

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 C3.3.3 TRANSACTION CLEARING HOUSE
SPECIFICATIONS**

CHIEF EXECUTIVE OFFICER

SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED

48 TAMBOTIE AVENUE

VAL DE GRACE

PRETORIA, 0184

NAME OF TENDERER:

Set sequential number



CONTRACT SANRAL X.002-184-2023/1

FOR THE 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 C3.3.3

TRANSACTION CLEARING

HOUSE SPECIFICATIONS

COMPILED UNDER THE DIRECTION OF THE REGIONAL MANAGER: NORTHERN REGION

SOUTH AFRICAN NATIONAL ROADS AGENCY SOC LIMITED

38 IDA STREET

MENLO PARK

PRETORIA

SOUTH AFRICA

0081

sanralbid@dbsa.org

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:

<u>Volume 1</u>	<u>The FIDIC Conditions of Contract for Design, Build and Operate Projects, First Edition 2008</u>
<u>Volume 2</u>	<u>Not Applicable</u>
<u>Volume 3</u>	<u>Project Document (Parts T1, T2, C1, C2, C3 and C4)</u>
<u>Part T1</u>	<u>Tender Procedures</u>
T1.1	Tender Notice and Invitation to Tender
T1.2	Tender Data
<u>Part T2</u>	<u>Returnable Schedules</u>
T2.1	List of Returnable Schedules
T2.2	Returnable Schedules
<u>Part C1</u>	<u>Agreements and Conditions of Contract</u>
C1.1	SAMPLE FORMS OF AGREEMENT
C1.2	CONDITIONS OF CONTRACT (PRINCIPAL CONTRACT)
C1.2.1	<i>Particular Conditions, Part A: Contract Data (Principal Contract)</i>
C1.2.2	<i>Particular Conditions, Part B: Special Provisions (Principal Contract)</i>
C1.3	CONDITIONS OF CONTRACT (TRANSITIONAL SUBCONTRACT)
C1.3.1	<i>Structure of Transitional Subcontract</i>
C1.3.2	<i>Particular Conditions, Part A: Contract Data (Transitional Subcontract)</i>
C1.3.3	<i>Particular Conditions, Part B: Special Provisions (Transitional Subcontract)</i>
<u>Part C2</u>	<u>Pricing Data</u>
C2.1	PRICING INSTRUCTIONS
C2.1.1	<i>Payment Methodology</i>
C2.1.2	<i>Part A - Contract: Payment Item Descriptions - DB</i>
C2.1.3	<i>Part B - Contract: Payment Item Descriptions - Ops</i>
C2.1.4	<i>Part A - Transitional Subcontract: Payment Item Descriptions - DB</i>
C2.1.5	<i>Part B - Transitional Subcontract: Payment Item Descriptions - Ops</i>
C2.2	PRICING SCHEDULE
C2.2.1	<i>Part A - Contract: Schedule of Payments - DB</i>

C2.2.2	<i>Part B - Contract: Schedule of Payments - Ops</i>
C2.2.3	<i>Part A - Transitional Subcontract: Schedule of Payments - DB</i>
C2.2.4	<i>Part B - Transitional Subcontract: Schedule of Payments - Ops</i>
Part C3	<u>Employer's Requirements</u>
C3.1	GLOSSARY OF TERMS AND CONDITIONS
C3.2	SCOPE OF SERVICES
C3.2.1	<i>Contract: Scope of Works</i>
	<i>Section A - Not applicable</i>
	<i>Section B - Specific Requirements (Project Related)</i>
	<i>Section C - Environmental Management Plan</i>
	<i>Section D - Small Contractor Development, Training and Community Liaison</i>
	<i>Section E - Requirements of the Occupational Health and Safety Act and Regulations</i>
C3.2.2	<i>Transitional Subcontract: Scope of Works Allocation</i>
C3.3	OPERATIONS REQUIREMENTS
C3.3.1	<i>General Operations Specifications</i>
C3.3.2	<i>Open Road Tolling Operations Specifications</i>
C3.3.3	<i>Transaction Clearing House Operations Specifications</i>
C3.3.4	<i>Violations Processing Centre Operations Specifications</i>
C3.4	TECHNICAL REQUIREMENTS
C3.4.1	<i>Standard Specs for Operations and Maintenance: E&M Specifications (2018)</i>
C3.4.2	<i>General System Specifications</i>
C3.4.3	<i>Road-Side System Specifications</i>
C3.4.4	<i>Open Road Tolling Back Office System Specifications</i>
C3.4.5	<i>Transaction Clearing House System Specifications</i>
C3.4.6	<i>Violations Processing Centre System Specifications</i>
C3.4.7	<i>Standard Specifications for Operations and Maintenance: Electronic Toll Collection (ETC) (2018)</i>
C3.4.8	<i>Description of Section 1 Works and Services (Transitional Subcontract)</i>
C3.5	OTHER REQUIREMENTS
C3.5.1	<i>Part A - Contract: Contract Performance Measurement</i>

	<i>Part B - Transitional Subcontract: Subcontract Performance Measurement Allocation</i>
<i>C3.5.2</i>	<i>Project Business Rules</i>
<i>C3.5.3</i>	<i>Financial Management</i>
<i>C3.5.4</i>	<i>VAS Requirements</i>
<u>Part C4</u>	<u>Site Information</u>
C4.1	PROJECT INFORMATION
C4.2	THIRD PARTY AGREEMENTS TYPICAL TERMS
C4.3	CONTRACT: SUB-SUPPLY SERVICES TYPICAL TERMS
C4.4	TRANSITIONAL SUBCONTRACT: SURROUNDING ENVIRONMENT
C4.5	MISCELLANEOUS
C4.6	AGREEMENT TO OCCUPY SANRAL'S PROPERTY
C4.7	DISPUTE ADJUDICATION AGREEMENT

TABLE OF CONTENTS

SECTION 1.	DETAILED OPERATIONAL REQUIREMENTS	1-8
1.1	INTRODUCTION	1-9
1.2	ROLE PLAYERS	1-11
SECTION 2.	OPERATIONAL ENVIRONMENT OVERVIEW	2-12
2.1	INTRODUCTION	2-13
SECTION 3.	MOBILISATION REQUIREMENTS	3-14
3.1	INTRODUCTION	3-15
3.2	TRANSITIONAL PERIOD PROGRAMME REQUIREMENTS	3-16
SECTION 4.	OPERATIONS DURING THE TRANSITIONAL PERIOD.....	4-17
4.1	INTRODUCTION	4-18
4.2	OPERATIONS AND MAINTENANCE PLAN.....	4-23
4.3	OPERATIONS AND MAINTENANCE PROGRAMME.....	4-26
4.4	QUALITY ASSURANCE	4-28
4.5	INTERFACES AND AGREEMENTS	4-29
4.6	UTILITIES, SERVICES AND LEVIES.....	4-44
4.7	TRAINING	4-45
4.8	MARKETING.....	4-47
4.9	MANAGEMENT OF ACCOUNTS.....	4-48
4.10	TAG MANAGEMENT	4-55
4.11	TRANSACTION PROCESSING	4-57
4.12	KEY ACCOUNT HOLDERS	4-62
4.13	CORPORATE USER ACCOUNT HOLDERS	4-68
4.14	CUSTOMER SERVICE.....	4-69

4.15	SAFETY AND SECURITY	4-75
4.16	FRAUD DETECTION AND PREVENTION	4-76
4.17	FINANCIAL MANAGEMENT.....	4-78
4.18	LAW ENFORCEMENT	4-79
4.19	MAINTENANCE	4-80
4.20	PERFORMANCE MONITORING.....	4-81
4.21	REPORTING	4-82
SECTION 5.	HANDBACK REQUIREMENTS	5-87
5.1	INTRODUCTION	5-88
5.2	HAND BACK PROCEDURES	5-89
5.3	HANDBACK TRAINING.....	5-91

CONTENTS OF TABLES

TABLE 4-1: TCH TO TOLL AGENCY INTERFACE	4-32
TABLE 4-2: TCH TO TOLL CUSTOMER INTERFACE	4-34
TABLE 4-3: TCH TO KEY/ CORPORATE USER ACCOUNT HOLDER INTERFACE	4-36
TABLE 4-4: TCH TO CUSTOMER SERVICE CENTRE FACILITIES INTERFACE	4-38
TABLE 4-5: TCH TO NATIS INTERFACE.....	4-39
TABLE 4-6: TCH TO BANKS INTERFACE.....	4-40
TABLE 4-7: TCH TO VPC INTERFACE	4-41
TABLE 4-8: TCH TO THE EMPLOYER INTERFACE	4-42

SECTION 1. DETAILED OPERATIONAL REQUIREMENTS

1.1 INTRODUCTION

- 1.1.1 The purpose of this document is to specify the minimum operational requirements of the Transaction Clearing House (TCH). The TCH will provide a national facility for road users or their authorised representative such as Fleet Banks, to set up and operate (Electronic Toll Collection) ETC accounts and will interface to the Open Road Tolling (ORT) Back Office, Key Account Registration System (KARS), other Toll Agencies and or to VAS (C3.5.4) Service Providers to provide ETC Transaction Record processing facilities for them.
- 1.1.2 The Contractor shall provide a fully operational solution, meeting at least the minimum requirements as detailed in this document and providing such other operations as necessary to meet the overall requirements for a fully functioning Transaction Clearing House.
- 1.1.3 The operational requirements of the ORT project together with a national TCH and Violations Processing Centre (VPC) solution are specified in the following documents:
- 1.1.3.1 Part C3.3.1 General Operations Specification
 - 1.1.3.2 Part C3.3.2 Open Road Tolling Back Office Operations Specification
 - 1.1.3.3 Part C3.3.3 Transaction Clearing House Operations Specification
 - 1.1.3.4 Part C3.3.4 Violation Processing Centre Operations Specification
 - 1.1.3.5 Part C3.5.4 VAS Requirements
- 1.1.4 The Contractor shall note that the requirements within the specifications listed above shall all together form the collective operations specification. However, if for example, there is a discrepancy or inconsistency between the TCH Operations Specification (C3.3.3) and the rest of these documents, then the TCH operational requirements in this specification shall take precedence, i.e. the particular volume regarding the specification takes precedence over the others. The Contractor shall however be obliged to draw the Employer's attention to inconsistencies and omissions, if any, so that these inconsistencies can be clarified.

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

1.2 ROLE PLAYERS

- 1.2.1 Within the overall and broader ORT Operational framework, there are distinct areas of operations, each with its unique accompanying requirements, namely the:
 - 1.2.1.1 Open Road Tolling (ORT) Operations (C3.3.2);
 - 1.2.1.2 Transaction Clearing House (TCH) Operations (C3.3.3);
 - 1.2.1.3 Violations Processing Centre (VPC) Operations (C3.3.4); and
 - 1.2.1.4 VAS Requirements (C3.5.4)
- 1.2.2 Each of the above operational areas plays a specific role with its own functions and responsibilities and with defined interfaces with one another, to enable a comprehensive and successful Open Road Tolling project.
- 1.2.3 The ORT Operations is a project specific initiative aimed at the Gauteng ORT network operations, while the TCH and VPC Operations are national initiatives providing a national service of clearing Electronic Toll Transactions through a Transaction Clearing House (TCH) and a Violation Processing Centre (VPC) to recover unpaid toll fees. This will allow any other Toll Agency to interface to the TCH and make use of its services and possibly those of the VPC. Other Toll Agencies includes the Concessionaires, and Employer managed CTROM projects. The purpose of this document is to describe the TCH Operations in terms of the required functions and responsibilities of the Contractor.
- 1.2.4 In this document, the Contractor, in terms of their role in TCH Operations, is referred to as the Contractor (responsible for TCH Operations).

SECTION 2. OPERATIONAL ENVIRONMENT OVERVIEW

2.1 INTRODUCTION

- 2.1.1 A description of the Operational Environment under which the Contractor shall work is contained in C3.3.1 - General Operations Specification.

SECTION 3. MOBILISATION REQUIREMENTS

3.1 INTRODUCTION

- 3.1.1 The general requirements for Mobilisation are defined in C3.3.1 General Operations Specification and the related ramp-up and ramp-down are defined in C3.2.1 Scope of Works.
- 3.1.2 The Contractor shall note that there is a Transitional Operations Period to permit the Contractor to mobilize its operational organization, including the necessary transfer, recruitment, appointment, training, procurement, take-over, implementation of 3rd party agreements, etc. to be able to commence with the Operation Service as described in Section 3.2.1, the Transitional period program requirements The Contractor shall ensure that sufficient of their mobilisation activities are completed for the Contractor to be able to participate fully in the Transitional Operations period utilising trained personnel and a fully established operational environment.

3.2 TRANSITIONAL PERIOD PROGRAMME REQUIREMENTS

- 3.2.1 The Transitional Operational Period programme for TCH Operations shall reflect the requirements of C3.3.1: General Operations Specification.
- 3.2.2 The TCH Operations Transitional period Programme shall clearly relate to the programme and detailed requirements included in the TCH Operations and Maintenance Plan and the Design and Build programme for relevant aspects of the TCH system.

