 A plan to employ temporary personnel (when required);
- 4.2.3.3.6 A plan to repair, replace or restore damaged infrastructure, equipment, systems and other assets;
- 4.2.3.3.7 An accommodation plan in terms of office space for personnel, equipment and related aspects of the operation;
- 4.2.3.3.8 Any other requirements as specified in Part C3.3.2; Part C3.3.3 and Part C3.3.4 for the business continuity plan and/or operations Disaster Recovery for the ORT, TCH and VPC operations respectively shall be incorporated in the BCP; and
- 4.2.3.3.9 The maximum interruption time limits for a declared disaster for critical areas of operations are defined in TABLE 4-1. These limits shall not waive any of the Employer's rights or payment penalties that will be instituted as a result of deteriorated performance, or remedial mechanisms that form part of the Contract as defined in Part C1 – Conditions of Contract. The Contractor shall have contingency plans in place whereby it can prove to the Employer that the time limits mentioned shall not be exceeded in the event of a disaster occurring.

**TABLE 4-1: TIME LIMITS FOR DISASTER RECOVERY**

Area of operations affected	Maximum Interruption time limit
<b>ORT Operations</b>	
Toll collection (in case of gantry-wide outage)	7 days
ORT Back Office	2 days
TCH-related Processing (transactions, Tag lists, etc.)	1 day
<b>TCH Operations</b>	
Call Centre and Customer Account processing	3 days
Website (includes Customer Account processing)	1 day
Toll Agency – related processing (transaction, Tag lists, etc.)	1 day
TCH – processing of Violations	5 days
<b>VPC Operations</b>	
Call Centre and Violation processing	3 days
Website (includes Violation processing)	1 day
Processing related to external parties (TCH, NaTIS, AARTO, etc.)	2 days

## **4.3 OPERATION SERVICE PROGRAMME**

### **4.3.1 General**

- 4.3.1.1 The Operation Service programme shall include all those programmes necessitated by and associated with the Transitional Period, the mobilization phases, Trial Operations, Operation Service Period, Ramp-down/Ramp-up Transitioning and hand back phases of the Project.
- 4.3.1.2 The programme shall include all subjects and activities in relation to the relevant parts of the Contractor's Proposal. These programmes shall also include all additional key operational activities identified as necessary for successful and timely deliveries pursuant to the Contract.
- 4.3.1.3 The programme shall be comprehensive and of sufficient detail to enable and permit the Employer's Representative to perform effective progress measurement.
- 4.3.1.4 When the Contractor is reasonably required to expand or review, update and implement any part of a programme, the Contractor agrees to do so promptly.
- 4.3.1.5 The programme shall be integrated and updated with his Design-Build Sections activities.

### **4.3.2 Specific requirements in terms of the O&M Programme**

- 4.3.2.1 The Operation Service programme shall comply with the more detailed mobilization programme requirements pursuant to section 3 herein.
- 4.3.2.1.1 The Operation Service programme shall comply with the more detailed hand back programme requirements pursuant to section 5 herein.

## 4.4 ASSET MANAGEMENT

### 4.4.1 Documents, Drawings and Software

#### 4.4.1.1 General

4.4.1.1.1 This section relates to the provision of documents, drawings and software, excluding operations and maintenance reports.

4.4.1.1.2 During the Contract Period, the Contractor shall provide all documents and drawings and any updates in relation thereto pursuant to the Operation Service.

#### 4.4.1.2 Documents, drawings and software provided by the Employer

4.4.1.2.1 The Employer will provide the Contractor with the following documents related to Employer's Equipment and facilities to be provided by the Employer:

- (a) As-built drawings;
- (b) Equipment user instructions; and
- (c) Equipment suppliers' manuals.

#### 4.4.1.3 Documents, drawings and software provided by the Contractor

##### 4.4.1.3.1 Manuals and Software for new and upgraded assets

- (a) The Contractor shall, at least 45 days before installing and commissioning any new or upgraded asset(s), submit to the Employer's Representative all equipment manuals and software in respect of such new asset(s) that shall include a full system recovery pack and system administrator manuals.
- (b) The full system recovery packs shall include all software required to be able to fully re-install and/or re-configure the system and a comprehensive installation manual, which will enable a suitably skilled user to completely install such a system.
- (c) The system administrator's manuals shall enable a suitably skilled system administrator to maintain the system and shall include a:
  - i. Data dictionary;
  - ii. Network configuration;
  - iii. Parameter set-up for the operating system;

- iv. Database, application software and system layout;
- v. Hardware configuration including hardware specifications and layout diagrams;
- vi. Password and user set-up configuration;
- vii. Back-up, archive and restore utility;
- viii. Set of equipment and System User manuals on various levels of use; and
- ix. A set of guidelines and protocols for good housekeeping, general system administration and emergencies in the event of system failure and management of related Incidents.

#### 4.4.1.4 Maintenance of documents, drawings, Software and Plant by Contractor

4.4.1.4.1 The Contractor shall submit new and updated operations and maintenance procedure manuals to the Employer's Representative before the intended implementation period and in accordance with his Operation Service programmes. Only after these documents have been approved by the Employer shall implementation thereof start.

4.4.1.4.2 The Contractor shall keep all documents, drawings and Software in a safe place, in good order and up to date, and in a condition which shall render such documents capable of auditing by the Employer's Representative at any time. The Contractor shall keep at least 1 (one) hard and 1 (one) soft copy of all versions of documents in electronic format on a dedicated Document Management System (DMS).

4.4.1.4.3 The Contractor shall provide 1 (one) copy of any documents and drawings within two calendar days after a request by the Employer's Representative.

4.4.1.4.4 The Contractor shall provide the Employer and Employer's Representative with access to all documents for the purpose of inspection and audit. If during the audit the absence/omission of documents is discovered, the Contractor shall rectify the situation within 14 calendar days of such audit, failing which the Employer may appoint another Party at the Contractor's Cost, to assist the Contractor in rectifying the situation.

4.4.1.4.5 The Contractor shall maintain a register, which may be part of the Document Management System (DMS) of all documents and software in electronic format. The register shall contain at least the following information and shall be updated at regular and appropriate intervals:

(a) For each Document and Drawing:

- i. The Contractor shall provide the numbering system for approval by the Employer's Representative, which shall incorporate at least the items listed below:

1. Main subject of document;

2. Document or Drawing number;
  3. Document title;
  4. Origin of document (Entity Name, Name of Document Owner);
  5. File Name (e.g. Example1.xls; Example2.doc; Example3.ppt);
  6. Status of document (e.g. draft, for review, approved, implemented, outdated, etc.); and
  7. Revision number.
- (b) For each Software package, the following shall be provided by the Contractor to the Employer:
- i. Details of the Software developer (company, tel., website, e-mail addresses, support contacts names and cellular numbers);
  - ii. IT specialist (person responsible for controlling the software package, with contact details);
  - iii. Type of software;
  - iv. Version control number;
  - v. Licences and/or serial number;
  - vi. Validity date of licence (start date, end date);
  - vii. Place of storage (e.g. safe 1 – building a);
  - viii. Source code (where applicable); and
  - ix. A configuration and version control manual.
- (c) For Plant, the following shall be provided by the Contractor to the Employer:
- i. A register with means to identifying individual items as part of Plant;
  - ii. Each asset shall be uniquely numbered to make identification and linking of each asset to this register easy;
  - iii. The Contractor shall ensure that this register contains the asset's date of purchase, asset description, asset number, asset value inclusive of commission or installation Costs, life expectancy and other information required for tax purposes;
  - iv. Ensure that the asset value for each asset corresponds to the payment certificate value for that particular asset.

**4.4.2 Asset Management System (AMS)**

- 4.4.2.1 The current AMS that has been implemented on the project and which will be operated and maintained by the Contractor is the Hardcat asset management. It is however envisaged that when the new Toll System Software is triggered, a new Asset Management System will be put in place.
- 4.4.2.2 During the Contract Period, the Contractor shall maintain and update his asset registers on a monthly basis to reflect any changes in terms of status, movements, modification, upgrades and replacements.
- 4.4.2.3 The Contractor shall make provision for the monthly submission and transfer of the asset registers to the Employer's Asset Management System which is currently SAP.
- 4.4.2.4 The Contractor shall ensure that its asset register values correspond to the amounts paid under the payment certificates for each asset and these amounts shall be inclusive of the purchase price, delivery fees, professional fees, commissioning and installation fees, etc.
- 4.4.2.5 The Contractor's asset management and reporting shall be in accordance with the IFRS requirements.
- 4.4.2.6 The Contractor's asset management policy shall be aligned with the Employer's own asset management policy and shall be updated as and when the Employer furnishes the Contractor with the updated policy.
- 4.4.2.7 The Contractor shall keep a record of maintenance tasks that are "completed", "overdue" and "scheduled" for each asset operated and maintained by him.
- 4.4.2.8 The Contractor shall utilize asset management statistics provided by the AMS to effectively monitor and manage assets operated and maintained by him.
- 4.4.2.9 The Contractor shall ensure that the asset register is transferred into the Employer's Asset Management System every month. The Employer's current management system is SAP and the Contractor shall ensure that the AMS can easily interface with this system.
- 4.4.2.10 For the purpose of the Contract the AMS shall be deemed part of the Contractor's Documents.

**4.4.3 Damage to Employer's and Contractor's Assets**

- 4.4.3.1 In the event of damage to any assets, the assets shall be repaired, rebuilt or replaced as soon as possible, within a time period agreed to by the Employer. The asset(s) shall be in substantially the same condition or better than prior to the event causing the damage.
- 4.4.3.2 The Contractor shall inform the Employer and the Employer's Representative of any damage of assets within 24 hours of the occurrence, failing which the Employer may appoint another Party at the Contractor's Cost, to assist the Contractor in rectifying the situation.



- 4.4.3.3 Even in the event of damage to an asset(s), the Contractor shall ensure that minimum performance standards are met as specified in the Employer's Requirements.