SECTION 4. OPERATIONS DURING THE TRANSITIONAL PERIOD

4.1 INTRODUCTION

- 4.1.1 The Transitional Operations Period is taken to include the period from the Commencement date to the date of Operations Service Period, further described in C1: Agreement and Conditions of Contract and C3.2.1: Contract Scope of Works
- 4.1.2 The main TCH Operational functions to be carried out by the Contractor during the Transitional Period include the following:
- 4.1.2.1 Update the Operations and Maintenance Plan included in the Tender to take into account the more detailed evaluation of requirements for provision of Call Centre Service and Web Site facilities and other operation requirements,
- 4.1.2.2 Develop operating policies related to the Project Business Rules detailed in C3.5.2 that apply to the TCH as may be required to fully define business relationships;
- 4.1.2.3 Liaise with the Employer's marketing team as required and undertake any marketing activity that they may require;
- 4.1.2.4 Prepare a set of Customer Account 'products' in conjunction with the Employer's marketing team;
- 4.1.2.5 Participate in updates and implementation of the standard Customer Agreements for the different types of Customer Accounts that the TCH will offer;
- 4.1.2.6 Using marketing targets and strategies produced by the Employer's marketing team, define requirements for different Customer Account 'products' and the resources required both from the Contractor, Customer Service Centres and Appointed Agents to 'sell' the 'products' and service Customers;
- 4.1.2.7 Arrange for provision of operational documentation and training to all System Users and others using links to the TCH system;
- 4.1.2.8 Take over and/ or arrange for suitable links to the Employer's Acquiring Bank and procurement and provision of suitable compliant and certified banking system POS terminals to be made available to Customer Service Centre Customer Service Facilities to enable the acceptance of payments initiated with Bank issued debit and credit cards;
- 4.1.2.9 Take over and /or arrange for agreements, suitable links and interfaces with the System Operator to the banking industries 'Account Verification Service' to be able to verify bank account details when a Customer Account is set up or when details associated with the account are changed;
- 4.1.2.10 Take over and /or arrange for suitable interfaces to NaTIS to enable real time checking of vehicle details when a Customer wishes to register an account and as required during operation of Customer Accounts;

- 4.1.2.11 Set up a stock control system for the control, management, distributing, and reporting of Tags, brackets and consumables procured and issued by the TCH and for Tag Readers and software issued to the Customer Service Centres;
- 4.1.2.12 In conjunction with the Employer, maintain the relevant SANRAL ORT related bank accounts to be used by the TCH for receiving all payments made by Customers or others and for TCH Operations;
- 4.1.2.13 Arrange for Tag procurement from nominated sub-contractors and ensure that appropriate numbers of Tags are made available to meet anticipated requirements based on regular and accurate forecasting and approval by the Employer;
- 4.1.2.14 Conduct checking and sample testing of Tags considered necessary before accepting the Tags from the nominated sub-contractor;
- 4.1.2.15 Enter and maintain details of Tags and its status and location on the stock control system;
- 4.1.2.16 Arrange for Tag packaging and production of fitting instructions prior to distribution;
- 4.1.2.17 Ensure sufficient tags are available at all times at Customer Service Centres and Appointed Agents and or Distributors, as required to issue to Customers;
- 4.1.2.18 Maintain and make available terminal software and Tag readers as necessary for the Customer Service Centres, Facilities and Appointed Agents and or Distributors;
- 4.1.2.19 Liaise with Toll Agencies regarding the migration of Legacy Customer Accounts to the TCH or provision of ETC facilities;
- 4.1.2.20 Migrate Legacy Customer Accounts (where/ when applicable) to the TCH according to the plan and programme agreed with the appropriate Toll Agency and included in the Operation and Maintenance Plan;
- 4.1.2.21 Make suitable arrangements for Call Centre provisions to ensure that sufficient system and resource service capacity is available to meet the required performance requirements of but not limited to bulk communications/ campaigns/ promotions etc.;
- 4.1.2.22 Ensure the provision and /or maintenance of the existing good and easy to use Web based service to ensure that the public can obtain general information about ORT, ETC charges and accounts. Road Users should be able to set up Customer Accounts and Customers can view statements and obtain information about Transaction Records, etc;
- 4.1.2.23 Liaise with other Entities, particularly the VPC, Key Account / Corporate User Account and or VAS Service Providers and Toll Agencies and set up appropriate Operations Accounts within the TCH system;

- 4.1.2.24 Liaise with and enter into and /or take over existing service level agreements as agreed with the Employer to cover arrangements with but not limited to other Toll Agencies interfacing to the TCH, Key Account / Corporate User and or VAS Service Providers, NaTIS, banks, Appointed Agents and any other service providers. The Key Account / Corporate User / VAS Service Providers service level agreements may be a tri-party agreement between the Employer, the Contractor and the Key Account Holder / Corporate User / VAS Service Providers ;
- 4.1.2.25 Set up, or take over and agree with the Employer and implement a national facility numbering scheme covering at least Toll Agencies, Tolling Points and individual elements of a Tolling Point, terminals, Tags, Customer Accounts and the like;
- 4.1.2.26 Ensure that arrangements are in place for the distribution of Security Keys and for monitoring breaches in security;
- 4.1.2.27 Ensure arrangements are in place for the continuous receipt of updated Tariff Tables from Toll Agencies, for their combination as appropriate and publishing to other Entities, particularly the VPC and as necessary;
- 4.1.2.28 Ensure that the functionality for compilation and distribution of Validation Lists (Green List, Red List, Grey List and VOSI List) is correct and that full lists are being published for all relevant Entities, including VAS Requirements detailed in C3.5.4 (where / when applicable) and Toll Agencies in an acceptable near real time, timeframe so as not to inconvenience the road user topping up an account prior to using the relevant toll road;
- 4.1.2.29 Ensure that the necessary procedures for Performance Monitoring detailed in C3.5 are in place and functioning correctly and that the KPIs in relation to Customer Account set up are being met;
- 4.1.2.30 Ensure that the necessary reports required for reporting to the Employer are in place.
- 4.1.2.31 Develop the Business Continuity Plan as defined in the Operations and Maintenance Plan for TCH operations at the Disaster Recovery centre in the event that operation at the main operations centre becomes not possible;
- 4.1.2.32 Plan as required for the Transitional and Operations Service Period as defined in C3.4.2 – General System Specifications.
- 4.1.2.33 The main TCH Operational functions to be carried out by the Contractor include the following:
- 4.1.2.34 Monitor operations of Call Centre and Web site and ensure that provisions of personnel and facilities are adjusted to provide the required level of service in the most cost-effective way;
- 4.1.2.35 Continue to provide service to Customer Service Centres and via Web site and Call Centre directly to Road Users, Customers, Key/ Corporate User Account Holders and or VAS Service Providers adjusting level of provision to meet the demand while providing the required level of service;

- 4.1.2.36 Deal with Customer queries and general enquiries via the Web site, email, Call Centre and by postal services. Deal with Key/ Corporate User Account Holder queries and general enquiries via KARS and dedicated Key Account Liaison Officers;
- 4.1.2.37 Deal with Customer, Road User and Key Account, Corporate User Account and or VAS Service Providers queries in relation to possible errors Transaction Records that appear on a statement and/ or Tax Invoice. This will include requests for data received from the VPC as part of Violation processing;
- 4.1.2.38 Ensure payments are made to Customer Accounts where required and remind Customer Account holders when payments are not made;
- 4.1.2.39 Receive payments for Automatically Allocated Accounts during the Grace Period and convert to Customer or Key/ Corporate User Account and or VAS Service Providers Accounts, where appropriate;
- 4.1.2.40 Ensure Tariff Tables are updated and VPC is notified of availability of an updated version as required;
- 4.1.2.41 Maintain a link with NaTIS for verification of vehicle details during Customer Account Set Up and as required during operation;
- 4.1.2.42 Set up / maintain further arrangements where necessary with but not limited to Appointed Agents, Tag Distributors, Retailers, and / or Service Providers, as required by the Employer, for provision of Customer Services to maintain and improve Customer Service in the most cost-effective manner
- 4.1.2.43 Ensure that Transaction Records in Automatically Allocated Accounts are 'sold' to the VPC after the expiry of the Grace Period and ensure that the guaranteed payment is received for such Transaction Records and deal with any Transaction Records that are rejected by the VPC. This may differ in cases where Key/ Corporate User Account and or VAS Service Providers are concerned;
- 4.1.2.44 Where payments into a Customer Account fail to be made, pass Transaction Records and Customer Account details to the VPC after the Grace Period for violation processing and reconcile payments received for each transaction. This may differ in cases where Key/ Corporate User Account and or VAS Service Providers are concerned;
- 4.1.2.45 Investigate claims of payment for Transaction Records by Road Users for contested Violations and potential Violations;
- 4.1.2.46 Advise VPC that a payment has been made where this is found to be the case, and update Customer Account details;
- 4.1.2.47 At agreed intervals as defined in the Project Business Rules (C3.5.2), prepare statements and Tax Invoices for each organisation that the TCH has a business relationship with and issue to that organisation and deal with any queries that arise;

- 4.1.2.48 Make payments to organisations that the TCH has a business relationship with or receive payments from such organisations in accordance with the agreed statements and Tax Invoices;
- 4.1.2.49 Continuously monitor performance of TCH operations and that of any other Entity whose performance affects or is affected by the performance of TCH operations and deal with any performance issues that arise;
- 4.1.2.50 Ensure that the system is maintained as agreed in the Operations and Maintenance Plan ensuring that and continue to provide the necessary levels of performance necessary;
- 4.1.2.51 Monitor system operations for breaches in system communications security and update Security Keys as required to maintain security;
- 4.1.2.52 If operations at the main operations centre becomes impossible, and as instructed by the Employer's Representative, transfer operations to the Disaster Recovery Centre;
- 4.1.2.53 Provide regular and accurate reports to the Employer in the agreed format and timeframe and with the agreed content and deal with any issues raised by the Employer;
- 4.1.2.54 At the appropriate time as determined by the Contract and as required by the Employer, make acceptable/ suitable arrangements for hand back of the TCH operations.

4.2 OPERATIONS AND MAINTENANCE PLAN

- 4.2.1 The Operations and Maintenance Plan for the TCH shall be prepared in accordance with the requirements of the Contract and as generally specified in C3.3.1: General Operations Specification.
- 4.2.2 For the TCH, the following factors shall be considered when preparing / updating the Operations and Maintenance Plan:
- 4.2.3 The need to maintain Customer Accounts. This will require:
- 4.2.3.1 Facilities must be available to interface to the Customer Service Centre facility terminals;
 - 4.2.3.2 Facilities must be available to interface to the Employer's acquiring bank for the implementation of POS terminals for the acceptance of credit and debit cards with suitable arrangements to be in place to market Customer Account 'products' and to accept payments on behalf of the TCH;
 - 4.2.3.3 Facilities must be in place to interface to the systems and services of appointed Agents for the receipt of customer top-up transaction data of payment transactions accepted by Agents for credit to customer accounts at the TCH;
 - 4.2.3.4 Tags with holders and Customer Account 'products' must be available for issue;
 - 4.2.3.5 Central services must be available for registration of accounts and to enable checks to be made through NaTIS and between Customer Accounts;
 - 4.2.3.6 Arrangements must be in place or to take over with the Employer's appointed bank and System Operator to receive payments from Customers;
 - 4.2.3.7 Arrangements must be in place or to take over for payments using mobile banking and for provision of SMS services via a wireless application service provider;
 - 4.2.3.8 Call Centre operation must provide general information on electronic toll collection and to enable Customer Account set up;
 - 4.2.3.9 The Internet facility must be operational with a fully featured Web site including an e-commerce gateway in operation able to provide information and set up accounts and receive payments;
 - 4.2.3.10 Personnel with appropriate training and terminal facilities must be in place to deal with postal and email applications, to monitor performance and to report to the Employer.
- 4.2.4 The need to develop a means of handling Customer Accounts and Transaction Records received related to hire cars and foreign vehicles;

- 4.2.5 The need to adopt a flexible approach that actual take up of Customer Accounts may differ significantly from projections included in the Employer' s marketing strategy and may be necessary to quickly adapt service levels to maintain a high level of Customer Service;
- 4.2.6 The need to be able to handle significantly higher levels of Customer queries at the Call Centre as Road Users and Customers become accustomed to the system, particularly during bulk communications/ campaigns /promotions etc.;
- 4.2.7 The need to ensure high levels of Customer Service and accuracy of application of Transaction Records to Customer Accounts to avoid as much as possible the negative publicity that will inevitably follow errors in billing or poor Customer Service;
- 4.2.8 The need to ensure a smooth migration of Legacy Accounts (where applicable) onto the TCH system whilst providing continuity of operation and no reduction in service levels;
- 4.2.9 The requirements for hand back as detailed in C3.3.1 General Operations Specifications.
- 4.2.10 An update of the Operation and Maintenance Plan shall be developed / submitted to the Employer for approval in an agreed timeframe not later than the end of the Transitional Operations Period. The plan shall consider all comments received on the tendered plan prior to Contract Commencement Date. The main aim of this version will be to enable the Contractor to develop their own detailed plans for operation and estimates of the usage of various aspects of the TCH Operational facilities. This will form a basis for the Contractor to develop their proposed staffing and Call Centre provision. In addition, It will provide an input to the TCH system design and supply as it will enable requirements for facilities to be more accurately determined.
- 4.2.11 The Operation and Maintenance Plan shall include all relevant aspects of Operations and Maintenance ensuring compliance in accordance with the KPIs described in C.3.5.
- 4.2.12 The Plan shall include a Gap Analysis related to the requirements included in this specification and elsewhere if related to TCH Operations. This analysis shall identify any matters that have not been fully covered in order to provide a full and complete TCH Operation service and shall provide a proposal to include such. This analysis shall follow that included with the Tender and it would be expected that any significant gaps will have been identified and included in the Contract.
- 4.2.13 The plan shall include a discussion of each of the KPIs that the Contractor is required to meet with details of how the Contractor plans to ensure that each requirement is compliant, both in terms of actual service provision and how the contractor plans to monitor and report performance to ensure compliance. The Contractor shall advise of any KPIs in addition to those stated by the Employer that may be required by other Entities (particularly Toll Agencies and where applicable, Key/ Corporate User Account Holders / VAS Service Providers) to meet, in order to ensure that their own performance requirements are adhered to. The plan shall include reference to maintenance proposals as necessary to demonstrate that these have been considered.

- 4.2.14 The plan shall include proposals for personnel recruitment and set up and the establishment of agreements with third parties and other Entities to meet the operational requirements. It shall include proposals for staff training and relate to the overall training programme provided by the Contractor.
- 4.2.15 The plan shall include a detailed evaluation of risks (including those associated with the system supply and testing) that may prevent the Operations Management Programme being achieved. This shall particularly relate to the critical path items identified in that programme and any other items that may become critical path items and have a significant impact upon the ability of the Contractor to meet the overall project programme. Where a risk is identified, risk mitigation strategies shall be defined.
- 4.2.16 In developing quantification of service levels as part of their plan, the Contractor shall utilise the levels of provision included in the Employer' s Requirements and shall propose updating as may be necessary based upon their experience on similar projects elsewhere and the targets developed by the Employer' s marketing team.
- 4.2.17 The Operations and Maintenance Plan shall include a section describing the Contractor' s proposed Business Continuity Plan dealing with operations at the Disaster Recovery Centre and considering the transition to operations at that centre and the levels of operation that will be provided.
- 4.2.18 As development of the operational strategy proceeds, the Operation and Maintenance Plan shall be updated and re-submitted for approval. An updated version of the Plan shall be submitted for approval on an annual basis.

4.3 OPERATIONS AND MAINTENANCE PROGRAMME

- 4.3.1 The Operations Management Programme shall be as defined in the Contract and developed by the Contractor in their Operations and Maintenance Plan.
- 4.3.2 The programme shall include a detailed schedule related to all TCH mobilisation and operations and that reflects when each of the requirements of the TCH must be completed. It shall highlight dependencies and lead time and shall identify a critical path. In addition to the Maintenance and Operations Programme sated herein, refer to C3.3.1: General Operations Specifications for detailed requirements on the Operations and Maintenance Programme
- 4.3.3 Asset management
- 4.3.4 The general requirements for Asset Management are included in C3.3.1 - General Operations Specification.
- 4.3.5 There are no specific requirements for Asset Management as such that must be accommodated by the Contractor but shall establish and operate a stock control system to control, manage, monitor and report items of stock relevant to the TCH. These are Tags including the associated consumables and brackets and Customer Service terminal software and any associated Tag reading equipment provided.
- 4.3.6 The Contractor shall operate the stock control system that ensures that each and every Tag supplied by a nominated sub-contractor (or taken over from an existing Toll Agency) can be accounted for and its status, location, usage remaining life expectancy and or current value (adjusted annually) can be tracked and reported. The Contractor shall ensure that at least the following actions are completed:
- 4.3.6.1 On receipt of Tags and holders from the supplier, each Tag Personal Account Number shall be entered and maintained into the stock control system with the storage location identified. The results of any sample testing that is carried out shall be entered onto the System.
- 4.3.6.2 As a batch of Tags is allocated to a Customer Service Centre Facility or other centre for distribution, the Tag Personal Account Numbers allocated shall be entered and maintained on the stock control system;
- 4.3.6.3 As each Tag which is issued to a Customer and associated with an Account, this information shall be entered onto the stock control system and maintained shall be readily available from the TCH system;
- 4.3.6.4 Any further action affecting the status of the Tag or its location shall be entered and maintained onto the stock control system so that a complete record is maintained through its life cycle until it is written off, quarantined or disposed.
- 4.3.6.5 For legacy Tags taken over from existing Toll Agencies, the status of those Tags on takeover shall be entered into the stock control system and thereafter shall be treated similarly to Tags procured by the Contractor.

- 4.3.7 The Contractor shall ensure that each Customer Service Centre, Tag Distributor such as a Retailer, Key/Corporate User Account Holder or other location that is involved with issuing Tags is supplied with the latest version of the relevant terminal operating software and that the correct version number in use is recorded on the stock control system. Where the Contractor has supplied a Tag Reader to be associated with a Customer Service terminal, detailed records shall be entered onto the stock control system. The locations where the software and Tag Readers have been supplied shall be updated so that it provides an updated, complete, and accurate record of the location and status.

4.4 QUALITY ASSURANCE

- 4.4.1 The requirements for Quality Assurance are included in C3.3.1 - General Operations Specification.

4.5 INTERFACES AND AGREEMENTS

4.5.1 Interfaces

4.5.1.1 This section identifies the main interfaces and messages that will pass between the TCH and other Entities. The list should be considered a minimum requirement and the Contractor will be responsible for ensuring that all messages necessary to be transmitted to ensure correct operations are included and are correctly transmitted or received.

4.5.1.2 The message descriptions indicate an outline of content and the direction of transmission. The actual message structure will be determined as part of the Design-Build. Normally it would be expected that the electronic data transmission system will be used to provide the message transmission but, in some cases, for example the Security Keys, the data may be sent external to the system.

4.5.1.3 The Contractor will be responsible for verifying any messages that are flagged as not conforming to agreed interface standards, such as being Valid Transaction Records. Where a message is not accepted, a rejection message with a code indicating the reason for rejection shall be sent to the originating Entity such that the specific Entity can check and change the message to overcome the error. The Contractor will be responsible for checking messages identified by other Entities as non-conformance and for correcting and re-transmitting, as necessary. The Contractor shall ensure that message transmission from and acceptance by the TCH system accords with requirements for timeliness.

4.5.1.4 The TCH may receive requests from other Entities for re-transmission of a message and may itself request re-transmission from other Entities. The message numbering and reference structure must be such that the Contractor (or the TCH system) is able to request individual messages and to respond to such requests and enable any missing messages to be identified.

4.5.1.5 The Tables below show the messages and a brief description of content and purpose that pass between the TCH and other Entities.

4.5.2 Interface - TCH to Toll Agency

4.5.2.1 The interface messages in the table below relate to the ORT BO or any other operating Toll Agency. It is assumed that arrangements for initially connecting a new Toll Agency to the TCH or for changes to an existing Toll Agency will be handled largely outside the format of this interface. This includes the arrangements necessary for transfer of Legacy Accounts. The Tariff Table can be used by the Toll Agency to institute changes or additions to RSS under its control, as the Tariff Table should list each RSS and provide appropriate details for other Entities to use.

4.5.2.2 A Toll Agency may provide Customer Service Centre Facilities on behalf of the TCH but not limited to the following interfaces:

No.	Title and Direction	Description
1	Security Keys from TCH	The TCH shall be responsible for managing and distributing Security Keys for all encrypted transmission taking place within the system, including for the DSRC transaction. The TCH shall be responsible for the overall monitoring of transmission with the assistance of other entities, to determine when there has been a security breach and the security keys may need to be changed. The means of distribution of the Security Keys shall of itself, be completely secure.
2	Tariff Table from Toll Agency	Each Toll Agency will be responsible for preparing its own Tariff Table in the agreed format and at agreed times and transmitting it to the TCH. The timing shall be such that the TCH has sufficient time to prepare a consolidated Tariff Table and distribute as appropriate to the VPC and other Entities to implement in advance of the date by which any changes in the Tariff Table become active.
3	Tariff Table Acceptance or Rejection from TCH	The TCH will check the Tariff Tables received from Toll Agencies and will confirm acceptance to the originating Toll Agency (or will reject it where it does not conform to agreed rules). It will consolidate as necessary and store for its own use and transmit to all Entities that will need to act upon it (probably only the VPC)
4	Temporary Suspension of Tolling from Toll Agency	In unusual circumstances, a Toll Agency may suspend Tolling at one or more Tolling Points and shall notify the TCH of the locations and duration of the suspension. This shall then over-ride the Tariff Table.
5	Discounts and exemptions from Toll Agency	The Toll Agency will prepare and maintain a list of Discounts and Exemptions that apply to the Tolling Points under its control. The actual discounts will be included in the Tariff Table and the Customers to which they will apply will be entered onto the Customer Account when the Discount is agreed by the Toll Agency (or the TCH for National Discounts and Exemptions). Transaction Records for the vehicles to which Discounts should apply will be annotated with the discounted toll at the Toll Agency based upon the Tariff Table and the Validation List (Green) and may be checked by the TCH. For Exemptions where there is currently no account, the Toll Agency will annotate the Transaction Records so that the TCH can set up an appropriate Automatically Allocated Account.

No.	Title and Direction	Description
6	Time and Density Discount from Toll Agency	When a Toll Agency determines that a time and density discount should be applied, it shall notify the TCH of the time and locations where the discount is being applied.
7	Green List from TCH	The TCH will compile a Validation List (Green) of all vehicle Identifiers included on active Customer Accounts and any Exempt Vehicles associated with Automatically Allocated Accounts and will publish for all Toll Agencies and where applicable, such as Mobility Account Service Providers in a near real time timescale.
8	Grey List from TCH	The TCH will compile a Validation list (Grey) of active Customer Accounts with balance below the agreed limit and will publish for all Toll Agencies and where applicable, such as Mobility Account Service Providers in a near real time timescale.
9	Red list from TCH	The TCH will compile a Validation List (Red) of Tags that have been issued and not returned or are currently not associated with an active Customer Account or have been reported as stolen and transmit to all Toll Agencies and where applicable, such as Mobility Account Service Providers in a near real time timescale.
10	VOSI list from TCH	The TCH shall compile a VOSI list and transmit to all Toll Agencies in a near real time timescale.
11	Transaction Records from Toll Agency	The Toll Agency shall send in an agreed format and meeting agreed accuracy requirements, all Transaction Records for Chargeable Events taking place within its area of operation. The Transaction Record may have an attached Evidential Record.
12	Rejected Transaction Records from TCH	The TCH may reject any Transaction Records that do not meet agreed standards of accuracy and will notify the Toll Agency and/or the respective entity such as Mobility Account Providers with a Reconciliation Code. The rejection may be of the Transaction Record itself and/or any attached Evidential Record. Where a Toll Agency elects to Opt Out of using the VPC, the TCH shall advise the Toll Agency of any Transaction Records associated with a Violation that would otherwise be sent to the VPC and which the TCH is unable to accept.
13	Rejected Transaction Records by VPC from TCH	The VPC may reject Transaction Records sent to it and where the issue is indicated as arising from the Toll Agency, the TCH

No.	Title and Direction	Description
		shall pass the rejection message back to the Toll Agency with a Reconciliation Code.
14	Transaction Record error message from TCH	Where the TCH discovers an error in a Transaction Record from a Toll Agency and/or the respective entities, it shall send a Transaction Record error message to the Toll Agency and/or the respective entity with a Reconciliation Code.
15	Request for Evidential Record from TCH	The TCH may request an Evidential Record for any Transaction Record that it has received from a Toll Agency within an agreed timescale.
16	Statement of Service Charges from TCH	The TCH will provide a statement to each Toll Agency and/or to the respective entities of Transaction Records processed and service charges due.
17	Accounting/payment information from Toll Agency	The TCH will receive from each Toll Agency and/or entity where applicable in an agreed format and to an agreed timescale an account statement that includes details of all Transaction Records and charges and a request for payment of the value of the Transaction Records
18	Queries on accounts etc. from TCH	The Contractor may query items on the account statement from the Toll Agency in an agreed format and to an agreed timescale
19	Response to queries from Toll Agency	The Toll Agency shall respond to the queries raised by the Contractor in an agreed format and to an agreed timescale
20	Final accounting/payment information from TCH	The TCH shall issue a final account statement for the period to each Toll Agency and /or from the respective entities, considering any responses to queries that it accepts

TABLE 4-1: TCH TO TOLL AGENCY INTERFACE

4.5.3 Interface TCH to Customer (Web site, Call Centre, post)

- 4.5.3.1 The TCH will interface to the Customer by means of a Web Site, email, by telephone through a Call Centre and by post. All face to face interfacing is dealt with by Customer Service Centres operated by the Toll Agency or through Appointed Agents organised by the TCH.

No.	Title and Direction	Description
1	Vehicle and bank/payment data for account set up from Customer	A Customer wishing to set up a Customer Account must provide details of the vehicle, the proposed payment method and possibly personal details as required by the agreed Project Business Rules in order to set up an account.
2	Tag and Customer Agreement from TCH	After receiving and checking Customer data and setting up a Customer Account, the TCH must provide details of the Customer Agreement governing the account and arrange for a Tag to be made available (if required)
3	Statements from TCH	The TCH must make available statements of road use, tolls charged, and payments received to Customers, in a method as agreed with the Customer, including Tax Invoices, if required. (The TCH will advise of low balance by means of the Validation List (Grey) which will initiate a Tag 'beep' or other agreed methods)
4	Payments from Customers	The TCH must receive and account for payments from Customers in accordance with the arrangements agreed with the Customer, or other methods provided for by the TCH. Each payment received shall involve the issue of a uniquely numbered receipt to the Customer, if a 'one off' payment or a uniquely referenced entry on the Customer's statement or Tax Invoice.
5	Letters/emails from TCH regarding change of charges, rules etc.	The TCH must advise the Customer in an agreed way of any changes of charges or Customer Agreement that may affect him
6	Letters/emails/SMS from TCH regarding late or non-payment or other payment issues	The TCH must communicate with Customers in the event of late on non- payment of the account. A Customer must be notified of account termination and passing Transaction Records to the VPC in the event of persistent non- payment. The TCH shall remind a Customer when details associated with a credit card are due to change (validity date etc.) so that they can be updated by the Customer.
7	Queries from Customers (email, telephone or letter) on account or Transaction Records	The TCH must receive queries from Customers of all varieties through agreed channels
8	Responses to queries from TCH	The TCH must respond to queries received in accordance with the defined performance requirements.

No.	Title and Direction	Description
9	Request for changes to Customer Accounts from Customers	The TCH must receive requests for changes to Customer Accounts from Customers and after actioning, must respond appropriately. Such changes may include changes to vehicles associated with the account or changes to payment arrangements.
10	Requests to cancel Customer Accounts from Customers	The TCH must receive requests to cancel Customer Accounts from Customers and after actioning, must respond appropriately
11	Complaints about Tags from Customers	The TCH must accept complaints about Tags from Customers including but not limited to non-functional, lost, stolen, broken holder etc.
12	Responses to requests/complaints from TCH	The TCH must respond with an agreed service level to requests for information and complaints from Customers

TABLE 4-2: TCH TO TOLL CUSTOMER INTERFACE

4.5.4 Interface TCH to Key/ Corporate User Account Holder (KARS)

4.5.4.1 The TCH will interface to the Key/ Corporate User Account Holders by means of KARS, through the TCH's Operator's Key Account Liaison Officer. All face to face interfacing is dealt with by the Contractor through the Key Account Liaison Officer, or the Employer, as required.

No.	Title and Direction	Description
1	Vehicle and bank/payment data for account set up from Key Account Holder	A Key/ Corporate User Account Holder wishing to set up a Key Corporate User Account must first enter into an agreement with the Employer. Once the agreement is concluded, the Key/ Corporate User Account Holder must provide details of account units, the proposed payment method and possibly personal details as required by the agreed Project Business Rules in order to set up an account.
2	Tag and Key/ Corporate User Account Holder Agreement from TCH	After receiving and checking Key/ Corporate User Account Holder data and setting up a Key/ Corporate User Account, the TCH must arrange for a Tag(s) to be made available (where required)
3	Provision of Files and Statements from TCH	The TCH must submit daily Transaction Files, Financial Files and Adjustment Files to the Key/ Corporate User Account Holder, in accordance with the Key/ Corporate User Account Holder agreement. The TCH must make available statements of road

No.	Title and Direction	Description
		use, tolls charged, lost tags and payments received from Key/ Corporate User Account Holders, in a method as agreed with the Key/ Corporate User Account Holder, including Tax Invoices.
4	Payments from Key/ Corporate User Account Holder	The TCH must receive and account for payments from Key/ Corporate User Account Holder in accordance with the arrangements agreed with the Key/ Corporate User Account Holder, or other methods provided for by the TCH. Each payment received shall involve the issue of a uniquely numbered receipt to the Key/ Corporate User Account Holder, if a 'once off' payment or a uniquely referenced entry on the Key/ Corporate User Account Holder's statement or Tax Invoice.
5	Letters/emails from TCH regarding change of charges, rules etc.	The TCH must advise the Key/ Corporate User Account Holder in an agreed way of any changes of charges or Key/ Corporate User Account Holder Agreement that may affect him
6	Letters/emails from TCH regarding late or non-payment or other payment issues	The TCH must communicate with Key/ Corporate User Account Holders in the event of late on non-payment of the account. A Key/ Corporate User Account Holder must be notified of interest implications, account termination and passing Transaction Records to the VPC in the event of persistent non-payment. The TCH shall remind a Key/ Corporate User Account Holder when details associated with a credit card are due to change (validity date etc.) so that they can be updated by the Key/ Corporate User Account Holder, if applicable.
7	Queries from Key/ Corporate User Account Holders (Letters / Emails) on account or Files	The TCH must receive queries from Key/ Corporate User Account Holders of all varieties through agreed channels.
8	Responses to queries from TCH	The TCH must respond to queries received in accordance with the defined performance requirements.
9	Request for changes to Key/ Corporate User Accounts from Key/ Corporate User Account Holders	The TCH must receive requests for changes to Key/ Corporate User Accounts from Key/ Corporate User Account Holders and after actioning, must respond appropriately. Such changes may include changes to vehicles associated with the account or changes to payment arrangements.
10	Requests to cancel Key/ Corporate User Accounts from Key/ Corporate User Account Holder	The TCH must receive requests to cancel Key/ Corporate User Accounts from Key/ Corporate User Account Holders and after actioning, must respond appropriately

No.	Title and Direction	Description
11	Complaints about Tags from Key/ Corporate User Account Holders	The TCH must accept complaints about Tags from Key/ Corporate User Account Holders including but not limited to non-functional, lost, stolen, broken holder etc.
12	Responses to requests/complaints from TCH	The TCH must respond with an agreed service level to requests for information and complaints from Key/ Corporate User Account Holders

TABLE 4-3: TCH TO KEY/ CORPORATE USER ACCOUNT HOLDER INTERFACE

4.5.5 Interface TCH to Customer Service Centre Facility

- 4.5.5.1 The TCH will make available to Customer Service Centres, access to the TCH system for their terminals for them to use to be able to set up and maintain accounts and provide information to Customers. For the purposes of this section, the Customer Service Centre is primarily one provided by a Toll Agency, but these may not all provide full facilities. In addition, Appointed Agents may contract to provide some or all facilities of a Customer Service Centre and hence appropriate aspects of Table 4-3 are relevant to them.