## **4.5 QUALITY ASSURANCE**

### **4.5.1 General**

- 4.5.1.1 The Contractor shall submit the detailed design of his quality assurance system to the Employer's Representative for approval.
- 4.5.1.2 The quality assurance system shall be based on the standards and follow the guidelines of quality management as stated in ISO 9001:2015 (or similar) and ISO 15288:2015 (or similar).
- 4.5.1.3 The quality assurance system shall include, amongst others, internal Policies, processes, procedures and objectives that are needed by the organization to meet performance standards.
- 4.5.1.4 The Contractor shall demonstrate the quality of each part of the system and its functional and operational capability during Trial Operations performed before commencement of that part of the operations.
- 4.5.1.5 For the purposes of the Contract, the quality assurance system shall be part of the Contractor's Documents.
- 4.5.1.6 The Contractor shall ensure that his quality policy:
  - 4.5.1.6.1 Meets all objectives stated in the Contract;
  - 4.5.1.6.2 Includes a commitment to continually improve the effectiveness of the quality management system and overall operations system;
  - 4.5.1.6.3 Provides a framework for establishing and reviewing quality objectives;
  - 4.5.1.6.4 Is communicated and understood within and across the Contractor's organization, including sub-contractors on Site;
  - 4.5.1.6.5 Is reviewed, updated and implemented in order to maintain the ongoing sufficiency and suitability thereof; and
  - 4.5.1.6.6 Is auditable.
- 4.5.1.7 The Contractor shall ensure that audit and any related information is readily available upon request by the Employer, the Employer's Representative, the Employer's external auditors or the Auditor-General of South Africa (AGSA). For more information about AGSA, refer to [www.agsa.co.za](http://www.agsa.co.za). The Contractor shall ensure that its agents (including but not limited to the Contractor's external auditors) comply with any request for information from the Employer, the Employer's Representative and the Employers auditors within 7 days. For the Auditor General's request, the Contractor shall ensure that its agents comply with the request within

3 days from date of such request. If the AGSA request cannot be met, the Contractor shall request an extension of time no more than 5 days from date of request.

## **4.5.2 Trial Operations**

- 4.5.2.1 The Contractor shall prepare a detailed strategy of functional and operational system testing, for the design Build Sections including a systematic procedure with pre-defined outcomes to be followed to prove Operations Readiness, as defined in Part C3.2.1 – Contract: Scope of Works.
- 4.5.2.2 The strategy for Trial Operations shall be appropriately detailed and based on good accepted engineering principles and approved by the Employer at least 30 days before any Trial Operations commence. Where Trial Operations are not possible, the Contractor shall request approval from the Employer and/or demonstrate operational readiness.
- 4.5.2.3 Trial Operations form an integral part of “Tests on Completion of Design–Build” (as defined by FIDIC). This serve to establish:
- 4.5.2.3.1 Whether an acceptable state of operations and system readiness has been achieved in order to permit the commencement of the full suite of operations and maintenance services related to the Operations Service Periods; and
- 4.5.2.3.2 Serve as a useful phase in which to utilise the operational and system trial delivery outputs (particularly at ORT and VPC Back Office levels) to communicate with Road Users as to the status of their (pending or current) Account registration, Tag functioning; amongst other aspects.
- 4.5.2.4 The Operations and Maintenance Plan of the Contractor shall provide a detailed outline of the envisaged Trial Operations planning, including:
- (a) Detailed scope of system Works and operational services to be performed during the Trial Operations;
  - (b) The envisaged modus-operandi;
  - (c) The management and monitoring solution; and the
  - (d) Expected Contractor’s documents to be delivered for these Works and services

- 4.5.2.5 The Employer will accept the Trial Operations as being successfully executed when:

- (a) The relevant part of the Design-Build Works has been approved in terms of the specified testing regime and Skills Audit to be presented by the Contractor for approval by the Employer's Representative; and
- (b) The Contractor and the Employer are satisfied that Operations Readiness has been achieved. To this end, the Contractor shall submit for acceptance by the Employer, a detailed Trial Operation report which outlines, at a minimum, what Trial Operations occurred, how they occurred, when they were executed, at what locations, the outcomes of trials, and what concerns and shortfalls remain, including resolutions.

### **4.5.3 Implementation of Quality Assurance System**

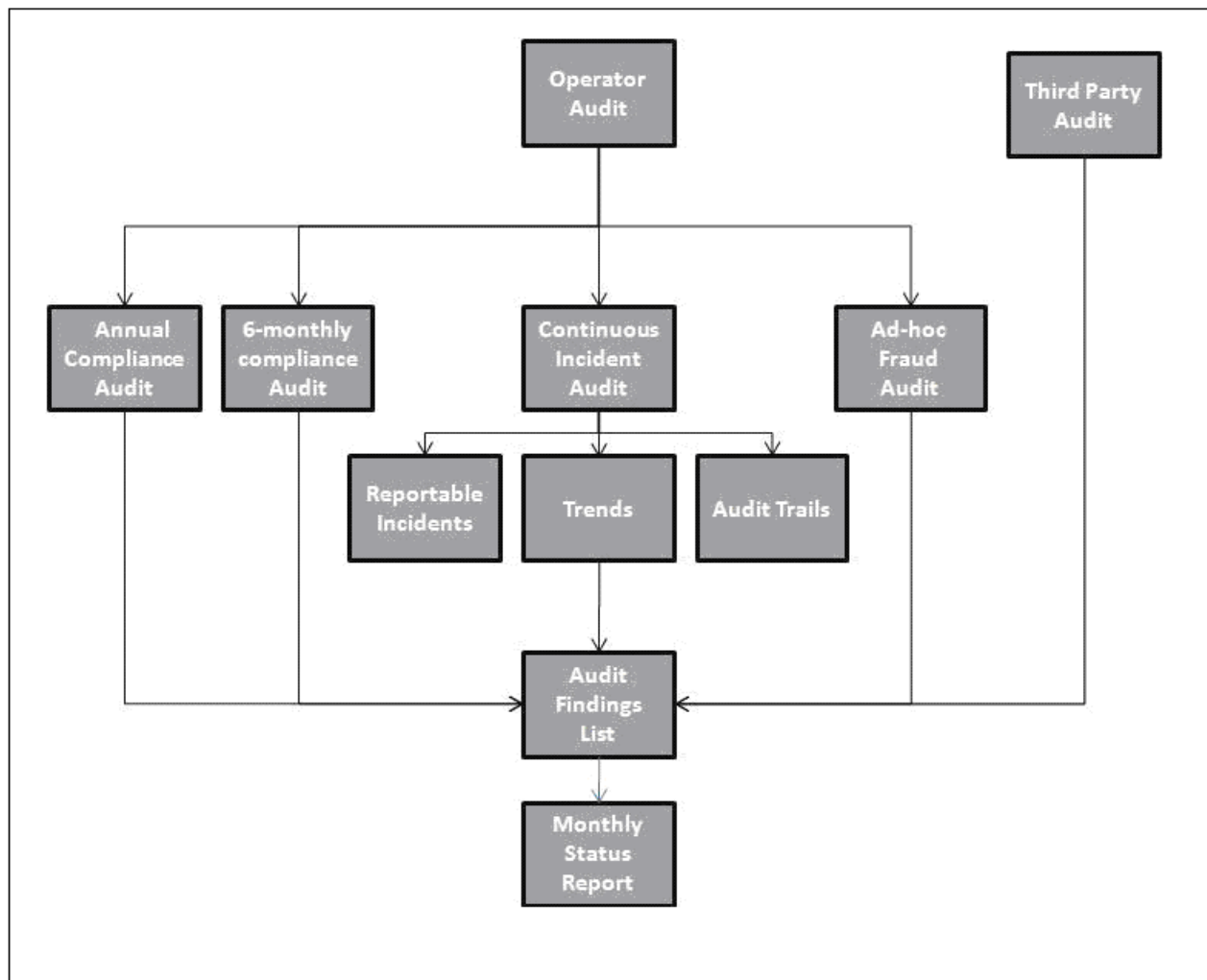
- 4.5.3.1 The quality assurance system shall be fully implemented prior to the Operations Service Period.
- 4.5.3.2 The Contractor shall develop, implement, update and maintain a comprehensive electronic annual management planner to indicate all scheduled and periodic activities to be performed under the Contract.
- 4.5.3.3 The annual management planner shall indicate an updated progress status to be reported at the routine progress meetings.
- 4.5.3.4 The annual management planner shall, for example, include the following activities:
  - 4.5.3.4.1 Periodic renewal of each subcontract and service level agreement;
  - 4.5.3.4.2 Annual review plan of the operations and maintenance procedure manuals;
  - 4.5.3.4.3 Annual review plan of the Asset Management System;
  - 4.5.3.4.4 Periodic review plan of the performance measurement system;
  - 4.5.3.4.5 Periodic asset audits and submission of reports;
  - 4.5.3.4.6 Periodic asset condition and replacement plans and submission of reports;
  - 4.5.3.4.7 Refresher personnel training plans;
  - 4.5.3.4.8 Service Provider and other training plans;
  - 4.5.3.4.9 Routine and periodic Contractual meetings;
  - 4.5.3.4.10 Routine Contractor's (in-house) management meetings;

- 4.5.3.4.11 Safety meetings;
- 4.5.3.4.12 Review plans concerning health, safety and environmental matters;
- 4.5.3.4.13 Major asset improvement/replacement procurement plans;
- 4.5.3.4.14 Socio-economic development plans;
- 4.5.3.4.15 Periodic issue/re-issue of applicable personnel uniforms (that is for all personnel interacting face to face with the public);
- 4.5.3.4.16 Periodic reports; -
- 4.5.3.4.17 Periodic financial reporting as stipulated in the Employer's Requirements; and
- 4.5.3.4.18 Any other periodic or pre-scheduled activities derived from the Contractor's general obligations under the Contract.

#### **4.5.4 Quality Control**

- 4.5.4.1 The Contractor shall, as a minimum, implement and perform appropriate internal audits that shall comply with the standards and procedures of the Institute of Internal Auditors South Africa. Refer to [www.iiasa.org.za](http://www.iiasa.org.za).
- 4.5.4.2 The Contractor shall implement an efficient system to track and control scheduled audit dates and to report on progress and status of the audit activities. The scheduled audits shall include the Contractor's internal audits, audits by independent auditors and audits by the Employer and/or Employer's Representative.
- 4.5.4.3 All the audit findings shall be categorized, reported and followed up according to the level of urgency associated with the finding. The urgency will be determined based on the risk assessment of the finding, e.g. the most critical findings shall include findings where loss in Income or loss of life occurred or where a risk and/or finding needs to be addressed immediately. Less critical findings include findings where non-compliance impacts on proper control and/or where the Contractor needs to address it in the next month. Low criticality findings shall include findings where no defined procedure is the main cause and where the findings need to be addressed before the next audit, etc. The Contractor shall submit a benchmark for categorizing the audit findings for approval by the Employer's Representative before commencement of the first internal audit.
- 4.5.4.4 The Contractor's auditing system shall include an evaluation mechanism whereby his internal audit results are compared against:
  - 4.5.4.4.1 An acceptable industry standard benchmark;

- 4.5.4.4.2 Similar results of previous audits at the same location;
- 4.5.4.4.3 Targeted results in relation to similar businesses; and
- 4.5.4.4.4 Benchmarks set for operations performance and approved by the Employer's Representative before commencement of the first internal audit.
- 4.5.4.5 The Contractor shall submit an Annual Audit Plan for approval by the Employer's Representative. The audit plan shall include the audit scope and the audit programme with required actions and target dates from the preparation for the audit to the final submission of the audit report and the subsequent follow-up on audit findings and recommendations.
- 4.5.4.6 The Contractor shall submit a monthly status update on the progress of the items included in the Annual Audit Plan, including an action plan to address the outstanding actions where target dates were not met and updates on new ad-hoc audits were performed and planned.
- 4.5.4.7 The Contractor shall submit a monthly report on the audit finding statistics per location.
- 4.5.4.8 The Contractor shall submit a monthly status update on the progress of the Contractor's action list for the implementation of recommendations or follow-up actions on audit findings from the previous audits, including an action plan to address the outstanding actions where target dates were not met. As indicated in FIGURE 4-1, the action list of audit findings with actions from all types of audits done by the Contractor and all actions from third Party audits done shall be submitted to the Employer and the Employer's Representative.