No.	Title and Direction	Description
1	Data on Project Business Rules etc. from TCH	The TCH shall provide full details to the Customer Service Centre of the Project Business Rules and related information to allow them to perform their Customer Service function and set up and operate Customer Accounts, issue Tags (where allowed) and respond to queries from Customers.
2	Facility to Set Up Customer Accounts at Customer Service Centre Facility	The TCH shall provide access over an interface to enable Customer Accounts to be set up and modified, accounts status and Transaction Records to be queried and payments to be made and recorded.
3	Request for details of vehicle make/class and Registered Owner from Customer Service Centre Facility	As part of the account set up procedure, the Customer Service Centre shall be able to request details related to the registered vehicle to check the data provided by a Customer. This will come from NaTIS via the TCH. The TCH itself will check whether the vehicle is associated with another Customer Account.
4	Details of vehicle make/class from TCH	The TCH shall provide details of the vehicle to the Customer Service Centre. If the vehicle is already associated with an existing Customer Account or an Automatically Allocated Account, this will be advised.

No.	Title and Direction	Description
5	Request for bank account verification from Customer Service Centre Facility	As necessary, the Customer Service Centre shall be able to request verification of Bank Account details provided by the Customer as part of the Customer Account set up (via the TCH to the banking industries Account Verification Service).
6	Response with bank account status from TCH	The TCH shall respond with verification (or otherwise) of the bank account details provided by the Customer
7	Details of proposed Customer Account from Customer Service Facility	The Customer Service Centre shall provide details of the proposed Customer Account to the TCH for checking
8	Confirmation of Customer Account details from TCH	The TCH shall check the details of the Customer Account and confirm to the Customer Service Centre that they are acceptable (or not). The check shall include confirmation that no other account is active for the vehicle(s) involved and that there is no history of default on past accounts that may need to be considered
9	Details of payments made to TCH	The Customer Service Centre shall capture on the TCH system details of all payments made by a Customer including pre-payments or payments during the use of the customer's account.
10	Details of cash collected from TCH	The TCH will provide details and reconciliation of cash collected at terminals for Customer Service Centre Facilities.
11	Details of Tags and holders issued to Customer Service Centre Facility from TCH	When a batch of Tags, holders, cleaning wipes and instructions are issued to a Customer Service Centre by the TCH, the details shall be confirmed by a message from the TCH to the Customer Service Centre and an acknowledgement from the Customer Service Centre with the details of the stock received
12	Details of Tags issued to Customers from Customer Service Centre Facility	When a Customer Service Centre supplies a Tag to a vehicle, the Tag shall be read, and the details must be sent to the TCH system with the associated Customer Account details. This, for account registration as well as Tag stock control and management
13	Details of spare Tag holders issued to customers from Customer Service Centre Facility	It is expected that requests will be received for spare Tag holders, cleaning wipes and fitting instructions when holders become damaged or removed from the windscreen. Details of the applicant vehicle must be sent to the TCH system for stock control as part of Customer performance monitoring

No.	Title and Direction	Description
14	Stock details of Tags and holders from Customer Service Centre Facility and requests for more	The Customer Service Centre must provide details of stocks of Tags, holders and consumables on hand on a regular basis to the TCH system and requests for additional stock when required
15	Details of faulty Tags returned by Customers from Customer Service Centre Facility	When a Customer comes to a Customer Service Centre with a faulty Tag and after this has been tested, if confirmed faulty, a new Tag shall be supplied and details of the faulty Tag together with the Tag shall be sent to the TCH. The new Tag details will be included in an amended Customer Account record
16	Accounting/payment information from Customer Service Centre Facility	The TCH will receive from each Customer Service Centre in an agreed data format and to an agreed timescale an Operation Account statement that includes details of all work done for the TCH and associated charges and a request for payment
17	Information on applicable Discounts from Customer Service Centre Facility	Each Toll Agency is responsible for granting Discount rights to a Customer (although the TCH may operate on the Toll Agency behalf) and this must be notified to the TCH in an agreed format for inclusion on the Customer Account.
18	Queries on accounts etc. from TCH	The TCH may query items on the Operation Account statement from the Customer Service Centre in an agreed format and to an agreed timescale
19	Response to queries from Customer Service Centre Facility	The Customer Service Centre shall respond to the queries raised by the TCH in an agreed format and to an agreed timescale
20	Final accounting/payment information from TCH	The TCH shall issue a final Operation Account statement for the period to each Customer Service Centre taking into account any responses to queries that it accepts

TABLE 4-4: TCH TO CUSTOMER SERVICE CENTRE FACILITIES INTERFACE

4.5.6 TCH to RTMC (NaTIS)

- 4.5.6.1 RTMC will provide a real time response from NaTIS to requests for information regarding registered Vehicle Licence Numbers and the class, make and model if registered.

No.	Title and Direction	Description
1	Request for details of single vehicle/class from TCH	During Account set up or at other times, the TCH may request details of an individual vehicle from NaTIS for confirmation of applicant information. This will be a request including a VLN in an agreed format.
2	Details of vehicle from NaTIS	Registered class, make, model and colour

TABLE 4-5: TCH TO NATIS INTERFACE**4.5.7 TCH to Banks**

4.5.7.1 Facilities must be in place to interface to the systems and services of an appointed bank for the receipt of customer payment transactions for credit to customer accounts at the TCH.

No.	Title and Direction	Description
1	Payment requests for payment from Customers bank accounts or Credit Cards from TCH	A request for the collection of a payment from a Customer's bank or Credit Card when the Customer Account balance reaches a pre-determined state or minimum balance (for a pre-paid account) or when an agreed number of Transaction Records have occurred or a specific time frame has elapsed since the last request for payment (for a post-paid account)
2	Confirmation of payment from bank	Confirmation or rejection of the payment transaction.
3	Request for the verification of Customer bank account details from TCH	When a Customer provides bank account details these will be checked with the banking industries Account Verification Service
4	Receipt of verification (or otherwise) of bank account details from bank	Response to verification request from Account Verification Service.
5	Payment instruction for payment to another Entity to bank	Instruction to Bank to make payment to Entity for services rendered
6	Confirmation of payment to Entity from bank	Information from bank recording payment made to an Entity
7	Confirmation of payment receipts from bank	Information from bank recording payment received from a Customer Service Centre or the VPC or other agency that may make payments to TCH

No.	Title and Direction	Description
8	Detailed statements from bank	Detailed electronic statements from bank on a periodic basis or as requested for detailed checking of payments received.

TABLE 4-6: TCH TO BANKS INTERFACE**4.5.8 TCH to VPC**

- 4.5.8.1 The TCH will provide the VPC with operational data such as Tariff Tables and Validation Lists (Green) so that it is fully aware of the latest state of operation. The main purpose of the link will be to pass Transaction Records where the vehicle involved is not associated with a Customer Account or where there is a default on a Customer Account.

No.	Title and Direction	Description
1	Consolidated Tariff Table from TCH	The TCH shall send the consolidated Tariff Table incorporating all Tariff Tables received from the Toll Agency (s) to the VPC for application
2	Temporary Suspension of Tolling from TCH	The TCH shall send details of any temporary suspension of Tolling notifications received from the Toll Agency (s) for application.
3	Time and Traffic Density Discount from TCH	When the TCH receives notification from a Toll Agency of the application of a time and traffic density discount, it shall notify the VPC.
4	Green List from TCH	The TCH shall publish the Validation List (Green) according to an agreed timescale for the VPC to collect.
5	Red List from TCH	The TCH shall publish the Validation List (Red) according to an agreed timescale for the VPC to collect.
6	Transaction Records for vehicles not associated with Customer or Automatically Allocated Accounts from TCH	Transaction Record including Evidential Record to VPC for a non-account holder i.e. where there are no definitive distinguishing features after allowed Grace Period has expired and no payment has been received.
7	Transaction Records for Automatically Allocated Accounts from TCH	As above, but for vehicles with a readable number plate where an Automatically Allocated Account has been set up, but no payment has been received during the Grace Period allowed
8	Transaction Records for Red Listed vehicles from TCH	Transaction Records including Evidential Records for Red Listed Vehicles shall be sent to the VPC without any Grace Period for payment being allowed.

No.	Title and Direction	Description
9	Transaction Records and Customer Account details for accounts with non-payment where due processes have been exhausted from TCH	Account details and outstanding Transaction Records including Evidential Records to VPC for Customers Accounts where TCH processes to recover outstanding payments according to Project Business Rules have been exhausted
10	Acceptance/rejection message from VPC	Acceptance or rejection of details sent to VPC above depending upon compliance with Project Business Rules
11	Status updates on all cases received from VPC	Regular status messages to TCH from VPC for each case referred to it by TCH
12	VOSI request from VPC	VOSI list from VPC for vehicles that VPC wishes mobile patrols to intercept or for the passage to be logged. List includes details of offences and fines outstanding
13	VOSI data from TCH	Transaction Records involving vehicles on the VOSI will be sent to the VPC with no grace period or delay
14	Payment details from VPC	Payments made to the TCH regarding guaranteed payments according to the Project Business Rules and any administration payments.

TABLE 4-7: TCH TO VPC INTERFACE**4.5.9 TCH to Employer**

4.5.9.1 The Employer will require several summarized reports. In addition, periodic accounting/financial reports and Performance Monitoring reports will be provided electronically to the Employer, to be imported into the Employer's system.

4.5.9.2 The list below is a summary to be agreed and amended as part of the Operations and Maintenance Plan. It is assumed that the TCH as the central Entity will be the main reporting channel to the Employer, although the VPC and ORT BO will report on their activities.

No.	Title and Direction	Description
1	Tariff Tables	Consolidated Tariff Tables.
2	Transaction Record rejection messages sent to Toll Agencies	Rejections from TCH and VPC, with reason for rejection.
3	Financial and Accounting Statements to Employer	Periodic report in agreed format sent to the Employer summarising Transaction Records, violations, revenue,

No.	Title and Direction	Description
		account information and other relevant data for preceding period and on an accumulating basis for the business year.
4	Performance Monitoring Report to Employer	Periodic report on Performance of the TCH in relation to all of the KPIs with proposals for improvement where performance standards are not met.

TABLE 4-8: TCH TO THE EMPLOYER INTERFACE**4.5.10 Tariff Table**

4.5.10.1 The Tariff Table is a key set of data that defines the tolls to be applied at each Tolling Point, for each class of vehicle and defines any discounts that are allowed for defined types of Road User. Each Toll Agency, including the Gauteng ORT, is responsible for generating its own Tariff Table according to well defined rules and procedures that must be developed by the Contractor. The completed Tariff Table must be sent to the TCH according to defined rules to be determined by the Contractor and with a defined period prior to it becoming effective.

4.5.10.2 The TCH will automatically verify the Tariff Table to ensure that it meets the requirements in terms of content and timeliness and may reject due to non-conformity. The Contractor shall liaise with the originating Toll Agency if required to advise of the reason for rejection and to correct the table for re-submission.

4.5.10.3 The TCH shall automatically consolidate Tariff Tables received and shall bring this into use to update the existing Tariff Table according to the timescale included in the Tariff Table. The TCH shall forward the consolidated Tariff Table to the VPC for application. The Contractor shall monitor the Tariff Table in use to ensure that it is the most recent version and shall take action to correct the situation where an error is discovered.

4.5.11 Agreements

4.5.11.1 The Contractor shall prepare and enter into, or take over service level agreements with each Toll Agency that interfaces to the TCH, (save for the ORT BO). Service level agreements shall be prepared and entered into or taken over for any other agency or Appointed Agents that there is a commercial relationship with. This will include but not be limited to System Operators and service providers in the banking and payments industry, retail agents, tag distributors and VAS appointed Service Providers and a wireless application services provider.

4.5.11.2 All service level agreements shall be subject to the approval of the Employer and shall reflect the relevant/ applicable KPIs placed upon each party to the Agreement either directly by the Contract's Key Performance Indicators or by implication where a KPI placed upon the TCH requires a particular performance from the Toll Agency or other party to ensure that that KPI can be met.

- 4.5.11.3 The service level agreements shall detail the payment structures between the TCH and Toll Agency or other entities and ensure that the reporting and accounting requirements be retained so that the necessary invoices and statements can be prepared and checked and where necessary, queried by the receiving party.

4.6 UTILITIES, SERVICES AND LEVIES

- 4.6.1 The requirements for Utilities, Services and Levies are included in C3.3.1- General Operations Specification.