**FIGURE 4-1: AUDIT PROCESS**

- 4.5.4.9 The Contractor shall ensure that continuous auditing on reportable Incidents is included in the Annual Audit Plan.
- 4.5.4.10 The Contractor shall submit the Incident scope and audit sampling plan to the Employer for approval, which approval shall not absolve the Contractor of any obligation in this regard.
- 4.5.4.11 Reportable Incidents to be included in the continuous audit shall include all Incidents where the Contractor had to implement an operational procedure.
- 4.5.4.12 The Contractor shall submit a monthly audit report on all audit findings to the Employer's Representative by the 10<sup>th</sup> day of every month.
- 4.5.4.13 Target dates for actions required to resolve the audit findings will be included in the audit report and will be approved by the Employer's Representative.

- 4.5.4.14 The audit scope of the Contractor shall place particular emphasis on reportable Incidents with a financial implication, such as the following:
  - 4.5.4.14.1 Under and over classification discrepancies;
  - 4.5.4.14.2 Exempt and Free Passage Vehicle Transaction Records;
  - 4.5.4.14.3 Violations;
  - 4.5.4.14.4 Non-payments;
  - 4.5.4.14.5 Manual Validation and ANPR verifications;
  - 4.5.4.14.6 Technical Loss Transaction Records;
  - 4.5.4.14.7 Customer Account Transaction Record with a Vehicle Licence Number mismatch, i.e. the Vehicle Licence Number linked to the passage does not match the Vehicle Licence Number registered on the system, for the Identifier used;
  - 4.5.4.14.8 Customer Account Transaction Records with a Vehicle Class mismatch, i.e. the Registered Vehicle Class of the Tag does not agree with the Vehicle Class of the Transaction Record;
  - 4.5.4.14.9 Discounts; and
  - 4.5.4.14.10 System Incidents that indicate the possibility of system tampering or malfunction.
- 4.5.4.15 For maintenance audits, the following shall apply:
  - 4.5.4.15.1 The Contractor shall conduct quarterly audits on all maintenance of all types;
  - 4.5.4.15.2 The maintenance audits shall be done according to an audit plan, which the Contractor shall compile and submit to the Employer's Representative for approval;
  - 4.5.4.15.3 Such approval shall not absolve the Contractor of any obligation under the Contract;
  - 4.5.4.15.4 Such audits shall be separate and distinct from any inspection which the Employer may periodically elect to conduct;
  - 4.5.4.15.5 Instances of non-conformance of the condition of assets, such as may reasonably be expected to lead to imminent malfunction of the said asset or associated assets and result in the operation's being interrupted or compromised, shall be reported to the Employer within twenty four (24) hours of such non-compliance being discovered or suspected; and



- 4.5.4.15.6 The reports of audits so conducted by the Contractor shall be submitted to the Employer not later than 21 days after the conclusion of such audits.
- 4.5.4.16 Asset audits
- 4.5.4.16.1 The Contractor shall conduct annual audits on all types and classifications/categories of assets.
- 4.5.4.16.2 The asset audits shall be done according to an audit plan, which the Contractor shall compile and submit to the Employer's Representative for approval. Such approval shall not absolve the Contractor of its obligations under the Contract.
- 4.5.4.16.3 Such audits shall be separate and distinct from any ad hoc inspection or audit, which the Employer may periodically elect to conduct.
- 4.5.4.16.4 Non-conformance of the condition of assets or missing assets, such as may reasonably be expected to lead to imminent malfunction in the operation's performance, shall be reported to the Employer's Representative within 24 (twenty-four) hours of such non-compliance.
- 4.5.4.16.5 The audits so conducted by the Contractor shall be completed in good time, annually, and reports of such audits shall be submitted to the Employer's Representative not later than 3 (three) weeks after the conclusion of such audits and not later than the financial year end of the Employer.
- 4.5.4.17 Audit of financial and operational trends
- 4.5.4.17.1 The Contractor shall include continuous auditing of trends in the Annual Audit Plan.
- 4.5.4.17.2 The Contractor shall submit the scope and audit sampling plan for the measurement of trends to the Employer's Representative for approval, which approval shall not absolve the Contractor of any obligation under the Contract. Trend audits shall, amongst others, include the following:
- (a) Income per method of payment and settlement option;
  - (b) Revenue banked;
  - (c) Surplus cash;
  - (d) Cash shortages;
  - (e) Under and over classification discrepancies;
  - (f) Exempt and Free Passage Vehicle Transaction Records;
  - (g) Violations;

- (h) Non-payments;
- (i) Rejected bank card Transaction Records;
- (j) System performance;
- (k) Discounts;
- (l) Submission of a monthly audit report (including all audit results) to the Employer's Representative by the 10<sup>th</sup> (tenth) working day of every month; and
- (m) Submission of target dates for actions required to resolve the audit findings together with the aforementioned report.

#### 4.5.4.18 Audit of system audit trails

4.5.4.18.1 The results of the continuous auditing of audit trails shall be included in the Annual Audit Plan.

4.5.4.18.2 The scope of system audit trails will be dependent on the capability of the Toll System. The Contractor shall maintain manual audit trails should the Toll System not provide such audit trails automatically.

4.5.4.18.3 The Contractor shall submit the scope and audit sampling plan to the Employer's Representative for approval.

4.5.4.18.4 Audits of system audit trails shall, include, amongst others:

- (a) Changes to Transaction Records and other base data;
- (b) Changes to Contractor's system inputs;
- (c) Changes to system configuration;
- (d) Changes to Customer Account information;
- (e) The submission of a monthly audit report on all audit findings to the Employer's Representative by the 10<sup>th</sup> (tenth) calendar day of every month; and
- (f) The submission of target dates for actions required to resolve the audit findings, together with the aforementioned report.

#### 4.5.4.19 Potential fraud audits

4.5.4.19.1 The Contractor shall perform audits whenever fraud is suspected by the Contractor or the Employer.

- 4.5.4.19.2 The Contractor shall notify the Employer when fraud has been reported or is suspected within 2 (two) working days since the potential fraud was detected.
- 4.5.4.19.3 The Contractor shall submit an audit plan for the Employer's Representative's approval within 5 (five) working days after notification that fraud has been reported or is suspected.
- 4.5.4.19.4 Audit reports shall be submitted to the Employer's Representative no later than 2 (two) weeks after the completion of the audit.
- 4.5.4.19.5 Target dates for actions required to resolve the audit findings shall be included in the audit report.
- 4.5.4.19.6 In the event of the audit taking longer than one week and the audit not being finished at month end, an interim report on the findings and progress of the audit shall be submitted to the Employer's Representative by the 10<sup>th</sup> (tenth) working day of every month.
- 4.5.4.19.7 Follow-up audits shall be conducted to confirm the progress and status of audit findings and shall be added to the Annual Audit Planner.
- 4.5.4.20 Failure by the Contractor to perform audits.
- 4.5.4.20.1 Should the Contractor at any time fail to perform audits to the satisfaction of the Employer as stated herein, the Employer reserves the right to appoint a 3<sup>rd</sup> Party auditor to perform such audits as it deems necessary, at the expense of the Contractor.

#### **4.5.5 Continuous Improvement**

- 4.5.5.1 The main goal of the Contractor's Continuous Improvement efforts shall be to:
  - 4.5.5.1.1 Improve Customer satisfaction and service delivery;
  - 4.5.5.1.2 Improve the product and service quality;
  - 4.5.5.1.3 Maximize the Employer's Revenue stream and minimize the Violation Rate on the Project; and
  - 4.5.5.1.4 Lower operating and capital Costs over the life of the Project.
- 4.5.5.2 The Contractor shall initiate Continuous Improvement initiatives and investigations whereby business processes, procedures and systems are constantly evaluated to improve overall efficiency, effectiveness and flexibility.
- 4.5.5.3 The Contractor shall identify, reduce and eliminate sub optimal processes by applying value engineering principles.

- 4.5.5.4 The Contractor shall report on all Continuous Improvement activities to the Change Management Committee as defined in Part C3.2.1 – Contract: Scope of Works.
- 4.5.5.5 The Continuous Improvement workgroup for the Project shall review Policies, procedures and Business Rules of each operation in relation to the ORT, TCH and VPC Entities operations and make proposals for improvement to the Change Management Committee for implementation.
- 4.5.5.6 Acceptable operational research methods shall be used for the purpose of Continuous Improvement, in order to:
- 4.5.5.6.1 Measure the effectiveness of critical or bottleneck processes performed;
  - 4.5.5.6.2 Investigate operational performance and data;
  - 4.5.5.6.3 Review business processes and functions;
  - 4.5.5.6.4 Provide and update documents that define critical processes;
  - 4.5.5.6.5 Implement approved process improvement solutions;
  - 4.5.5.6.6 Measure, review and analyse the implemented solution for determining its effect on the system as a whole; and
  - 4.5.5.6.7 Provide, maintain and update quality manuals, quality plans and guidelines that form part of the Quality Assurance System.
- 4.5.5.7 The findings and proposals made by the Continuous Improvement teams for each Entity shall be compiled and reviewed quarterly or more often by the Change Management Committee.
- 4.5.5.7.1 All personnel shall be trained in Continuous Improvement methods and philosophies in order to create a participating workforce that helps to identify opportunities for improvement over the entire system.
- 4.5.5.8 Measurement
- The Contractor shall establish an overall standardized method to calculate the success of his Continuous Improvement effort, such as Total Cost of Ownership (TCO).
- 4.5.5.9 Management of ideas and suggestions for improvement
- 4.5.5.9.1 The Contractor shall use a structured approach for proactive soliciting, evaluating and taking appropriate actions on ideas and suggestions for improvement received from Road Users, suppliers, the Employer and personnel.