4.7 TRAINING

- 4.7.1 The Contractor shall ensure that training manuals and training courses are provided at regular intervals for all personnel involved in operation of TCH facilities and providing services on behalf of the TCH including TCH Operations Personnel, Call Centre personnel and any others associated with operation of TCH facilities at other Entities, particularly at the Customer Service Centres, Appointed Agents and Toll Agencies. The numbers of personnel to be trained will be determined according to the Contractor approved Operations and Maintenance Plan but may be varied to meet the circumstances.
- 4.7.2 The Manuals and Training provided for the Customer Service Centre personnel shall include but not limited to the following:
- 4.7.2.1 General training on customer service, 'soft selling' and provision of positive approach to Customers;
 - 4.7.2.2 Background information on ORT and the reasons for introduction of tolling, particularly payment methods and discounts and value -added service where applicable;
 - 4.7.2.3 Dealing with difficult Customers and countering a negative approach to tolling;
 - 4.7.2.4 The principles of account set up, charging and allocation of Transaction Records to Customer Accounts, Customer Account payments and top ups, statements, Tax Invoices, VPC Account and related queries and enforcement processes;
 - 4.7.2.5 The types of accounts available to Customers and the Customer Agreements associated with each;
 - 4.7.2.6 The process of setting up Customer Accounts and the information required to be provided by Customers;
 - 4.7.2.7 Vehicle classes and the distinguishing features and value- added services
 - 4.7.2.8 National exemptions and discounts, checking validity and application to Customer Accounts. (It is assumed that local discounts and exemptions will be determined and handled by the local Toll Agency although this may be done by TCH on the Toll Agency's behalf);
 - 4.7.2.9 Account payments, deposits and confirmation of financial status;
 - 4.7.2.10 Checking vehicle details on NaTIS and dealing with differences;
 - 4.7.2.11 The linking of Tags to Customer Accounts, the fitting of Tags to vehicles and their use;
 - 4.7.2.12 Tag stock control and Tag testing;

- 4.7.2.13 The highways covered by ORT and other Toll Agencies, the processes involved in charging and Tolling Tariffs;
- 4.7.2.14 Other Toll Agencies and VAS Service Providers projects where a Tag and Customer Account can be used;
- 4.7.2.15 The use of accounts, statements, Tax Invoices, account and transaction queries, account changes;
- 4.7.2.16 The use of the Web site for set up and access to Customer Accounts;
- 4.7.2.17 The enforcement process, charges, representations and payments;
- 4.7.2.18 Data Protection and other relevant Legislation;
- 4.7.2.19 Operational and system problems, record keeping and reporting requirements;
- 4.7.2.20 Fault recognition and reporting.
- 4.7.3 The Contractor shall ensure that all personnel involved in Call Centres dealing with the TCH are similarly trained and informed of the various campaigns/ promotions/ value added services (where applicable) so that an acceptable level of Customer Service can be provided/ maintained.
- 4.7.4 The Contractor shall provide training manuals and material to be used for personnel at any Appointed Agents. The Contractor may host training courses for supervisors from the Appointed Agents so that they can train their personnel who will be involved in provision of Customer Service.
- 4.7.5 The Contractor shall ensure that all personnel in their employ for the operation of the TCH are fully trained and capable to operate the system and facilities efficiently and to ensure that the relevant KPIs are adhered to. The Training shall include handling but not limited to email, fax and postal queries and applications.
- 4.7.6 The Contractor shall continuously monitor the performance of their personnel and shall provide additional training where performance does not meet the required standard. The Contractor shall continuously monitor the performance of personnel at Appointed Agents, Call Centres and Customer Service Centres and shall provide additional training where this is considered necessary.

4.8 MARKETING

4.8.1 The requirements for Marketing are defined in C3.2.1- Contract Scope of Works

4.9 MANAGEMENT OF ACCOUNTS

4.9.1 Introduction

4.9.1.1 The Contractor shall set up and operate distinct types of accounts as may be required taking into consideration VAS requirements. Amongst these are Customer Accounts so that Customers can pay for their use of Toll Roads and or other services offered, Automatically Allocated Accounts that are set up by the TCH on receipt of a Transaction Record for a Vehicle that is not associated with an existing account and or Operation Accounts that record the various financial dealings between the TCH and other organisations that it has a commercial relationship with.

4.9.1.2 An outline description of the operation of each account type is given below and the Contractor shall develop and expand this to be a full and comprehensive description of the Account Management Services to be provided and shall include this in the Operation and Maintenance Plan.

4.9.1.3 In addition to the accounts, the TCH must ensure that correct and up to date Validation Lists are made available in a near real time, timeframe.

4.9.2 Setup and Operate Customer Accounts

4.9.2.1 The Contractor shall be fully responsible for the setup, management and take over (where applicable) of Customer Accounts and for the accuracy of data used to set up such accounts. The Contractor shall be fully responsible for the application of Transaction Records to those accounts. Where the Contractor must rely upon the accuracy of data received from a Toll Agency, including the ORT BO or Customer Service Centre or Call Centre Personnel to achieve KPIs related to over and undercharging or accuracy of account set up data, the Contractor shall ensure that the agreements reflect the accuracy of the required input data and that the system and the operating procedures provide means of monitoring accuracy levels to ensure that these are maintained and overall performance levels are met

4.9.2.2 Two main types of Customer Accounts will be provided by the system and the Contractor must operate and maintain each type according to the required standards of performance as defined in C3.5.1 - Contract Performance Measurement Part A and/or Part B. The main account types are Pre-paid Customer Accounts and Post-paid Customer Accounts (for the payment of Toll/ Mobility services and or related Value -added services). Each type of Customer Account may operate with a Vehicle Licence Number only as an Identifier or with a Vehicle Licence Number and a Tag as Identifiers or with a Primary Account Number (PAN) as a Mobility Account identifier for Account Based Ticketing (ABT).

4.9.2.3 Customer Accounts utilising VLN as Identifiers are expected to be for the majority of toll users and those utilising an e-Tag only are expected to be used primarily by infrequent toll users. Customer accounts using a PAN as an identifier will be exclusively ABT Mobility Account users.

- 4.9.2.4 Payment of funds into a Pre-Paid Customer Account may be allowed by making a payment at an Appointed Agent or at a Toll Agency Customer Service Centre, by completing a debit or credit card payment at such a facility or via the TCH Call Centre or web site or by means of an agreed automatic bank payment triggered by the pre-defined minimum account balance or by means of a payment transaction initiated by a Customer via an internet or mobile banking service or any other digital payment platform application where a payment can be effected.
- 4.9.2.5 Payment of funds into a Post -Paid Customer Account may be similar to that for a pre-paid Customer Account, but the overall operation of payment means must be as defined in the Project Business Rules.
- 4.9.2.6 It is an important requirement that an individual vehicle identified by the Vehicle Licence Number may only appear on one active account at any one time and when an account is set up or a new vehicle is added, the Contractor must ensure that there is no account already reflecting that vehicle as active. If the Vehicle Licence Number does appear on another Customer Account, the Contractor shall take steps to resolve the situation prior to set up of the new account and shall not open the new account until it is resolved.
- 4.9.2.7 Where the vehicle is associated with an Automatically Allocated Account, the Customer shall be made aware of any unpaid Transaction Records and shall be required to pay these as part of the account set up process. Where Transaction Records on an Automatically Allocated Account have been passed to the VPC, the Customer shall be made aware of this and shall be given the opportunity of paying any outstanding charges. The Automatically Allocated Account shall be converted into a Customer Account so that the vehicle is only associated with one active account.
- 4.9.2.8 Where Transaction Records associated with an Automatically Allocated Account have been passed to the VPC for enforcement action, the VPC will offer the Road User the opportunity to set up a Customer Account, potentially with a discount as defined as part of the marketing strategy.
- 4.9.2.9 When a Tag is issued, the Contractor shall ensure that it is assigned to one individual vehicle, the details of which are obtained from the Customer and associated with the account. The Contractor shall ensure that the Customer is made aware that it cannot be used in different vehicles and to do so may result in a Violation (unless the Customer notifies the TCH of a change of Vehicle), as defined in the Project Business Rules. The Tag Personal Account Number and the Vehicle Licence Number are associated on the Validation List (Green) issued by the TCH containing the vehicle class (although the Actual Class may change if a trailer is being towed).
- 4.9.2.10 When setting up a Customer Account, the Contractor must obtain details of the vehicle class from the Customer and take appropriate steps to confirm that this is correct, normally by checking details from NaTIS. The Vehicle Classes used shall be as defined in C3.4.2 - General System Specifications.
- 4.9.2.11 As part of their Operations and Maintenance Plan, the Contractor shall undertake a detailed study of the different vehicle types that operate in South Africa (including foreign vehicles), their distinguishing features and their allocation into each of the ORT Vehicle Classes (A to C) and to the existing classification structure (Classes I to IV) of participating Toll Agencies, in

order to create a vehicle list for the TCH system (Refer to clause 2.2 Vehicle Lists in C3.4.5 - Transaction Clearing House System Specifications). The study shall consider the potential for vehicles to tow trailers and the impact of the presence or absence of a trailer on the designated class. The results of this study, after approval by the Employer, shall be used by personnel setting up and managing Customer Accounts, personnel at Toll Agencies dealing with checking Transaction Records and personnel in the VPC dealing with violations.

- 4.9.2.12 A Customer Account may be set up for an individual vehicle or for several vehicles, normally part of a vehicle fleet. A multi vehicle Customer Account would normally be Tag based, although it may be operated with a mixture of Tag based and Vehicle Licence Number based.
- 4.9.2.13 A Tag based Customer Account may be pre-paid or post-paid, depending upon the Project Business Rules adopted by the Contractor and approved by the Employer. It might be expected that, at least initially, accounts for private individuals would be based upon pre-payment and an arrangement for automatic top up instituted when the balance falls below an agreed level. Although centred on a Tag as the primary means of account identification, a Transaction Record may be allocated to the account when the Tag Personal Account Number is missing but the Vehicle Licence Number is present in the Transaction Record. Commercial Customer Accounts for vehicle fleets may operate on a post payment basis providing a satisfactory means of automatic payment of balance is provided.
- 4.9.2.14 Customer Account details shall always be held on the TCH, but an account may be set up and accessed (according to well defined security and data protection rules that the Contractor shall develop as part of the Operations and Maintenance Plan in terms of the relevant laws) internally by the Contractor or externally by a Customer Service Centre operated by Toll Agencies or by other arrangements that may be made with Appointed Agents. The accounts and the conditions governing their operation shall be identical regardless of where they are set up.
- 4.9.2.15 The Contractor will provide Customer Service Centre Facilities, but may provide additional facilities for distribution, fitting, testing and checking Tags as defined in C3.3.2 - Open Road Tolling Operations Specification and as may be required by the Employer. The Contractor shall provide facilities for issue of Tags via the postal services or via other Toll Agency operated Customer Service Centre Facilities and Appointed Agents.
- 4.9.2.16 The TCH Operation shall make provision for the inclusion of Discounts and Exemptions associated with individual vehicles registered on Customer Accounts as defined in C3.2 - Scope of Works. An application for a Discount applicable to an individual tolling scheme may be made to a Toll Agency (including the ORT BO) responsible for the operation of that scheme. With the agreement of the Toll Agency the TCH may undertake this task on behalf of the Toll Agency. The Contractor shall ensure that any such granting of a Discount by a Toll Agency or the TCH is identified on the Customer Account and on the Validation List (Green).
- 4.9.2.17 The Contractor may grant national Discounts (on the approval of the Employer) as part of a Rewards Programme or other reason.
- 4.9.2.18 The setting up of Customer Accounts for Exempt Vehicles may be undertaken by the Toll Agency as part of its Customer Service Centre Facility role, but the Employer may require the

Contractor to liaise directly with organisations whose vehicle fleets are eligible for a National exemption to set up Customer Accounts for such fleets and to issue Tags.

- 4.9.2.19 During operation of a Customer Account utilising a Tag, Transaction Records shall be continually monitored and incremented to detect when the Tag may have ceased to operate reliably. This may be determined by inclusion of incomplete DSRC transactions or no DSRC transactions in the Transaction Record or a discontinuity in the numbers from the Tag transaction counter included in the Transaction Record. When this is found, the Contractor shall contact the Customer to arrange for the Tag to be checked for faults. In addition, the Contractor shall develop and implement a strategy to monitor the status of the Tag battery so that in the event of a low battery and or an e-tag reaching end of life, the Customer can be asked to exchange their Tag for a new one. The Contractor shall establish suitable facilities and training to enable Tags to be checked and if necessary, exchanged with the Customer Account being suitably updated. This facility shall normally be provided by Toll Agencies Customer Service Centre Facilities.
- 4.9.2.20 The Contractor shall continuously monitor all payments into each Customer Account to ensure that the payments are in accordance with agreements. Where a payment does not take place as expected, the Contractor shall take appropriate steps as defined within the Operation and Maintenance Plan and the agreement with the Customer to ensure that the payment is made, and that regular payments continue.
- 4.9.2.21 Where arrangements for a Customer Account include an agreed minimum balance or a balance that will trigger a payment or warning action, the Contractor shall ensure that the agreed actions are taken when the appropriate balance levels are reached. This shall include adding the Tag to the Validation List (Grey) so that an audible warning can be given at the Tolling Point. The Contractor shall continue to monitor the account to make sure that it is topped up appropriately.
- 4.9.2.22 Where an account is a post payment account, the Contractor shall ensure that appropriate invoices are sent to the Customer as defined in the Customer Agreement and that payments are made within the agreed time scales. The general requirements are defined in the Project Business Rules.
- 4.9.2.23 Where a payment is not made in accordance with the Customer Agreement, the Contractor shall take appropriate action as defined within the Operation and Maintenance Plan to obtain payment.
- 4.9.2.24 When payments into a Customer Account have ceased and the Contractor has completed all processes to seek payment from the Customer as defined in the Operations and Maintenance Plan, the Contractor shall send details of the account and all outstanding Transaction Records associated with the account to the VPC for enforcement action and shall enter details of the vehicles associated with the account onto the Validation List (Red list).
- 4.9.2.25 The Contractor shall continue to monitor the payment channels for a payment associated with the account and if one is received shall take such action as defined in the Operations and Maintenance Plan to continue to operate the account. The Contractor (responsible for TCH) shall inform the Contractor (responsible for VPC) and the action to be taken will depend upon the legislative framework and the state of the enforcement process that the Transaction

Records have reached. The Operation and Maintenance Plan shall include a set of procedures to be followed, based upon the legislative framework and agreed with the Contractor (responsible for VPC Operations).

- 4.9.2.26 The Contractor shall operate a service to allow Customer Account holders to be able to modify their accounts including changing personal and payment details, changing vehicles associated with the account and requesting closure of the account. This, and other aspects of the operation of a Customer's Account, including those described below, shall be included in the Customer Agreement.
- 4.9.2.27 The Contractor shall provide and operate a facility whereby a Customer can report a Tag as missing or stolen, or the vehicle as being stolen. The Contractor shall normally immediately enter the Tag Personal Account Number on the Validation List (Red) such that the Tag is identified at the Tolling Point as not being associated with an active Customer Account and enforcement images are taken and retained for the vehicle. Transaction Records for Validation List (Red List) Tags received by the TCH shall normally be passed to the VPC after any Grace Period allowed, although a copy should be associated with the relevant Customer Account. Where a Tag and Vehicle is reported as stolen, the information shall be provided to the VPC who, as part of their enforcement activity, may add the details onto the VOSI list. When a Tag is reported as stolen, the Contractor shall normally issue another Tag (on receipt of any payment required under the Project Business Rules) and the Customer Account shall continue to operate as normal (but with only the Vehicle Licence Number as an Identifier) until the new Tag is fitted to the vehicle.
- 4.9.2.28 When a vehicle, associated with a Customer Account is sold, the Contractor shall require that the Customer removes the Tag (but not the holder) from the vehicle being sold. The Customer must then obtain a new Tag Holder and fit the Tag to the new Vehicle. The Customer will be responsible for changing the Customer Account to associate the Tag with the new vehicle. The Contractor shall ensure that Customers are made aware of the need to notify the TCH when a vehicle is sold and provide details of the new owner so that the Contractor can approach him to open a Customer Account for the vehicle and supply a Tag. The Contractor shall ensure that their Operations and Maintenance Plan clearly deals with the selling and purchase of vehicles and the transfer of responsibility for payment of Tolls incurred and dealing with any Transaction Records that occur during transfer. This shall be defined in accordance with the Project Business Rules.
- 4.9.2.29 The Contractor shall make suitable arrangements for provision of new Tag holders and if required, Tags when a vehicle windscreen is broken. These arrangements may be directly with a Customer or via windscreen replacement companies.
- 4.9.2.30 The Contractor may, if required by the Employer, establish relationships with all main vehicle dealers providing vehicles that are likely to operate countrywide such that all vehicles offered for sale can be pre-fitted with Tags and pre-registered at the TCH and can be easily linked to a Customer Account set up by the Customer with the assistance of the vehicle retailer. The vehicle dealers should be encouraged to set up Customer Accounts that will cover their vehicle stock as well as their operational vehicles. When a used vehicle is added to their stock, it can be transferred from any existing Customer Account to the account of the dealer and from there to a Customer Account of the purchaser. Vehicles not linked to an account at the TCH can be

pre-registered and linked to the dealer's Customer Account ready for transfer to a purchaser's account.