- 4.5.5.9.2 The Contractor shall implement an appropriate reward programme or incentive scheme to encourage all personnel to make suggestions for improvement.

## **4.6 INTERFACES AND AGREEMENTS**

### **4.6.1 General**

- 4.6.1.1 The Contractor shall maintain effective interfaces on all levels of the operations in accordance with properly defined interface protocols that shall form part of the Contractor's operation and maintenance manuals.
- 4.6.1.2 The Contractor shall develop, define, implement, review, improve and maintain all interfaces needed with such third parties in accordance with effective and appropriate Contractor's protocols. Such protocols shall aim to address, amongst others:
  - 4.6.1.2.1 Third Party contact particulars;
  - 4.6.1.2.2 Reporting protocols of third parties;
  - 4.6.1.2.3 Reporting protocols of the Contractor;
  - 4.6.1.2.4 Handling of Exceptional Events;
  - 4.6.1.2.5 Standardized interfacing reporting forms;
  - 4.6.1.2.6 Routine and periodic interfacing procedures;
  - 4.6.1.2.7 Co-ordination mechanisms and frequencies in relation thereto; and
  - 4.6.1.2.8 Any other formalized liaison protocols.

## **4.7 UTILITIES, SERVICES AND LEVIES**

### **4.7.1 General**

4.7.1.1 This section covers the supply of utility services to ensure continuous availability.

### **4.7.2 Electricity**

4.7.2.1 The primary supply of electricity to the facilities provided by the Employer shall be in accordance with the facility designs. Such supplies include:

4.7.2.1.1 The national Eskom reticulation network;

4.7.2.1.2 Municipal reticulation networks;

4.7.2.1.3 Uninterruptible power supplies (backup battery banks), and

4.7.2.1.4 Diesel engine driven sets (for standby power).

4.7.2.2 The Contractor shall anticipate and address interruptions in the supply of electricity to the Site and shall ensure the availability of backup power supply systems for critical functions. The Employer shall provide generators as specified in Part C3.2.1 – Contract: Scope of Works.

4.7.2.3 The Contractor shall perform all arrangements during the Transitional Period to ensure that all utility accounts are transferred to the Contractor's name and are sent to the Contractor's address during the Contract Period and that these accounts are paid in time. Said utility accounts shall be taken over by the Contractor in accordance with the Ramp-down/Ramp-up Transitioning under Part C3.2.1 – Contract: Scope of Works.

4.7.2.4 The Contractor shall be responsible for the Cost and payment of all utility accounts under his name in respect of electricity supply.

4.7.2.5 The Contractor shall at his own Cost supply sufficient diesel fuel as may be necessary for the generation of standby electricity and ensure that the diesel Cost is an insurable item in an event of Incidents such as cable theft, vandalism, etc. For all other Incidents and events outside of the Contractor's control and not insurable, the diesel Costs will be paid for under the relevant Provisional Sums.

4.7.2.6 Electrical supply interruptions of the Central Operations Centre, Dalpark Operations Centre, Satellite Centres, Mobile Payment Stations and Technical Shelters shall be regarded as serious System Failures. Interruptions in relation to the circumstances listed below shall be subject to the Contractor's performance measurement according to Part C3.5.1 – Contract Performance Measurement.

- 4.7.2.6.1 A shortage of diesel fuel for the primary and/or standby generators due to negligence of the Contractor in ensuring delivery of adequate quantities of fuel required for the generation of the electricity needs;
- 4.7.2.6.2 Non-payment or late payment of the invoices from the supplier of electricity or diesel fuel;
- 4.7.2.6.3 A failure of an automatic start-up by the standby generator, after a cut in the primary supply;
- 4.7.2.6.4 A failure of a UPS unit to carry the load during a changeover between primary supply and the standby generator or vice versa, or during a failure of both the primary and standby generator supply; and
- 4.7.2.6.5 Excessive surges measured on the supply side of the UPS.
- 4.7.2.7 The Contractor shall maintain all electricity installations, including the associated Employer's Equipment to ensure the continuous availability of backup power.

#### **4.7.3 Water, Sewerage and other Municipal Levies**

The Contractor shall be responsible for the Cost and payment of all accounts in respect of water, sewerage and other municipal levies.



## **4.8 TRAINING**

### **4.8.1 General**

- 4.8.1.1 The Contractor shall perform all training activities and tasks necessitated by and associated with his training responsibilities as defined in the Employer's Requirements.
- 4.8.1.2 Apart from the training requirements related to BBBEE, the Contractor shall define, develop, implement, review, update and maintain formal training programmes that reflect the current business processes, procedures, practices, systems and Employer's Objectives under the Contract.
- 4.8.1.3 The Contractor shall provide a comprehensive list of formal personnel training courses that shall be submitted to the Employer's Representative for approval.
- 4.8.1.4 As a minimum, the formal training for personnel shall contain, amongst other requirements in the Contract, the following:
  - 4.8.1.4.1 An induction programme;
  - 4.8.1.4.2 Training in the current system as well as the new Toll Back Office System once implemented;
  - 4.8.1.4.3 Health and Safety training;
  - 4.8.1.4.4 Basic telephone etiquette;
  - 4.8.1.4.5 A basic course on the current list of Frequently Asked Questions (FAQs) that may be asked by Road Users; and
  - 4.8.1.4.6 Practical training in CPR and basic emergency health care.
- 4.8.1.5 The Contractor shall provide a formal training programme with supporting training manuals for all levels of users that have access to the system. System Users shall include personnel from the Employer, ORT, TCH and VPC operations and any third Party personnel that may be granted access to the system by the Employer, including personnel at the Toll Agencies.
- 4.8.1.6 The Contractor shall ensure full training for personnel in the ORT, TCH and VPC operating environments in accordance with his plans, procedures and systems.

## **4.9 MARKETING**

### **4.9.1 Marketing Strategy provided by the Employer**

- 4.9.1.1 The marketing process and/or strategy process, which will provide guidance and direction to the Contractor, is as defined and provided under Section B5.6 of Part C3.2.1 – Contract: Scope of Works.
- 4.9.1.2 The Contractor shall perform the activities necessitated by and associated with the Contractor's Proposal.
- 4.9.1.3 The Contractor shall adopt and adhere to the marketing strategy of the Employer.

### **4.9.2 Marketing Functions to be performed by the Contractor**

- 4.9.2.1 The Contractor shall develop an appropriate marketing plan as part of his role to support the marketing strategy as specified by the Employer's appointed marketing agent. Details of these specific requirements are as indicated under Section B5.6 of Part C3.2.1 – Contract: Scope of Works.

### **4.9.3 Media Liaison, Printed Media and Public Relations**

- 4.9.3.1 The Employer shall be responsible to co-ordinate and manage the public relations function for the national road network.
- 4.9.3.2 The Contractor shall liaise with the Employer and shall ensure that any information provided is in accordance with the policy and requirements and guidelines as provided by the Employer.
- 4.9.3.3 The Contractor shall prepare regular press releases for the Employer relating to project progress, operations, Customer satisfaction and testimonials to make public via the media in English and other official languages as may be nominated by the Employer.
- 4.9.3.4 The Contractor shall support the Employer and prepare the contents for interviews with the media as-and-when-required for the Employer, including coverage of any other part of this project in which the media may be interested.

### **4.9.4 Measurement of Public Opinion by Employer**

- 4.9.4.1 The Employer may assess and measure public opinion on an annual basis to gather information and monitor trends on the following:
  - 4.9.4.1.1 Road User awareness of the ETC system, website usage, SANRAL App usage and related aspects (including awareness of applicable law and penalties);

- 4.9.4.1.2 Suggestions from the public for improvement of the system; and
- 4.9.4.2 The above information may be made available by the Employer to the Contractor to improve Strategies, systems, processes and any other aspect that needs attention.

## **4.10 MANAGEMENT OF USER ACCOUNTS**

### **4.10.1 Description of User Types**

There are two defined types, namely Customers (registered Road Users, including Key Account Holders and Corporate Account Holders) and unregistered Road Users, which are described below.

#### **4.10.1.1 Customers**

4.10.1.1.1 Customers are defined as individuals or companies that applied and registered their details with the TCH Entity. All Road Users requesting to use the ORT network shall be required to provide basic information, which shall automatically be used to open an account for them. The intention is that this account shall be used for life by that Road User for all ETC-enabled Toll Roads in South Africa.

4.10.1.1.2 The Contractor shall actively promote Road User registration and simplify the sign-up process as much as possible.

4.10.1.1.3 The following types of usage by Customers should be provided for:

- (a) Tag users;
- (b) VLN users;
- (c) Exempt, Free Passage and special discount Road Users,
- (d) Anonymous users; and
- (e) Mobility Account Users.

#### **4.10.1.2 Tag users**

4.10.1.2.1 The Contractor shall actively promote Tag usage to frequent users of the ORT network. These Road Users shall be registered with their details in full and may receive a Discount based on the applicable Discount requirements.

4.10.1.2.2 If for any reason, a Tag fails or is not read successfully during a passage, the Contractor shall use ANPR or MNPR to identify the Vehicle Licence Number (VLN). If this number corresponds with a number registered against an existing Tag user, then the passage will be allocated to that specific account and the applicable charge shall apply. These passages shall trigger a mechanism (alarm) that informs the user of a faulty Tag, which is currently done on a re-active basis.