- 4.9.2.31 The Contractor shall liaise with existing Toll Agencies regarding the transfer of Legacy Accounts to the TCH. The Contractor shall include in their Operations and Maintenance Plan their proposals for the transfer and for the subsequent operation of the accounts including receipt of Tariff Tables and Transaction Records and the issue of Validation Lists to ensure that there is a smooth transition of operation.
- 4.9.2.32 Set Up and Operate Automatically Allocated Accounts
- 4.9.2.33 Automatically Allocated Accounts are similar in concept to a Vehicle Licence Number Customer Account where the vehicle Identifier is the Vehicle Licence Number, but the account is set up automatically by the TCH on receipt of a Transaction Record for a vehicle not linked to an existing account. Future Transaction Records for the same vehicle are then allocated automatically by the TCH to the same account. No payment means is associated with the account and the Contractor must wait for payment to be made within the Grace Period and if none is received, pass the account to the VPC for enforcement action.
- 4.9.2.34 It is assumed that Automatically Allocated Accounts will always use the Vehicle Licence Number as the Identifier as any Tag in use that is not associated with a Customer Account will be in use illegally and should have been on the Validation List (Red) by the Contractor. The Contractor shall ensure that this is always the case.
- 4.9.2.35 Where a Transaction Record is received by the TCH with no Vehicle Licence Number present, the Transaction Record shall be placed in a special account for non-identified vehicles, an Unidentified Vehicles Account.
- 4.9.2.36 In accordance with the operational rules of the ORT (different rules may apply for other Toll Agencies) when a vehicle undertakes a Chargeable Event, the vehicle owner is allowed a 'Grace Period' during which the vehicle owner can pay the charge, with a surcharge added. The operation of the Grace Period may be configured in two ways. The first is when each Transaction Record is allocated a separate Grace Period and is treated individually. The second is where a vehicle is only allowed one Grace Period that is started with the first Transaction Record that it generates. Subsequent Transaction Records during the Grace Period are allocated a shorter Grace Period until the initial Grace Period time runs out and all Transaction Records accumulated during the Grace Period that remain unpaid are passed to the VPC. No subsequent Grace Periods for that vehicle would be allowed.
- 4.9.2.37 The duration of the Grace Period shall be configurable but will be set in line with the updated Toll Tariff Notice Published. After this time, the Contractor should ensure that the Transaction Record is sent to the VPC for further action, as a potential Violation.
- 4.9.2.38 The Contractor shall ensure that the Customer Service Centres, their Call Centre and the Web based facility are able to process requests for payments from Vehicle Owners for which an Automatically Allocated Account has been set up. The normal method for a Customer Service operator to gain access to the details of Transaction Records to be paid would be through the

Vehicle Licence Number and the Contractor shall ensure that this access is provided and available.

- 4.9.2.39 Where a Transaction Record has been allocated to the Unidentified Vehicle Account, the Contractor shall develop an easy means of gaining access that may be by reference to location and time of the Transaction Record or by reference to any distinguishing marks of the vehicle. A Customer Service Centre Facility or the TCH Call Centre should be able to accept payment for Transaction Records placed in the Unidentified Vehicle Account.
- 4.9.2.40 The Contractor shall allow payment of outstanding charges on the Web based facility by reference to the Vehicle Licence Number of the Vehicle. The facility shall allow the Customer to check the make and model of the Vehicle to ensure that the Vehicle is correct.
- 4.9.2.41 When a payment is made for charges on an Automatically Allocated Account, the Customer Service operator (or the design of the Web site) shall seek to encourage the Customer to provide sufficient information to convert the Automatically Allocated Account into a Customer Account with appropriate payment means.
- 4.9.2.42 When a Customer queries about payment for a vehicle with an Automatically Allocated Account and some Transaction Records have been passed to the VPC for enforcement, the Customer shall be notified of this fact and should be advised to contact the VPC (or other enforcement authority that may be dealing with the Transaction Records).
- 4.9.2.43 The Contractor shall ensure that details are associated with Transaction Records that have been forwarded to the VPC for enforcement action to ensure that information can be provided to Customers, including passing him on to the VPC Web page or Call Centre.
- 4.9.2.44 After the 'Grace Period' the Contractor shall ensure that all Transaction Records for Automatically Allocated Accounts or the Unidentified Vehicle Account for which no payments have been received are sent to the VPC for enforcement action.

4.10 TAG MANAGEMENT

- 4.10.1 The Contractor shall assume full responsibility for management of Tags and the associated brackets and consumables (including the receipt from the supplier/ manufacturer, storing, distribution, returns, re-distribution, recalls, reporting etc.) from the time of their receipt from the Tag Supplier until they are written off due to damage, loss or reached end of life and disposed of, or are subject to hand back in accordance with the provisions of the Contract. The management responsibility will be undertaken using a stock control and management system. Tags associated with Legacy Accounts may be subject to different arrangements, subject to the agreement of the issuing Toll Agency.
- 4.10.2 The Contractor shall prepare, as part of their Operations and Maintenance Plan, an estimate of usage of Tags, Tag holders, cleaning wipes and fitting instructions etc. and shall keep this updated based upon experience of usage and any other data that is relevant. The Contractor shall use the information to propose a procurement programme to the Employer that will ensure that estimated requirements are met, with a contingency, but does not involve the accumulation of large stock for long periods of time which would not be cost effective.
- 4.10.3 The Contractor shall be required to liaise with the Employer in the management of Tag and Tag holder procurement from sub-contractors. It is expected that the Employer will nominate the supplier(s) to use and the Contractor will undertake contract management, receipt of Tags, testing as necessary and entry onto the stock control system. The Contractor will be expected to arrange and or take over suitable branding and packaging.
- 4.10.4 The Contractor shall note that there is a requirement for motorcycles to be charged Tolls and be included in Customer Accounts. The Contractor shall ensure that Tags and holders suitable for use in association with motorcycles are procured.
- 4.10.5 The Contractor shall prepare and or take over precise but easy to understand fitting instructions for each type of vehicle that may be required to be fitted with a Tag, including those with metallised windscreens and motorcycles. The fitting instructions shall consider the use of the vehicles, the need to ensure that the Tag is protected from theft and does not obstruct the windscreen or cause any vehicle operational or health and safety issues. The instructions shall consider the need to ensure optimum location for reading by all Toll Agencies where operation may be required.
- 4.10.6 The Contractor shall develop and implement and or take over a Customer Account Identification Card which will be a bank card sized plastic card with a unique visible 16 digit Primary Account Number (PAN), with the same number encoded on the magnetic stripe and on a bar code printed on the back of the card. The PAN will be linked to the Customer Account and will provide an easy means for the Customer to reference their account for top up or enquiry services. The card shall be branded in accordance with marketing requirements and shall have useful telephone numbers, web site address and other relevant information useful to a TCH Customer printed upon it.
- 4.10.7 The Contractor shall develop and implement the concept of a ‘Tag in a Bag’ product. This is a Tag and holder, linked Customer Account Identification Card, fitting instructions and Customer Account set up instructions packaged in a suitable branded metallised bag or other

suitable packaging and available for distribution to Appointed Agents and Customer Service Centre Facilities.

- 4.10.8 Each 'Tag in a Bag' shall be linked to an already set up pre-paid Customer Account, with an associated number of discounted trips but with no Customer, vehicle or payment means associated with the account. The number of discounted trips and the purchase cost of the product will be determined in accordance with the Project Business Rules and considering the Employer's marketing strategy.
- 4.10.9 The Contractor shall ensure that the first time a Customer uses the 'Tag in a Bag' and a Transaction Record is generated, the Customer Account is updated with the VLN and class of vehicle from the Transaction Record, however for first time usage at the Toll Agencies, Mobility and or Value Added Service, a simple but easy to follow registration process is to be completed by the road user. The TCH shall monitor subsequent Transaction Records to ensure that the initial VLN and class are correct, and the Contractor shall be advised when this is not the case. The Customer may continue to use the Tag until the discounted trips expire or a top up payment is made to keep the account in credit. The instructions in the bag will describe the steps in setting up and operating a Customer Account.
- 4.10.10 The Contractor shall continuously monitor and ensure that it holds stocks of Tags, Tag in a Bag, holders, cleaning wipes, fitting instructions and related consumables to meet the estimated requirements of all Customer Service Centres, Appointed Agents and other locations where Tags may be issued to Customers.
- 4.10.11 The Contractor shall ensure that at each stage of the life cycle of a Tag, appropriate entries are made onto the stock control system so that the status and records of each Tag is always known and available.
- 4.10.12 The Contractor shall ensure that any payments required for lost, stolen or damaged Tags required by the Project Business Rules (C3.5.2) are received and accounted for as part of the Customer Accounts system.
- 4.10.13 The Contractor shall be responsible for the secure operation of the DSRC between Tag and RSS System and shall manage changes to the Security Keys used to protect the communication to ensure that it remains secure.

4.11 TRANSACTION PROCESSING

- 4.11.1 The management of Transaction Records received by the TCH shall be subject to detailed review by the Contractor and shall propose a detailed methodology in the Operation and Maintenance Plan. This shall be kept under continuous review as experience is gained and proposals for modification may be made to the Employer at any time when the Contractor is of the opinion that operation and/or Customer Service would be improved by a change.
- 4.11.2 The proposals for management of Transaction Records shall be developed taking into account the need to provide a good standard of service to Customers and hence treat them reasonably in the event of a potential misuse of an account while at the same time being sufficiently strict to ensure that abuse of the system is minimised. This shall be as defined in the Project Business Rules (C3.5.2).
- 4.11.3 The proposed management described below shall be treated as an initial proposal rather than a definitive requirement and the Contractor shall review it in detail and shall use it as a basis for their proposed methodology unless the contractor can demonstrate that a more effective method exists. Any methodology adopted must ensure that the KPIs, particularly in relation to Over and Undercharging of Customers are met.
- 4.11.4 The Contractor shall keep in the TCH system data base a record of each Transaction Record received and the action taken with it. This record shall include the Transaction Record Identifier. The record shall be used as a basis for reporting and comparison with records held by Toll Agencies to ensure that all Transaction Records are properly accounted for. It shall be used for checking the status of any received Transaction Record. As the Transaction Record is further processed and allocated to an account and payment made to the Toll Agency, or it is sent to the VPC, the record shall be continuously updated.
- 4.11.5 The TCH shall receive from a Toll Agency and or other Value added service provider, Transaction Records for Chargeable Events that have occurred place within their jurisdiction. The Transaction Records may be of different types namely:
- 4.11.6 Transaction Records for vehicles that appear on the Validation List (Green) issued by the TCH i.e. vehicles associated with a recognised Customer Account and where all details are fully in accordance with the Validation List (Green);
- 4.11.7 Transaction Records for vehicles where two Identifiers (Tag Number and Vehicle Licence Number) are as on the Validation List (Green) but the vehicle class is different;
- 4.11.8 Transaction Records for vehicles where one Identifier (Tag Number or Vehicle Licence Number) is as on the Validation List (Green), but the other is different or not present. The vehicle class may or may not be as appears on the Validation List (Green);
- 4.11.9 Transaction Records for vehicles with an Identifier present, normally a Vehicle Licence Number, but that doesn't appear on the Validation List (Green);
- 4.11.10 Transaction Records for vehicles with no Identifier present.

- 4.11.11 Transaction records for Account Based Ticketing (ABT) for Value-Added Service (VAS) implementations

- 4.11.12 The TCH system will verify various aspects of all Transaction Records received to ensure compliance and conformity to the Project Business Rules and are Valid Transaction Records. The TCH system may reject non-valid Transaction Records and advise the Toll Agency or other Value added service provider with a Reconciliation Code. The Contractor may be required to liaise with the Toll Agency/ Value Added service provider generating the rejected Transaction Records and to advise on the details of the reasons for rejection.

- 4.11.13 Transaction Records received by the TCH may or may not have a copy of an Evidential Record appended, as defined in the Project Business Rules. An Evidential Record will not normally be provided when the details of the vehicle causing the Chargeable Event to conform completely to a record contained on the Validation List (Green). Where there is any discrepancy, the Evidential Record will be present so that the TCH and or VPC may check the details if required.

- 4.11.14 Transaction Records received by the TCH shall conform to the specified standards for accuracy and hence shall not normally require manual or other verification but may require verification for other reasons. The Contractor shall, however, operate a programme of random verification of records received to ensure that the performance requirements related to Transaction Records being sent from a Toll Agency or other value-added service provider are met. The degree and extent of such verification shall be defined within the Contractors Operation and Maintenance Plan and shall be aimed at ensuring that the Contractor is able to meet their performance requirements, particularly in relation to over and under charging.

- 4.11.15 Where the Contractor verifies Transaction Records and determines that their quality does not meet the performance requirements, the Contractor may reject them and advise the originating Toll Agency or other value- added service provider. These may be verified by the originating entity and if necessary corrected and resubmitted or may not be re-submitted. Where there is a consistent failure to meet KPIs, the Contractor shall advise the Employer of the details of the failure and any impact such failure may have on their ability to meet the KPIs.

- 4.11.16 Local Discounts have already been applied to Transaction Records that have been received and this shall be verified by the TCH when the Transaction Record is allocated to the Customer Account. Should there be a future agreement with the Toll Agency and or other value added service provider to apply Discount at the TCH, that will be done before allocation to the Customer Account and the Toll Agency or other value added service provider will be advised of the application of the Discount. The Contractor shall ensure that the appropriate Discounts are applied, and such Discounts are applied accurately as a failure will negatively impact the Over and Under Charging performance requirements (C3.5.1).

- 4.11.17 Receipt of Transaction Records for a Vehicle on the Validation List (Green) - Compliant Transaction Record

- 4.11.18 A Compliant Transaction Record shall include a Tag Personal Account Number where one is shown on the Green List together with a VLN but will include a VLN only where an account is based upon a VLN and no Tag has been issued.