#### **4.10.1.3 VLN users**

- 4.10.1.3.1 These are Customers who have not installed a Tag. These vehicles shall be identified by means of their Vehicle Licence Number that shall be processed by means of ANPR or MNPR.
- 4.10.1.4 Exempt Vehicle and Free Passage users
- 4.10.1.4.1 The Contractor shall accept applications for all Exempt Vehicles as specified in the SAPS/SANDF legislation and where applicable from time to time. Any new additions to the Exempt Vehicles as gazetted in future, during the Contract Period, will also be for the Employer's account.
- 4.10.1.4.2 The current Exempt Vehicles according to the relevant legislation are the South African Police Services (SAPS), the Metro Police and the South African National Defence Force (SANDF).
- 4.10.1.4.3 Institutions that qualify for Free Passages and any other institution (such as qualifying Taxis, Buses, Emergency Response Units, Fire Brigade, Disabled people, etc.) shall be published in the Government Gazette. These discounts are project specific and institutions shall apply at the route's Toll Agency to be registered as a "Free Passage" or a "Prepaid" User with a 100% discount grant, following the approval process defined by the Employer.
- 4.10.1.4.4 The Contractor shall assist with Tag installation for approved Exempt Vehicles and Free Passage vehicles, if requested.
- 4.10.1.4.5 The Contractor shall compile and manage a detailed list of Exempt Vehicles, Free Passage vehicles and special discounted vehicles, applicable to each route and/or gantry.
- 4.10.1.4.6 The Contractor shall record all Exempt Vehicle, Free Passage and special discounted transactions per applicable Vehicle Class, per exemption category and take the risk of accepting false or incorrect applications.
- 4.10.1.4.7 Exempt Vehicles without a Tag shall be identified with ANPR or MNPR or other acceptable means.
- 4.10.1.4.8 The Contractor shall keep separate accounting of all Transaction Records regarding Exempt Vehicles, Free Passages and special Discounts.
- 4.10.1.5 Anonymous users
- 4.10.1.5.1 The need for this type of user emerged from users that need privacy of travel and the "Tag in a bag concept" has been rolled out for these users.
- 4.10.1.6 Unregistered users
- 4.10.1.6.1 Unregistered users are those Road Users using the ORT network without opening an account at the TCH.

- 4.10.1.6.2 All first Transaction Records from identifiable vehicles that cannot be associated with an account shall be considered to be that of an unregistered user and shall be allocated to an unregistered user.
- 4.10.1.6.3 An unregistered user account shall be automatically opened for an identifiable vehicle and all Transaction Records associated with that particular vehicle shall be allocated to that specific user account.
- 4.10.1.6.4 All Transaction Records of unregistered users shall be kept for the legislated Grace Period (currently 30 days) or as set by the Employer, at the TCH. The whole batch of Transaction Records accumulated until then, plus each Transaction Record received after the Grace Period shall be transferred to the VPC for processing as Potential Violations.
- 4.10.1.6.5 Unregistered users may consist, amongst others, of private Vehicle Owners, commercial Vehicle Owners and government owned vehicles. Some of these Vehicle Owners may not have opened an account, have not linked the vehicle in question to an account or may qualify as Exempt Vehicles or Free Passage users but have not followed the set application procedure.
- 4.10.1.6.6 The Contractor shall actively promote unregistered users to provide their details and complete the required account application process, the linking of the vehicle(s) to the correct account and the payment of outstanding toll fines and/or additional administration fees associated with their account(s).

#### **4.10.2 Pay Points**

- 4.10.2.1 The Contractor shall ensure that any Customer and unregistered user with Transaction Records pending at the TCH during the allowed Grace Period, shall be able to make payments via the TCH website with a credit card, via the TCH Call Centre with a credit card, via accepted EFT options, SANRAL App or alternatively at a Customer Services Facility.
- 4.10.2.2 The Contractor shall ensure that users with Transaction Records that were transferred from the TCH to VPC, thus in "Violator status", shall be able to pay outstanding fees via the VPC website with a credit card, via the VPC Call Centre with a credit card, via the SANRAL App, via EFT or direct bank deposit, or alternatively, at a Customer Service Facility with cash or any other accepted payment option.

#### **4.10.3 Payment Schemes and Payment Options**

- 4.10.3.1 The only currency that the Contractor shall accept for this project is South African Rand (ZAR) and any other currency will not be accommodated.
- 4.10.3.2 The Contractor shall offer all Customers automatic payment mechanisms at regular intervals defined in terms of time (e.g. at month-end, or every 2<sup>nd</sup> week) or balance limit (e.g. when lower than R100.00, request automatically Rxxx.00 from bank).

- 4.10.3.3 The Contractor shall allow Customers with pre-payment accounts to pay discretionary amounts via credit cards, other Bank Cards, EFT, SANRAL App or cash at a Customer Services Facility as they may wish to do. Pre-payment account holders may use discretionary means in combination with an automatic payment mechanism.
- 4.10.3.4 The Contractor shall request Violators and unregistered users to arrange for payment or make a payment immediately in order to avoid legal action by the VPC.
- 4.10.3.5 The Contractor shall accept the following Payment Options:
- 4.10.3.5.1 Cash in South African Rand shall be accepted at all the Customer Services Facilities locations for different Vehicle Classes;
- 4.10.3.5.2 Visa and MasterCard branded debit cards issued by a South African bank;
- 4.10.3.5.3 Visa and MasterCard branded credit cards, and
- 4.10.3.5.4 Electronic Funds Transfers via Internet banking interfaces, debit orders and stop orders.
- 4.10.3.6 The Contractor shall not accept cheque payments, or he may allow for this payment option at his own risk.
- 4.10.3.7 The Contractor shall offer Customers a pre-payment or post-payment option with the associated benefits and requirements for opening such account.
- 4.10.3.8 The payment schemes and Payment Options, defined in TABLE 4-2, shall be accepted or initiated at the Customer Services Facilities for Customer Account payment and replenishment ("top-up").

**TABLE 4-2: ACCOUNT TYPE, PAYMENT SCHEME AND PAYMENT OPTIONS**

Account Type	Payment scheme	Payment option
Pre-Paid Account	- Automatic replenishment [on specific day of month or on defined level of balance]	- Visa/Master credit card - Debit order
	- Discretionary payment	- Cash - Debit card - Visa/Master credit card - EFT

Post-Paid Account	- Automatic payment [mandatory requirement]	- Visa/Master credit card; or - Debit order
	- Discretionary payment	- Cash - Debit card - Visa/Master credit card - EFT

- 4.10.3.9 The following Payment Options and payment schemes shall be accepted or initiated for each Account Type by the TCH Call Centre and at the e-commerce payment gateway (website functionality):

**TABLE 4-3: PAYMENT SCHEME AND PAYMENT OPTIONS ACCEPTED BY TCH**

Account Type	Payment scheme	Payment Options
Pre-Paid Accounts	- Automatic replenishment	- Visa/Master credit cards - Debit orders
	- Discretionary payments	- Visa/Master credit cards - Debit card - EFT - Cash
Post-Paid Accounts	- Automatic payment	- Visa/Master credit cards - Debit orders
	- Discretionary payment	- Visa/Master credit cards - Debit card - EFT - Cash

- 4.10.3.10 The following payment options shall be accepted for payment of Violations at Customer Services Facilities and at the e-commerce payment gateway (website functionality):



**TABLE 4-4: PAYMENT SCHEME AND PAYMENT OPTIONS ACCEPTED FOR VIOLATION PAYMENTS**

Violations	Payment Options
For all types of Violations	<ul style="list-style-type: none"><li>- Cash</li><li>- Debit cards</li><li>- Visa/Master credit cards</li><li>- EFT</li></ul>

## 4.11 TAG MANAGEMENT

### 4.11.1 General

- 4.11.1.1 The Contractor shall promote the usage of Tags on vehicles that frequently use the ORT network.
- 4.11.1.2 The Contractor shall manage and take care of the Tags being part of the Employer's Equipment under the Contract until the Tags have been written off and/or disposed of.
- 4.11.1.3 The Contractor shall procure Tags from a nominated sub-Contractor for bulk distribution to Toll Agencies and other Appointed Agents for onward distribution on a national basis.
- 4.11.1.4 The Contractor shall ensure that Tag distribution to Customers takes place in the most efficient way via the Customer Service Centres and the selected third parties that may be appointed by the TCH to increase market penetration.
- 4.11.1.5 The Contractor shall make use of SMMEs for Tag distribution and also allow for the merchandising of the Tags at the selected third Party distributors.
- 4.11.1.6 The Tag status (e.g. in transit, in stock, issued, active, stolen, lost, etc.) shall be centrally managed by the TCH Entity via an electronic/ automated stock control system.
- 4.11.1.7 The Contractor and/or other distributors shall not personalize or brand Tags without the Employer's approval.
- 4.11.1.8 The Contractor shall install signage on Tags according to the Employer's set branding standards.
- 4.11.1.9 The Tags shall remain the property of the Employer after receipt by the TCH until the said Tag(s) have been written off and/or disposed of.
- 4.11.1.10 Specific operational requirements in relation to Tag management and pertaining to the ORT, TCH and VPC operations, are given in the following books respectively:
  - 4.11.1.10.1 Part C3.3.2 – Open Road Tolling Operations Specifications;
  - 4.11.1.10.2 Part C3.3.3 – Transaction Clearing House Operations Specifications; and
  - 4.11.1.10.3 Part C3.3.4 – Violations Processing Centre Operations Specifications.

## 4.12 TRANSACTION RECORD PROCESSING

### 4.12.1 General

- 4.12.1.1 The TCH shall manage and reconcile all Transaction Records processed on Customer Accounts.
- 4.12.1.2 The ORT shall act on behalf of the TCH to provide all Customer Services and collect cash on its behalf.
- 4.12.1.3 All Transaction Records performed shall conform to the specified standards and regulations specified by the TCH.
- 4.12.1.4 All Transaction Record processing shall use secure processes.
- 4.12.1.5 An audit trail shall be provided for all Transaction processing actions.
- 4.12.1.6 Specific operational requirements in relation to Transaction Record processing are given in the following books, respectively for the ORT, TCH and VPC operations:
  - 4.12.1.6.1 Part C3.3.2 – Open Road Tolling Operations Specifications;
  - 4.12.1.6.2 Part C3.3.3 – Transaction Clearing House Operations Specifications; and
  - 4.12.1.6.3 Part C3.3.4 – Violations Processing Centre Operations Specifications

### 4.12.2 Collection of Toll and Vehicle Classes

- 4.12.2.1 The vehicle classification system together with the applicable Tariffs for Vehicle Classes shall be published in the Government Gazette by the Employer from time to time.
- 4.12.2.2 It shall be the responsibility of the Contractor to familiarise itself and apply such vehicle classification system and Tariffs at all times in accordance with legislation.
- 4.12.2.3 The Contractor shall be responsible for recovering the correct toll and Tariff after Discount for all vehicles processed according to the applicable Vehicle Classes without unlawful favour or prejudice to any Person.
- 4.12.2.4 The Contractor shall verify Vehicle Class disputes by viewing the related images and ruling upon the Transaction Record's evidential Vehicle Class.
- 4.12.2.5 In the event that no image is available or no obvious Vehicle Class is determinable, the class recorded in the account details and linked to the registered Vehicle Licence Number shall be used.

- 4.12.2.6 In the event that the Transaction Record cannot be associated with a Vehicle Class, the Vehicle Class shall be derived from the NaTIS registered vehicle make and model.
- 4.12.2.7 All monies received by the Contractor on behalf of the Employer shall be transferred directly and cash deposited directly into the Employer's bank account. The bank charges, with the exception of cash handling and deposition related charges, and all related payment processing and handling Costs pertaining to receipt of Customer payments for toll, administration Costs and fines will be paid through Provisional Sums whereas the Contractor's Costs will be paid through the Tendered percentage mark-up or fee on the Provisional Sums.
- 4.12.2.8 The Contractor may decide to utilise additional accounts for the different operating units, i.e. ORT, TCH and VPC. These accounts shall also be Employer's accounts and the Contractor will have viewing rights on these accounts to enable financial reconciliation.
- 4.12.2.9 The Contractor shall be responsible for the ORT, TCH and VPC reconciliations, including the reconciliation of accounts and the financial reconciliation thereof.

## **4.13 SAFETY AND SECURITY**

### **4.13.1 Security System**

- 4.13.1.1 The Employer shall provide a security system, which shall be operated and maintained by the Contractor, as part of the building and infrastructure.
- 4.13.1.2 The Contractor shall maintain any security equipment installed in an adequate way to ensure reliability and ensure that the life expectancy thereof is not compromised and shall include the performance of first line maintenance and co-operation with appointed specialist maintenance suppliers.
- 4.13.1.3 The Contractor shall train personnel to use and keep the environment secure at all times for their own safety and to protect assets deployed at the Site against potential loss or damage.

### **4.13.2 Access Control**

- 4.13.2.1 The Contractor shall be responsible for maintaining the access control system, including fencing, intercom systems, reading devices for identification, alarm systems and related equipment provided by the Employer.
- 4.13.2.2 The Contractor shall develop access control procedures and provide suitably trained security personnel to patrol 24 hours of the day and ensure a safe environment for personnel, the public and all assets under its control.
- 4.13.2.3 The Contractor shall monitor and ensure that the system records access to all facilities.
- 4.13.2.4 The Contractor shall ensure that the date and time a person(s) and vehicle(s) enters or exits the facilities are captured on a 24-hour basis, or as alternatively proposed, per building or area by the Contractor and approved by the Employer.
- 4.13.2.5 The Contractor shall report the status of faults on all access control systems to the Employer's Representative and ensure that appropriate corrective action is taken promptly.
- 4.13.2.6 Wherever necessary during the Contract Period, the Contractor shall add and monitor additional security equipment it may deem necessary if not provided by the Employer.

## **4.14 FINANCIAL MANAGEMENT**

### **4.14.1 General**

- 4.14.1.1 The Contractor shall ensure that sound financial management practices are implemented to manage all Entities on behalf of the Employer.
- 4.14.1.2 Specific operational requirements in terms of the Contractor's financial management function are given in the following books respectively for the ORT, TCH and VPC Entities and should be read together with Part C3.5.3 – Financial Management:
  - 4.14.1.2.1 Part C3.3.2 – Open Road Tolling Operations Specifications;
  - 4.14.1.2.2 Part C3.3.3 – Transaction Clearing House Operations Specifications; and
  - 4.14.1.2.3 Part C3.3.4 – Violations Processing Centre Operations Specifications.

## **4.15 FACILITIES MAINTENANCE**

### **4.15.1 General**

- 4.15.1.1 The Contractor shall carry out all Facilities Maintenance tasks that are necessitated by and associated with the provisions of the Contract.
- 4.15.1.2 The following maintenance aspects shall be performed on a day to day basis by the Contractor for assets under his control:
  - 4.15.1.2.1 Buildings – the Contractor shall ensure a clean, litter-free, hygienic, safe and tidy condition, internally and externally. Without limitation, the Contractor shall ensure that all doors (hinges, handles and locking mechanisms), windows (hinges, handles and locking mechanisms), toilets, basins, urinals and geysers are maintained in good working condition and that all broken windows shall be replaced promptly. The Contractor shall ensure that all paint work and the condition of lights and other fixtures are in immaculate condition.
  - 4.15.1.2.2 Gardens – the Contractor shall keep all gardens in a neat and aesthetically pleasing condition to project a professional image to the public.
  - 4.15.1.2.3 Parking areas, paving and access roads – The Contractor shall ensure a clean, litter-free, hygienic, safe and tidy condition and free of weeds, pollutants, undesirable vegetation and debris.
  - 4.15.1.2.4 All other maintenance aspects derived from Part C3.2.1 – Contract: Scope of Works shall be the Contractor's responsibility, save for those facility maintenance aspects that the Employer intends to take over as and when triggered.
- 4.15.1.3 All maintenance of assets shall be carried out strictly in accordance with the latest accepted maintenance procedure manuals. These manuals shall be drawn up by the Contractor and submitted for acceptance by the Employer's Representative.
- 4.15.1.4 The Contractor shall regularly monitor and report the status of maintenance of all assets to the Employer's Representative.
- 4.15.1.5 Specific maintenance requirements are given in:
  - 4.15.1.5.1 Part C3.3.2 – Open Road Tolling Operations Specifications.

## **4.16 PERFORMANCE MONITORING**

### **4.16.1 General**

- 4.16.1.1 The Contractor shall conduct routine and periodic Performance Monitoring in order to measure and ensure compliance in terms of the Employer's Requirements. Such appraisals shall be performed in accordance with the Contractor's related procedural manuals and systems.
- 4.16.1.2 The Contractor shall undertake periodic and appropriate performance appraisals on levels of his personnel compliment in order to ensure Continuous Improvement of levels of service. Such appraisals shall be performed in accordance with the Contractor's related procedural manuals and systems.
- 4.16.1.3 The outcomes or results of the Contractor's Performance Monitoring and measurement activities shall be meticulously recorded and shall be subject to inspection and auditing by the Employer's Representative whenever he elects to do so.
- 4.16.1.4 When required in the Contract and/or requested by the Employer's Representative, the Contractor shall submit the performance results and consequent plans for rectification and improvement.
- 4.16.1.5 The Contractor shall demonstrate to the Employer's Representative that he has used the outcomes of his Performance Monitoring and measurements as an input to his initiatives for Continuous Improvement.
- 4.16.1.6 Specific performance requirements for the ORT, TCH and VPC Operators are given in:
  - 4.16.1.6.1 Part C3.3.2 – Open Road Tolling Operations Specifications;
  - 4.16.1.6.2 Part C3.3.3 – Transaction Clearing House Operations Specifications;
  - 4.16.1.6.3 Part C3.3.4 – Violations Processing Centre Operations Specifications; and
  - 4.16.1.6.4 Part C3.5.1. – Performance Measurement.



## 4.17 REPORTING

### 4.17.1 General

- 4.17.1.1 This section details the general requirements regarding the reporting on operations and maintenance.
- 4.17.1.2 All reports shall be available for submission, inspection and auditing.
- 4.17.1.3 Specific requirements for the ORT, TCH and VPC Operations are respectively given in:
- 4.17.1.4 Part C3.3.2 – Open Road Tolling Operations Specifications;
- 4.17.1.5 Part C3.3.3 – Transaction Clearing House Specifications; and
- 4.17.1.6 Part C3.3.4 – Violations Processing Centre Operations Specifications.
- 4.17.1.7 Refer to TABLE 4-5 below for a minimum list of general reports required to measure, amongst others, operational performance.

**TABLE 4-5: REGISTER OF GENERAL REPORTS**

Nr	Report Name	Purpose	Minimum Information	Frequency
<b>CUSTOMER SERVICE REPORTS</b>				
001	Customer relations	To improve the communication process with Road Users and maximize net profit	<ul style="list-style-type: none"> <li>Total quantity and class of unique Road User Transaction Records per type</li> <li>Quantity of new Customers/Road User accounts added, blocked or terminated per type</li> <li>Quantity of Transaction Records processed per service channel</li> <li>Overall and total number of compliments and complaints received per team, department or other grouping</li> </ul>	Weekly
002	Processing effectiveness	To identify inefficiencies, problem areas and solutions	<ul style="list-style-type: none"> <li>Total quantity of queries per type not resolved during first attempt</li> <li>Overall average labour hours spent per Transaction Record type</li> </ul>	Monthly

Nr	Report Name	Purpose	Minimum Information	Frequency
			<ul style="list-style-type: none"> <li>Overall average telephone support per enquiry or call handled (for Call Centres)</li> <li>Overall average time spent per transaction or enquiry handled (for over-the-counter service)</li> </ul>	
<b>PROGRESS REPORTS</b>				
003	O&M Plan	To compile a list of detailed plans and activities	Refer to Part C1 – FIDIC and the Employer Requirement's stated in the Part C3 series of books.	Bi-monthly
004	O&M Programme	To do allocate resources and measure progress	Refer to Part C1 – FIDIC and the Employer Requirement's stated in the Part C3 series of books.	Bi-monthly
<b>ASSET MANAGEMENT REPORTS</b>				
006	Asset register	To keep track of the Employer's and Contractor's assets for financial records and operations	<ul style="list-style-type: none"> <li>List of assets with asset class, their original purchase price inclusive of commissioning and installation Costs, date of purchase, installation date, detail item description and standardised item code, location of asset</li> <li>Value of assets per location</li> <li>Lifespan or useful life for each asset</li> <li>Assets ready for write off</li> <li>Assets ready for disposal</li> </ul>	Monthly
007	Asset Replacement Schedule	To keep track of the Employer's and Contractor's assets, their replacement cycle and to do effective financial and operational planning	<ul style="list-style-type: none"> <li>List of assets with their scheduled replacement date, life expectancy and original purchase price, location of asset</li> <li>Asset scheduled for replacement during next 3 months</li> <li>Value and list of assets replacement over their scheduled expected date</li> </ul>	Quarterly
008	Document Management System	To keep track of document in use and control revision status	<ul style="list-style-type: none"> <li>Total number of documents stored</li> <li>Number of documents stored per type</li> <li>Date of latest updated document, version etc.</li> </ul>	Monthly