- 4.11.19 On receipt of a Compliant Transaction Record for a vehicle on the Validation List (Green), i.e. one with an active Customer Account, the TCH shall undertake an automatic check to ensure that the details of the Transaction Record conform fully to those on the Validation List (Green) and if they do, the Transaction Record shall be allocated to the account.
- 4.11.20 Where the details of the Transaction Record are found not to be fully in accordance with the Validation List (Green), it shall be treated as a Partially Compliant Transaction Record. In dealing with a Partially Compliant Transaction Record, the Contractor shall use the Tag Personal Account Number as the primary Identifier of the Customer Account, even for an Incomplete Transaction where there is sufficient to identify the Tag, as defined in C3.4.2 - General System Specifications. The secondary Identifier shall be the Vehicle Licence Number.
- 4.11.21 Receipt of Transaction Records for a Vehicle on the Validation List (Green) - Partially Compliant Transaction Record.
- 4.11.22 A Transaction Record may be a Partially Compliant Transaction Record under the following circumstances:
- 4.11.22.1 A Tag was present in the vehicle and undertook a transaction, but the Vehicle Licence Number was not in accordance with the Validation list (Green) as being associated with that Tag;
- 4.11.22.2 A Tag was present in the Vehicle and undertook an incomplete DSRC transaction, but sufficient to identify the Tag Personal Account Number and that and the Vehicle Licence Number was in accordance with the Validation list (Green);
- 4.11.22.3 A Tag was present in the Vehicle and undertook an incomplete DSRC transaction, but sufficient to identify the Tag Personal Account Number but the Vehicle Licence Number was not in accordance with the Validation List (Green);
- 4.11.22.4 A Tag was present in the Vehicle and undertook an incomplete DSRC transaction that was insufficient to identify the Tag Personal Account Number, but the Vehicle Licence Number was included on the Validation List (Green);
- 4.11.22.5 No Tag was detected in the Vehicle, but the detected Vehicle Licence Number was included on the Validation List (Green), either for a Vehicle that has had a Tag allocated or where a Tag has not been allocated;
- 4.11.22.6 A Transaction Record as in the categories listed above but the Vehicle Class is not in accordance with the Validation List (Green).
- 4.11.23 The Customer Agreement for a Customer Account and instructions given to Customers shall make it clear that a Tag is only to be used in a Vehicle for which it was issued, which will be of a defined class. Where it is clear that the Tag is being associated with an incorrect VLN (and/or class), the Customer is not abiding by the terms of their agreement, the Contractor shall develop procedures for handling mis-use in accordance with the Project Business Rules but initially the TCH would issue a warning to the Customer and then, if the mis-use continued it would be treated as a Potential Violation. The Contractor's Operation and Maintenance

Plan shall define the requirements and the circumstances under which misuse will be treated as a potential Violation. Under all circumstances of suspected misuse, it would be expected that the Contractor would conduct a manual check of the Transaction Record and the associated Evidential Record before taking action.

- 4.11.24 If the Transaction Record is found to be incorrect and the actual Vehicle Licence Number derived from the Evidential Record is not as indicated in the Transaction Record, the Contractor shall ensure that the TCH sends a Transaction Record rejection message to the Toll Agency with a Reconciliation Code. The Transaction Record may be corrected by the Toll Agency and resubmitted.
- 4.11.25 If the Tag Number is correct, but the Vehicle Licence Number is not in accordance with the Validation List (Green) (and the Validation List (Green) is confirmed as correct), and the Vehicle Class is in accordance with the Validation List (Green), the record shall be allocated to the Customer Account but a message shall be sent to the Customer advising of the discrepancy. If the Vehicle Class is not in accordance with the Validation List (Green), the Transaction Record shall be applied to the Customer Account with the Toll adjusted to be correct for the Actual Class and a message shall be sent to the Customer advising of the discrepancy.
- 4.11.26 Where there is an Incomplete DSRC Transaction which provides a Tag Personal Account Number, that shall be treated as satisfactory for charging purposes and the Transaction Record shall be dealt with normally.
- 4.11.27 Where there is an Incomplete DSRC Transaction or no DSRC Transaction, but the Vehicle Licence Number confirms a Vehicle on the Validation List (Green) (with or without an associated Tag listed), the VLN shall be taken as sufficient identification of the account. When the vehicle class in the Transaction Record corresponds with that on the Validation List (Green), the Transaction Record shall be allocated to the account. When the vehicle class is different, this will be indicated on the Transaction Record and the Transaction Record allocated to the account, with a revised Toll if appropriate and the Customer shall be advised of misuse.
- 4.11.28 Receipt of Transaction Records for a vehicle with no entry on Validation List (Green) - Identifier present
- 4.11.29 When a Transaction Record is received by the TCH for a vehicle with no entry on the Validation List (Green), the TCH shall check the list of Automatically Allocated Accounts to determine if one has been set up to which the Transaction Record can be allocated. If it has and the Transaction Record detail accords with the details of the vehicle for which the account was set up, the Charge shall be allocated to that account.
- 4.11.30 If a Transaction Record is received for which there is no existing Automatically Allocated Account, the TCH shall set up a new account and allocate the Transaction Record and any subsequent Transaction Records for the same vehicle to it.
- 4.11.31 Receipt of Transaction Records for a vehicle with no entry on Validation List (Green) - Identifier not present;

- 4.11.32 When a Transaction Record is received by the TCH with no Identifier present (i.e. no Tag Number and no readable Vehicle Licence Number), the TCH shall allocate the Transaction Record to an Unidentified Vehicle Account. The allocation shall seek to group vehicles of similar class or in another way so that if a Road User approaches the TCH or a Customer Service Centre Facility to pay for Vehicle Passages for such a vehicle during the Grace Period, the Contractor involved has some assistance with identifying the Transaction Records involved.

4.12 KEY ACCOUNT HOLDERS

4.12.1 Introduction

4.12.2 It is of importance that account registration and tag distribution continues to grow during the Contract Operations Period.

4.12.3 Key Account Holders contributes a significant percentage of the revenue of this Project and therefore, the management and maintenance of Key Account Holders' relationship similar to that of the general road user, is important. The Contractor is required to efficiently manage Key Account Holders, by adopting a partnership approach, to co-ordinate strategic dimensions of key account management, which centres on relationship building as a core function, focusing on the service levels through the day to day interaction encompassing pre-prescribed quality standards through specific system interfaces and processes.

4.12.4 The Contractor shall have the following objectives -

4.12.4.1 Providing easy and efficient account registration, bulk registration, tag distribution, satisfactory query resolution and payment solutions to Key Account Holders;

4.12.4.2 Maximizing account registrations and tag penetration;

4.12.4.3 Facilitating typically noncompliant organizations to become compliant road users in order to boost the compliance and payment rate thus reducing the violation/ non-compliance rates;

4.12.4.4 Facilitating non-compliant organizations in becoming compliant by efficiently assisting with their VPC queries and accounts and assisting to register;

4.12.4.5 Providing a level of service and support commensurate with the requirements and expectations of the Key Account Holder group:

4.12.4.5.1 Courteous customer service with a full back office support team dedicated to the Key Account Holders for query resolution in an agreed timeframe;

4.12.4.5.2 Individualized solutions to the various Key Account, including dedicated Key Account Liaison Officers (customer service relationship management);

4.12.4.5.3 An executive resource to manage relationships with Key Account Holders and the operations.

4.12.4.6 User friendly accessibility through multiple channels of communication, including dedicated access.

4.12.4.7 Optimizing the accuracy of data captured when self-managed by the Key Account Holder;

- 4.12.4.8 Supporting the communications message of the ORT projects;
- 4.12.4.9 Reducing the load on general customer service operations.
- 4.12.5 Criteria for Key Accounts Holders
- 4.12.6 Description of a Key Account Holder (KAH)
 - 4.12.6.1 The term “Key Account Holder” excludes individuals. It may be an organisation, a government department etc., and includes the following motivation to become a Key Account Holder:
 - 4.12.6.1.1 An organisation that requires one account with **more than 500 account units (vehicles)** whether registered to the ownership with NaTIS, leased, hired or loaned; and
 - 4.12.6.1.2 An organisation that **requires payment terms** other than the payment terms specified in the Terms and Conditions, i.e. payment after grace period with interest, and approved by the Employer
 - 4.12.6.2 A large Key Account Holder is defined as a Key Account Holder with a thousand (1000) or more vehicles registered on the KAH system.
 - 4.12.6.3 A Small Key Account Holder is defined as a Key Account Holder with less than a thousand (1000) vehicles registered on the KAH system.
 - 4.12.7 Key Account Holder’ s Qualifying Criteria
 - 4.12.7.1 The Key Account Holder will be responsible for their system development cost. The Contractor shall assist the Key Account Holder with information, process, and training in relation to the KARS;
 - 4.12.7.2 The Key Account Holder must meet their requirements imposed by the Employer;
 - 4.12.7.3 The Key Account Holder must undergo a certification process of the interface;
 - 4.12.7.4 The Key Account Holder must conclude an agreement with the Employer;
 - 4.12.7.5 The Key Account Holder needs to reserve the right whether they choose to register their account units with an e-tag option or VLN only option. Should the Key Account Holder register with VLN only option or change from being registered with an e-tag option to a VLN only option, the Key Account Holder agreement must reflect the changes and the impact of the changes;
 - 4.12.7.6 The Key Account Holder must have a minimum of 50 vehicles; and

4.12.7.7 The Key Account Holder must not be registered via a Fleet Bank.

4.12.8 The Key Account Interface Description

4.12.8.1 The Contractor is required to provide a software and hardware minimum requirements proposal to enable the software that is developed to interface with the Key Account Registration System (KARS). In this regard, please note:

- (a) Bulk Key Account Registration – the Contractor must provide an interface to allow for bulk registrations. The Contractor must provide the requirements to make use of this registration tool.
- (b) Key Account management interface module with third parties – the Contractor must provide for a bulk account management solution for Key Account Holders, as defined in the criteria above. This interface will enable Key Account Holders access to online TCH information, in accordance with the terms and conditions of use, as agreed by the Employer. The Contractor must provide specification requirements for parties who wish to integrate with this management tool.
- (c) Hardware – KARS will be hosted on the current TCH server cluster; however, a separation needs to be made in terms of levels of support.
- (d) IVR – an additional module to the existing IVR is anticipated, where a Key Account customer can input a PIN into the IVR system in order to be routed directly to the Key Account group assigned to their account.
- (e) Licenses – additional third-party licenses are required for the interface, being SFTP/ FSTP licenses to meet the Fleet Bank’s requirement as well as SQL enterprises licenses.
- (f) Works stations – the Contractor must provide for hardware and software maintenance for typical back-office workstations.
- (g) Maintenance – the Contractor must provide for and facilitate the take on of additional interfaces.

4.12.9 The Key Account Operations

4.12.9.1 The Contractor is required to provide a proposal to establish and operate Key Account functions in order to service the needs of this Road User group. In this regard, please note:

- (a) The Contractor must provide a direct service to Key Account Holders and shall implement the Key Account Holder agreements;
- (b) The Contractor is required to provide a bulk registration process to Key Account Holders;
- (c) The Contractor is required to provide full tag management, by assisting Key Account Holder’s with stock management. The Contractor must recover surplus tags in stock

from Key Account Holders on a regular basis in order to avoid large quantities of surplus tag build up at the Key Account holders;

- (d) The Contractor must handle all Key Account Holder queries from the Key Account Back Office in an agreed timeframe so as not to cause delay in query resolution;
- (e) The Contractor must provide Key Account Holders with up to date communications in order for the Key Account Holder to notify the end users, where applicable;
- (f) The Contractor must submit invoice and statements to the Key Account Holder timeously in order to avoid potential loss of income to the KAH and /or to the Contractor;
- (g) The Contractor must operate a service to allow Key Account Holders to efficiently modify their accounts including changing personal and vehicle details associated with the account.
- (h) The Contractor shall manage the Key Account Holders. On a monthly basis, the Contractor must:
 - i. Maintain a list with Key Account Holders indicating the number of registered vehicles on the KAH system, as generated by the system.
 - ii. Provide system generated reports for statistics required to substantiate payments, e.g. number of calls.
 - iii. This list shall be submitted with each payment certificate.
 - iv. The correct management fee is applied to the Key Account Holders
- (i) The Contractor must provide monthly comprehensive reporting including but not limited to the following system generated and/or operational reports:
 - i. Number of Key Account Holders
 - ii. Total Accounts and Account Units
 - iii. Daily Registration Overview (Registrations and De-Registrations)
 - iv. The Top 5 Accounts with huge volumes of unit registration
 - v. Total Number of queries for the operating month
 - vi. Breakdown of the said queries
 - vii. History on the 'open' queries per month (only the number of queries)

- viii. Financial reporting including the
- ix. Total amount Invoiced
- x. Total amount paid
- xi. Outstanding balance (total)
- xii. Outstanding balance per Key Account Holder
- xiii. Age analysis (financial) per Key Account Holder and summary thereof
- xiv. Summary/ overview of the 'outstanding' issues
- xv. Progress and process followed relating to;
 - Outstanding debt of Key Account Holders
 - Lost /Stolen /Damaged Tags and where applicable, invoicing for the Lost/ Stolen/ damaged tags
 - Surplus/unutilised tags and the reclaim process and quantity
 - Resolution on 'open' queries
 - Disputes
- xvi. The approved minutes following meetings with Key Account Holders
- xvii. Audit trail of tags ordered by Key Account Holders
- xviii. Tags /brackets distributed and returned to/ by Key Account Holders
- xix. Loss of income (due to system and /or operational errors), how is reported and the recovery or accountability process/ progress

4.13 CORPORATE USER ACCOUNT HOLDERS

- 4.13.1 The requirements for Corporate User Account Holder are defined in C4.5.1 – Draft Corporate User Requirements

4.14 CUSTOMER SERVICE

4.14.1 Customer Service shall be provided and or taken over in a number of different ways as follows:

4.14.1.1 By means of a Call Centre provided by/arranged by the Contractor;

4.14.1.2 By means of a Web Site provided by the Contractor;

4.14.1.3 By means of KARs provided by the Contractor;

4.14.1.4 By means of Customer Service Centre Facilities of various varieties provided by the Contractor (responsible for ORT BO Operations) as part of the ORT BO, as defined in C3.3.2 - Open Road Tolling Operations, Specification;

4.14.1.5 By means of Customer Service Centre Facilities that may be set up by other Toll Agencies;

4.14.1.6 By means of arrangements set up by the Contractor, with the approval of the Employer, with third party service providers such as appointed retail agents, appointed VAS Service Providers, wireless application service providers and System Operators in the banking and payments sector and Banks.

4.14.2 The Contractor shall develop suitable draft service level agreements for approval by the Employer that will form the basis of contractual relationships between third parties and the Contractor /Employer. The service level agreement shall ensure that the third party provides an appropriate standard of service for Customers and ensure that appropriate levels of checking of the applicants, the vehicle details and the applicant' s financial details is carried out such that it can be reasonably ensured that the basis of the account is sound. Any arrangements whereby payments are received on behalf of the TCH shall be subject to detailed Project Business Rules and checking to ensure that the payments are properly accounted for and in all cases, the Customer is given a suitable proof of payment that may use in the event of any dispute.