Nr	Report Name	Purpose	Minimum Information	Frequency
<b>QUALITY ASSURANCE REPORTS</b>				
009	Annual management planner	To keep track of periodic activities and progress & compliance status	<ul style="list-style-type: none"> <li>Dates of periodic activities</li> <li>Status of completion and progress</li> </ul>	Quarterly
010	Monthly Dashboard	To monitor and keep track of financial and account statistic	<ul style="list-style-type: none"> <li>Unique VLNs on the road per class for both registered and unregistered</li> <li>Registrations with or without Tags for Pre-paid, Post-paid and Free/Exempt Accounts</li> <li>Active accounts per payment type</li> <li>Active accounts by method of verification (tag or VLN)</li> <li>Consolidated Revenue per month for ORT, TCH and VPC</li> <li>GFIP Discounts on ORT as a percentage of ORT Revenue per discount type</li> <li>Age of debt</li> <li>TCH transaction classification</li> <li>Channel for cash flow received for TCH and VPC</li> <li>Number of transactions transferred to VPC</li> </ul>	
011	Annual Audit Plan	To keep track and monitor improvements made as a result of audits	<ul style="list-style-type: none"> <li>Audit reporting on at least the following: Maintenance of assets, the status of assets, financial and operation trends, system audit trails, fraud investigations</li> <li>List of audit findings, date, resolution and implementation/correction date</li> <li>Status report on resolution of findings</li> <li>Total number of findings per area or other grouping</li> <li>Total number of resolutions implemented</li> <li>Number, type and details of serious reportable Incidents</li> </ul>	Quarterly

Nr	Report Name	Purpose	Minimum Information	Frequency
<b>CONTINUOUS IMPROVEMENT REPORTS</b>				
012	Continuous Improvement report	To identify proactively problem areas and monitor overall improvement made	<ul style="list-style-type: none"> <li>List improvement activities identified</li> <li>Total number of improvement activities implemented</li> <li>Calculate the TCO (Total Cost of Ownership), quarterly or use other similar measure and report on its trend</li> <li>Report on findings and recommendations made by the Change Management Committee</li> </ul>	Quarterly
<b>REPORTING ON: UTILITIES, SERVICES AND LEVIES</b>				
013	Utilities, Services and Levies	To monitor the usage rate and Cost of utilities, services and levies	<ul style="list-style-type: none"> <li>Report on usage rates and Cost per location for electricity (kWh); water used (kl), sewerage, refuse removal and any other levies for services used</li> <li>Diesel consumption and Costs per generator</li> <li>Running time per generator per month</li> <li>Rental rates per location (where applicable)</li> </ul>	Monthly
<b>HUMAN RESOURCES &amp; TRAINING REPORTS</b>				
014	Personnel retention and resource levels	To monitor human resource levels	<ul style="list-style-type: none"> <li>Number of personnel employed per department, area or grouping per location (measured as Full Time Equivalents)</li> <li>Number of persons on payroll for project</li> <li>Percentage of total personnel compliment involved with project from or Commencement Date</li> <li>Average personnel turnover rate per department, area or grouping</li> </ul>	Monthly
015	General training and	To monitor training activities and their effect on	<ul style="list-style-type: none"> <li>Personnel completing induction programme</li> </ul>	Monthly

Nr	Report Name	Purpose	Minimum Information	Frequency
	personnel satisfaction	overall performance	<ul style="list-style-type: none"> <li>Number of Persons (personnel) employed for a period of less than 6 months on project</li> <li>Number of Persons (personnel) employed for a period of more than 18 months on project</li> </ul>	
<b>TAG MANAGEMENT</b>				
Refer to Part C3.3.2, C3.3.3 and C3.3.4 for detailed operational requirements.				
<b>SAFETY AND SECURITY</b>				
016	General safety and security on premises	To monitor general safety and security	<ul style="list-style-type: none"> <li>Number of security personnel on duty per shift per location</li> <li>Total number of hours worked by all safety and security personnel per month</li> <li>Total number of Incidents per location per shift, classified according to level of seriousness</li> <li>Overall number of Incidents per 10 000 hours worked by security personnel</li> <li>Total number of access cards issued per secure location</li> <li>Number of new access cards issued, terminated or blocked</li> </ul>	Monthly
<b>FACILITIES MAINTENANCE REPORTS</b>				
017	Facilities Maintenance status	To monitor the General Maintenance of facilities	<ul style="list-style-type: none"> <li>List of faults or maintenance requests reported for buildings, gardens and parking areas that have not been corrected at month end, including expected completion dates and actions.</li> <li>The above list shall include the date the fault or maintenance request was logged, detail description of fault or request, requesting Person's name and contact details.</li> </ul>	Monthly
<b>PERFORMANCE MONITORING REPORTS</b>				
Refer to Part C3.3.2, C3.3.3 and C3.3.4 for detailed operational requirements.				
<b>HAND BACK REPORTS</b>				
018	Hand Back report	To monitor hand back activities and	Status on the following:	Bi-Weekly, starting 12

Nr	Report Name	Purpose	Minimum Information	Frequency
		ensure a smooth transition to the new operator	<ul style="list-style-type: none"> <li>• Training of new personnel per function per area, grouping or location</li> <li>• Transfer of permanent personnel and/or assistance with interview, selection and appointment of new personnel</li> <li>• Hand back of documentation</li> <li>• Transfer of sub-supply or sub-service agreements</li> <li>• Hand back of all assets to the Employer and/or new Contractor</li> <li>• Employer facilities used by the Contractor</li> </ul>	months before issuing of final completion certificate

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## **SECTION 5.      HAND BACK REQUIREMENTS**

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## **5.1 INTRODUCTION**

### **5.1.1 General**

- 5.1.1.1 This section contains a part of the Employer's Requirements for the hand back phase(s) before the issue of a Contract Completion Certificate(s) whether interim or final. During these hand back phases, the Contractor shall perform all hand back activities necessary to de-establish his organization and resources, to undertake all hand back preparations and perform all activities needed prior to the expiry of the Operation Service or any part thereof. These hand back phases run concurrent to the Operation Service Period.
- 5.1.1.2 The hand back phases shall commence 12 months prior to the planned issue of the final Contract Completion Certificate at the end of the Contract Period, unless otherwise agreed between the Employer and the Contractor.
- 5.1.1.3 The initial hand back programme shall be that programme compiled by the Contractor and accepted by the Employer's Representative.
- 5.1.1.4 The Contractor shall on a continuous basis before and during the hand back phases maintain, review and update a hand back programme which shall comply with these requirements and the interface milestones of his Operation Service programme in order to minimize any resultant impact that the hand back processes may pose on the Contractor's operations.
- 5.1.1.5 The latest accepted revision (accepted in writing by the Employer's Representative) of the Contractor's hand back programme shall be used to measure progress, performance, delays and the like and to determine milestone payments (if any) in terms of the provisions of the Contract.
- 5.1.1.6 For the avoidance of doubt, the Contractor's hand back programme shall adopt the same programme software as used for the Operation Service programme such that synchronization of the programs is possible.
- 5.1.1.7 The Contractor shall arrange and administer fortnightly progress meetings with the Employer's Representative during the hand back phase, or at such other intervals as may be agreed.



## **5.2 CONTRACTOR'S HAND BACK FUNCTIONS**

### **5.2.1 General**

- 5.2.1.1 The hand back services to be performed by the Contractor shall include all those necessary to manage, administer, implement and ensure successful, satisfactorily and timely completion in terms of an accepted hand back programme.
- 5.2.1.2 The Contractor shall undertake all hand back activities necessitated by and associated with the functions described below.
- 5.2.1.3 The Contractor shall establish a hand back management team to perform the following tasks:
  - 5.2.1.3.1 Hand back programme management;
  - 5.2.1.3.2 Quality control;
  - 5.2.1.3.3 Health, safety and environmental de-establishment and transfer;
  - 5.2.1.3.4 Training & transfer to Employer and/or Next Contractor;
  - 5.2.1.3.5 Technical transfer; and
  - 5.2.1.3.6 Procurement and transfer of Customer Services, human relations and other items.

### **5.2.2 Hand back of Contractor's Documents**

- 5.2.2.1 The Contractor shall ensure that at least two (2) hard copies and two (2) electronic copies of each of the Contractor's Documents, in its final draft or approved state during the Design-Build Sections and all subsequent documents and revisions thereof during the Operation Service Period shall be handed over to the Employer.
- 5.2.2.2 Such electronic document copies shall be provided in the following formats:
  - 5.2.2.2.1 MS Word, open office format and portable document format (PDF) for text documents;
  - 5.2.2.2.2 MS PowerPoint or open office format for slide presentations;
  - 5.2.2.2.3 Bitmap, JPEG, TIFF, PNG or GIF format for images;
  - 5.2.2.2.4 Multi-media or sound recordings shall be in WAVE or another accepted format; and
  - 5.2.2.2.5 Databases shall be handed over in Employer's approved file formats;

- 5.2.2.2.6 System design documents in Visio; MS PowerPoint or specialist design tool; and
- 5.2.2.2.7 Technical drawings in AutoCAD and/or similar program.
- 5.2.2.3 The hand back of Contractor's Documents shall include the following:
  - 5.2.2.3.1 Documentation control system, listing all latest revisions of all documentation and signed by the Employer;
  - 5.2.2.3.2 Operations and Maintenance Plan;
  - 5.2.2.3.3 General Operation Service procedures and processes;
  - 5.2.2.3.4 Management manuals;
  - 5.2.2.3.5 Supervisory manuals;
  - 5.2.2.3.6 Administration manuals;
  - 5.2.2.3.7 Customer Service manuals;
  - 5.2.2.3.8 Cash collection manuals;
  - 5.2.2.3.9 Maintenance interface protocols;
  - 5.2.2.3.10 General electrical and mechanical maintenance;
  - 5.2.2.3.11 Management procedures;
  - 5.2.2.3.12 Systems maintenance and management procedures;
  - 5.2.2.3.13 Electronic toll clearing & billing interface protocols;
  - 5.2.2.3.14 Pre-printed documentation and stationery designs;
  - 5.2.2.3.15 Health, Safety and Environmental procedures;
  - 5.2.2.3.16 Quality assurance systems, plans and procedures;
  - 5.2.2.3.17 Marketing plans, procedures and input in relation to the Employer's strategy;
  - 5.2.2.3.18 Inputs in relation to the preparation of Employer's medium-term management plans;

5.2.2.3.19 Asset registers and management systems development; and

5.2.2.3.20 Any other manuals, procedures, periodic plans, systems and the like that may become necessary pursuant to the Contract or the Employer's Representative's reasonable requirements.

### **5.2.3 Operating Entity de-establishment**

5.2.3.1 The Contractor shall implement all arrangements in respect of the de-establishment and/or restructuring of agreement(s) pursuant to his business vehicles.

5.2.3.2 The Contractor shall arrange for local clearances and de-registrations, when and where applicable.

5.2.3.3 The Contractor shall implement all things necessary in respect of his head office infrastructure de-establishment and/or restructuring.

5.2.3.4 The Contractor shall perform all things necessary in relation to the de-establishment and transfer of financial systems, bank accounts and any others needed.

### **5.2.4 Human Resources termination and transfer**

5.2.4.1 The Contractor shall transfer his conditions of employment, letters of appointment and audited remuneration particulars concerning all personnel selected by the Employer and/or Next Contractor for transfer and takeover purposes.

5.2.4.2 The Contractor shall render all support needed by the Employer and/or Next Contractor during the selection, interview and transfer of selected personnel to the Employer and/or Next Contractor.

5.2.4.3 The Contractor's Personnel due for takeover selection shall consist of management personnel, supervisory personnel, Customer Service personnel, administrative personnel, cash control personnel, technical personnel, and any other personnel needed for a complete and successful hand back.

### **5.2.5 Subcontracts**

5.2.5.1 The Contractor's hand back service shall include the transfer of agreements and/or the latest protocol arrangements in relation to the following, amongst other aspects:

5.2.5.2 Revenue clearing and processing of payments;

- 5.2.5.3 Commercial agreements and/or latest protocol arrangements in relation to ETC interoperability;
- 5.2.5.4 Transfer of rental agreements for office space used to perform operations and/or provide Customer Services;
- 5.2.5.5 Financial institution/bank (where bank payment mechanisms are introduced) agreements and/or latest protocol arrangements;
- 5.2.5.6 Cash transport and cash-in-transit insurance service agreements where applicable;
- 5.2.5.7 Maintenance service agreements;
- 5.2.5.8 Cleaning and security service agreements;
- 5.2.5.9 Service Contracts/arrangements (electricity, telecommunications, etc);
- 5.2.5.10 Communication services (Internet, diginet, mobile phones, etc.) ; and
- 5.2.5.11 Transfer of all other agreements and/or arrangements needed to enable an effective and smooth continuation of the Operation Service (or any part thereof) by the Employer and /or Next Contractor.

## **5.2.6 Assets Hand Back**

- 5.2.6.1 The Contractor shall undertake all things necessary to hand back the Employer's Facilities. The condition of these assets at hand back shall be in no worse condition as opposed to the condition thereof at the time of takeover from the Employer, fair wear and tear accepted.
- 5.2.6.2 The Contractor's hand back services shall include all tasks in relation to the hand back of all Employer's Equipment, except for the Tags in use but including those in stock and those that should be in stock. The condition of these assets at hand back shall be in no worse condition as opposed to the condition thereof at the time of takeover from the Employer, fair wear and tear accepted.
- 5.2.6.3 The asset hand back shall include the hand back of the Works where applicable and pursuant to the Contract, inclusive of the testing, inspections and certification needed. The condition of these assets at hand back shall be in no worse condition as opposed to the condition thereof at the time of the issue of the Section Commissioning Certificates (save for the outstanding or defective parts that shall have been rectified), fair wear and tear accepted.
- 5.2.6.4 The asset hand back shall include the hand back of all software and computer programmes, including testing- and inspections procedures. The condition of these assets at hand back shall be in no worse condition as opposed to the condition thereof at the time of the issue of the Section Commissioning Certificates (save for the outstanding or defective parts that shall have been rectified).

- 5.2.6.5 The Works to be handed over shall be free of defects and deficiencies that may hamper the performance of the Operation Service by the Employer and/or Next Contractor.
- 5.2.6.6 The Contractor's hand back service shall further include the hand back of all other items needed and to be provided pursuant to the Contract.
- 5.2.6.7 For the purpose of hand back of above assets, the Contractor shall provide comprehensive, appropriate, updated and complete registers and documentation for signing off by the Employer and/or Next Contractor engaged to continue with the Operation Service or any part thereof.
- 5.2.6.8 All assets handed back may be inspected and verified for completion and correctness by an independent Party appointed by the Employer at the Employer's sole election.

## **5.2.7 Training of next Operator**

- 5.2.7.1 The Contractor shall provide the following training and hand back activities, where and when applicable, to the satisfaction of the Employer and/or Next Contractor to ensure a smooth transition:
- 5.2.7.1.1 Training on operating Entity internal procedures;
  - 5.2.7.1.2 Public relations training;
  - 5.2.7.1.3 Supervisory training: operational;
  - 5.2.7.1.4 Administration training: operational;
  - 5.2.7.1.5 Cash collection training: operational;
  - 5.2.7.1.6 Systems training: hardware operation;
  - 5.2.7.1.7 Systems training: software operation;
  - 5.2.7.1.8 Third Party liaison/interfaces training;
  - 5.2.7.1.9 Telephone exchange systems and operations training;
  - 5.2.7.1.10 Electrical and mechanical system operations and maintenance training;

5.2.7.1.11 General facilities provided by Employer: operational and maintenance training;

5.2.7.1.12 Hand back of the Site areas;

5.2.7.1.13 Hand back of the electrical and mechanical systems; and

5.2.7.1.14 Hand back of all other facilities and assets needed pursuant to the Contract.

## **5.2.8 Co-operation and other Contractor's Functions**

5.2.8.1 The Contractor shall deliver extensive and co-operative participation, liaison and support to the Employer and the Employer's Representative during the hand back phase of the Project.

5.2.8.2 The Contractor shall provide extensive and co-operative participation, input, liaison, support and advisory services in relation to the transfer of existing marketing plans.

5.2.8.3 The Contractor shall provide extensive and co-operative participation, input, liaison, support and advisory services in relation to the hand back of existing enforcement and Violation Debt protection and collection Strategies and plans.

5.2.8.4 The Contractor shall provide a Schedule of complete contact details pertaining to all third parties involved with the Project execution.

5.2.8.5 The Contractor shall provide extensive and co-operative participation and support to the Employer, the Next Contractor and Employer's Representative during testing and inspection of the Plant, software, software programs and all other hand back activities needed for a successful asset hand back.

5.2.8.6 The Contractor shall compile and submit comprehensive snag-lists (when required by the Employer's Representative and where necessary).

5.2.8.7 The Contractor shall develop and submit proposals and constructive commentary (when necessary and where requested by the Employer's Representative) during the hand back processes.

5.2.8.8 The Contractor shall ensure satisfactory availability and the provision of appropriate suitable resources towards the issue of interim and final Contract Completion Certificates.

5.2.8.9 In the case of the interim hand back before the end of the Operation Service Period:

5.2.8.10 The Contractor shall deliver all training and other services necessary to ensure a successful and timely hand back and acceptance signing by the Employer and/or Next Contractor.

- 5.2.8.11 The Contractor shall do all things necessary to define, develop and transfer all interface protocols needed between those parts of his remaining Operation Service and those related to the operations taken over and to be performed by the Employer or the Next Contractor.

## **5.2.9 Hand Back Programme**

- 5.2.9.1 The hand back management team

- 5.2.9.1.1 The hand back programme shall indicate the planned durations, start dates and end dates of all the Contractor's activities relating to hand back team establishment. The completion of the establishment of the Contractor's hand back team (organization) shall not take longer than two weeks from the Commencement Date of the hand back phase.

- 5.2.9.2 Hand back of Contractor's Documents

- 5.2.9.2.1 The hand back programme shall indicate the planned durations, start dates and end dates of all the Contractor's activities relating to hand back of documents.

- 5.2.9.2.2 The Contractor's documentation submissions shall be of such a format and quality to ensure compliance to all specified standards. The hand back programme shall include submission activities in accordance with an appropriately structured submission framework and a comprehensive documentation control system pertaining to all Contractors' Documents.

- 5.2.9.3 Transfer of personnel

- 5.2.9.3.1 The hand back programme shall indicate the planned durations, start dates and end dates of all the Contractor's activities relating to the transfer of personnel.

- 5.2.9.3.2 The hand back programme shall reflect a selection and interviewing activity, whereby the Employer and Next Contractor will have sufficient opportunity to interview and select the Contractor's Personnel to be taken over.

- 5.2.9.3.3 All agreements shall stipulate that the Employer or Appointed Agent can take over such agreement as and if required. The standard Contract of employment for employees shall be submitted for approval by the Employer before implementation.

- 5.2.9.4 Transfer of subcontracts

- 5.2.9.4.1 The hand back programme shall indicate the planned durations, start dates and end dates of all the Contractor's activities relating to transfer of sub-supply agreements.

- 5.2.9.4.2 The hand back programme shall reflect the planned dates of submission of an updated master record index and the submission of all existing service agreements or interfacing arrangements therein to the Employer's Representative.

#### 5.2.9.5 Assets hand back

5.2.9.5.1 The hand back programme shall indicate the planned durations, start dates and end dates of all the Contractor's activities relating to hand back of all assets applicable to the hand back.

5.2.9.5.2 The hand back programme shall state the order of testing, inspection and hand back of all Plant, systems, software and all others needed pursuant to the Contract.

#### 5.2.9.6 Training of personnel before complete takeover

5.2.9.6.1 The hand back programme shall indicate the planned durations, start dates and end dates of all the Contractor's activities relating to training before complete takeover.

5.2.9.6.2 The hand back programme shall distinguish between off-site and on-site training.

5.2.9.6.3 The hand back programme shall distinguish between theoretical, simulation and practicable training activities.

5.2.9.6.4 The hand back programme shall state the planned dates of issue and signing of training certificates indicating the satisfactorily completion of all training to the Employer and/or Next Contractor.

#### 5.2.9.7 Co-operation and other Contractor's functions

5.2.9.7.1 The hand back programme shall allow minimum interference with the Operation Service to be performed in parallel.

5.2.9.7.2 The hand back programme shall indicate the dates of bi-monthly, or as otherwise agreed, but at least monthly co-ordination and liaison meetings to be arranged by the Contractor with the Employer's Representative.

5.2.9.7.3 In the event of the Contractor's hand back activities' start and end dates be interrupted by the actual Operation Service to be performed in parallel, the Contractor shall propose and implement alternative working methods in order to ensure successful hand back completion in accordance with a revised and accepted Contractor's hand back programme.

5.2.9.7.4 The hand back procedures and programme shall allow for another system supplier (where applicable) to access the Site when and if systems need to be implemented and taken over during the hand back phases.



### **5.3 HAND BACK OF LICENCES, SOFTWARE AND SYSTEMS**

#### **5.3.1 General**

5.3.1.1 The Contractor shall hand back the following, in a good state before the issuing date(s) of the Completion Certificate(s):

5.3.1.1.1 Operational and Software licences,

5.3.1.1.2 Software;

5.3.1.1.3 Systems; and

5.3.1.1.4 Employer's assets including Plant, Employer's Equipment, Employer's Facilities and others pursuant to the Contract.