4.14.3 Third parties to be approached shall be selected with the intention of improving Customer service and managing of the account, including payment into it as easy as possible, while maintaining appropriate levels of security. The Contractors Operation and Maintenance Plan shall detail their proposals for approval by the Employer before any approach is made to third parties and these shall normally be as defined by the Employer' s marketing strategy. Additionally, System Operators in the banking and payment sector and retailers may be able to offer flexible and comprehensive service, particularly for Tag in a Bag distribution and account top up.

4.14.4 The Contractor must take note, while approaching third parties, all accounts will be set up on the TCH system and access to them must either use a standard Web style terminal to be provided under the TCH Supply Contract or must use the standard secure web style interface to be provided. It will be important for the Contractor to ensure that the terminals and interface to be provided are completely suitable for the use to which he intends to put them in the provision of Customer Services.

- 4.14.5 The Contractor shall, as required by the Employer, liaise with and enter into agreements with the Toll Agencies and VAS Service Providers as necessary for provision of Customer Service Centre Facility and shall ensure that the centres are able to provide the necessary standards of service, particularly during account set up. Where the Contractor believes that the level of service will fall short of requirements due to limitations in facilities being provided/proposed by the Employer in their marketing strategy, particularly in the initial period of account set up and operation, the Contractor shall make proposals to the Employer to provide additional capacity on a temporary basis or to take other steps as may be necessary to ensure that a good standard of Customer Service can be maintained.
- 4.14.6 The Contractor will be responsible for monitoring the performance of Appointed Agents and Customer Service Centre Facilities, including those provided by the ORT Back Office to ensure that they are providing service at levels in accordance with the appropriate KPIs and agreement. The Contractor will investigate any complaints from Customers either received directly or through the Employer or other means and shall ensure that a satisfactory and reasonable response is provided within a reasonable timeframe
- 4.14.7 The Contractor shall be responsible for ensuring that the performance of the third parties in terms of collecting accurate data on vehicles and Value-Added Service (VAS) implementations, and where necessary, Customers, are maintained.
- 4.14.8 Facilities to be provided by Toll Agency Customer Service Centre Facilities on behalf of the TCH shall generally include the following, but Appointed Agents provision may be more limited:
- 4.14.9 Provision of general information about the tolling services and facilities covered by the system;
- 4.14.10 Provision of facilities for setting up Customer Accounts for individuals (it is expected that, at least initially multi vehicle commercial Customer Accounts will be set up directly with the TCH);
- 4.14.11 Provide facilities for Customers to pay funds associated with Customer Account set up and provide banking information to enable automatic top up. Such banking information will be automatically checked via the banking industries Account Verification Service during the account set up process;
- 4.14.12 Provide a means for checking that correct vehicle details are supplied by making a direct check with information available at the TCH, received from NaTIS;
- 4.14.13 Provide a means for checking the correctness of address details supplied by Customers;
- 4.14.14 Provide facilities for Customers to check their account balances and obtain a statement of previous Transaction Records and to obtain a copy Tax Invoice;
- 4.14.15 Provide facilities for a Customer to make a payment into the account by using a banking industry supported electronic payment method or by making a cash payment;

- 4.14.16 Provide facilities for a Customer to change details of their account including their personal or banking details or the vehicle associated with the account. In the latter case, the Customer may be required to return the Tag and will be issued with a new one or may associate the Tag with the new vehicle;
- 4.14.17 Provide facilities for a new vehicle to be added to a Customer Account, on production of satisfactory vehicle details;
- 4.14.18 Provide details for individual Transaction Records to be checked by a Customer (including checking images captured);
- 4.14.19 Provide a means for a Customer (or Customer Service representative acting on their behalf) to register a query or complaint relating to one or more disputed Transaction Records with reasons for the dispute (to be taken up by TCH);
- 4.14.20 Provide secure account name and password protection for a Customer to access account details and include means for Customer to change their password;
- 4.14.21 Provide a means for a Customer to provide details of apparent mis-operation of Tag (or account) and for arrangements to be made for a check, including checking Tag operation;
- 4.14.22 At ORT Back Office Customer Service Centre Facility, provide facilities for Tag checking and provision of a replacement for a faulty Tag (including updating a Customer Account). Provide fitting service for and provision of new holders where previous one has become broken or displaced;
- 4.14.23 TCH Customer Service
 - 4.14.23.1 The Contractor shall set up and or take over and operate its own customer service centre to handle applications for accounts and operation of accounts that take place by telephone, by email, via the Web access facility and by postal service. It is not expected for the Contractor to set up their own centre to interface 'face to face' with customers at the TCH, although if the Contractor feels that this is necessary, the Contractor may do so, subject to the approval of the Employer.
 - 4.14.23.2 The customer service centre shall operate in accordance with the defined performance criteria and shall be monitored by the Contractor and details of operational performance shall be provided to the Employer. The Contractor shall provide access for independent auditors who may be employed to undertake independent performance audits from time to time in accordance with the Contract.
 - 4.14.23.3 The Contractor shall base their planning on the assumption that any accounts that are set up or set up by third party customer service centres shall involve the issue of a Tag at a Toll Agency Customer Service Centre Facility or the purchase of a 'Tag in a Bag' from an Appointed Agent. The Contractor shall have a contingency plan for mailing Tags to customers that may be brought into operation if it appears that the existing facilities are not able to cope with the demand and unacceptable delays to Customers are being experienced.

- 4.14.23.4 The TCH shall ensure that all payments to accounts and Transaction Records related to accounts are allocated to the accounts and the accounts updated within a reasonable time of the payment or Transaction Record taking place in accordance with the KPIs and Project Business Rules. The updates shall be available for checking by Customers on the web or other means of access that may be provided.
- 4.14.24 Web Access Facility
- 4.14.24.1 The Contractor shall ensure that a fully featured Web based facility is provided and or taken over and kept updated. This shall provide full information to the public on the Gauteng ORT system, any value added services offered and information and provide links to the web sites of any other Toll Agency that are interfaced to the TCH. It shall provide access to the more general Employer Web site and sections of the Web Site dealing with enforcement provided by the VPC.
- 4.14.24.2 The TCH Web site shall enable a Road User to set up a Customer Account and shall provide full access for the operation of that account including obtaining statements and Copy Tax Invoices as well as arranging payments to that account, through an e-commerce gateway to be arranged by the Contractor.
- 4.14.24.3 The TCH Web site shall allow a Customer to view images associated with Transaction Records for vehicles on their account, within the time constraints for keeping such images imposed by the Project Business Rules.
- 4.14.24.4 The Contractor shall provide and keep updated a Web based facility that may be the same facility, which allows its own operational personnel and operational personnel in the Customer Service Centre Facilities (including those operated by non ORT Toll Agencies) to access the TCH and perform the required functions in relation to Customer Account set up and operation, including but not limited to arranging and recording payments and payment means, providing update toll tariffs and related information. Depending upon agreed arrangements, access to the TCH system via a web interface may be provided for Appointed Agents.
- 4.14.24.5 Access to the system shall be controlled at several different levels with differing degrees of security and access requirements. The base level providing general information to the public shall be generally available with no particular security requirements. The next level shall provide a facility for a Customer to set up an account and the data provided by the Customer shall be securely protected against unauthorised access, particularly personal data as covered by data protection legislation and any financial/banking data that may be provided. The next level shall be accessible to Customer Account holders only and shall be subject to normal username and password protection, or other such improved levels of protection that the Contractor may propose, particularly in relation to security when making payments through the e-commerce gateway. This will represent the highest level of access that is available from the public web site.
- 4.14.24.6 In addition to the access identified above, a higher level of access shall be provided to Customer Service Centre Facility operators and will be subject to higher levels of security. This access will allow an operator to access any Customer Account or Automatically Allocated Account to modify or add selected account information, to record payment information and to access Transaction Records. Under no circumstances will modification or deletion of

Transaction Records be allowed, although under carefully controlled circumstances, additional information may be appended to a Transaction Record.

- 4.14.24.7 Depending upon system design, higher levels of access may be allowed to controlled members of the TCH personnel to perform their functions in relation to managing Transaction Records and dealing with accounts. Again, under no circumstances will modification or deletion of Transaction Records be allowed or modification or deletion of any related data that may result in misreporting or mis-recording of Transaction Record or account data.
- 4.14.24.8 The Web site access facility shall be designed to be very user friendly and shall not assume a particular level of familiarity with the internet and usage of similar types of web site.

4.14.25 Call Centre Operation

- 4.14.25.1 The Contractor shall provide and or take over a Call Centre service for the public and Customers that is designed and staffed to meet the relevant performance level requirements especially when but not limited to the following: various campaigns/ promotions/ bulk communications/ etc. are being held. The Call Centre telephone number will be the main number for Customer queries on all aspects of the ETC operation and the initial response to the call shall be to seek an outline of the nature of the call and if more appropriate to the VPC, it shall be routed through to the VPC Call Centre.
- 4.14.25.2 The Call Centre shall be able to provide relevant information about tolling and the Toll Agency facilities connected to the TCH, specific information about individual toll levels and locations of Tolling Points.
- 4.14.25.3 The Call Centre shall provide a facility for a Customer to set up a Customer Account, access details of an existing Customer Account, make payments using allowed methods and query individual Transaction Records. Access to an existing account shall be subject to security checks.
- 4.14.25.4 The Contractor shall be able to set up an account for a caller and the caller must provide similar details as would be necessary if it was set up on the web site. The Contractor shall be able to make appropriate on-line checks of the data provided and where the NaTIS database is incorrect, shall advise the Customer when there is a discrepancy.
- 4.14.25.5 The Contractor shall be able to take payments into a Customer Account using a Card Not Present transaction for valid credit card on behalf of the Customer or provide details of balances and Transaction Records as well as make amendments to the account. The Contractor shall only access such information and provide details subject to provision of correct answers to the security questions associated with the account by the Customer.
- 4.14.25.6 The Contractor shall be able to call up details of individual Transaction Records if requested by a Customer and shall be able to discuss these in general terms, and shall be able to take any specific action or escalate as required to deal with any issues that may be raised by the Customer. The operator may, however, provide information to the Customer on how to raise questions on Transaction Records or make a formal complaint when there is a dispute. (A formal complaint must be made personally by the Customer either at a Customer Service Centre Facility or on the Internet or by post and hence should not be allowable via an operator).

4.15 SAFETY AND SECURITY

- 4.15.1 The general requirements for Safety and Security are defined in C3.3.1 - General Operations Specification.
- 4.15.2 As the Contractor will access to customers Personal Data, the Contractor shall ensure that their operation in relation to the data shall be in accordance with the latest legislation and associated requirements in South Africa. Where Personal Data is collected by other Entities or Appointed Agents on behalf of the TCH, the Contractor shall ensure that their agreements with those Entities require that they meet appropriate requirements and the Contractor shall, as part of their supervision of the agreements, require the other Entities to provide proof that that they are appropriately handling such data at all times.

4.16 FRAUD DETECTION AND PREVENTION

- 4.16.1 The Contractor shall set up and or take over and be responsible for the operations of a comprehensive series of checks/ verifications and investigations to minimise the risk of Fraud and to detect any instances that occur. This shall include fraud being attempted by Customers and Road Users, by other Entities that have a business relationship with the Contractor, by the general public trying to gain access to the TCH system and internal fraud that may be attempted by members of TCH personnel.
- 4.16.2 The Contractor shall, as part of their proposed Operation and Maintenance Plan describe the proposed fraud detection and prevention procedures and facilities the Contractor intends to implement for the approval of the Employer. Where the contractor intends to utilise facilities included within the TCH system itself, this shall be described in detail, and where the Contractor intends to utilise additional external facilities, details shall be provided.
- 4.16.3 The Contractor shall ensure that each and every Transaction Record that enters the TCH from any Toll Agency and or other entities is fully accounted for and either results in a payment from a Customer or the VPC or has been written off by the VPC as being uncollectable (which is approved by the Employer).
- 4.16.4 The Contractor shall regularly exchange lists of numbers and types of Transaction Records received from or sent to other Entities having a business relationship to the TCH and to ensure consistency in the transfer of Transaction Records between Entities. In the event that an inconsistency is found, the Contractor shall fully investigate together with the other concerned operator/ entity and shall provide a report to the Employer.
- 4.16.5 The Contractor shall regularly undertake a reconciliation of number of Transaction Records and payments at various stages within the TCH Transaction Record processing system to ensure that the numbers are consistent, and all Transaction Records and payments are accounted for.
- 4.16.6 The Contractor shall ensure that the TCH system itself and their proposed operations do not under any circumstances allow Transaction Records or payment records to be deleted. Where a change is necessary to a record, it shall be achieved by the appending of a sub-record to the Transaction Record rather than a change to the record itself.
- 4.16.7 The Contractor shall ensure that the TCH system and their operation are such that a regular audit can be conducted to confirm that there are no irregularities in the operation or to identify any irregularities that have occurred.
- 4.16.8 The Contractor shall conduct regular internal audits of their system to identify any irregularities. The Contractor shall ensure that external audits required by normal business processes and rules are carried out and shall co-operate fully with any independent auditors employed in accordance with the Contract to check and confirm operations.
- 4.16.9 The Contractor shall conduct checks of all Transaction Records received to detect any potential misuse by Customers or other Road Users of Tags or number plates or other matters

associated with ETC. The Contractor can assume that the Transactions Records received from a Toll Agency will have been checked against entries on the Validation List (Green) and hence should be valid and accurate to within the accuracy required by the KPIs. Transaction Records received with no Tag Identifier may include the use of duplicate number plates or plates with false Vehicle Licence Numbers. Duplicate number plates may mean that the user/holder of the genuine plates would be charged for Chargeable Events that he did not make, which would be an overcharge. The Contractor shall ensure that the TCH system undertakes analysis of Transaction Records, particularly those without a Tag Identifier to check for inconsistency of use of the vehicle that may suggest that duplicate number plates are being used. The Contractor shall then investigate each case highlighted by the system.

- 4.16.10 The Contractor shall thoroughly investigate any suggestions by Customers that Transaction Records are appearing on their account that are not related to their vehicle. If a duplicate number plate situation is detected, the Contractor shall correct the account. The Contractor shall take appropriate steps to ensure that Transaction Records without a Tag Identifier and including the duplicate number are always verified before application to the Customer Account and that the details of the vehicle with the duplicate number plates is reported to VPC for attention of a Mobile Patrol.

4.17 FINANCIAL MANAGEMENT

- 4.17.1 The Contractor shall undertake their main Financial Management function using Operation Accounts as set out in C3.5.3 Financial Management.
- 4.17.2 The Contractor shall set up and or take over operate an Operational Account for business relations with all Entities and other organisations that the Operator has a business or contractual relationship with.
- 4.17.3 The Operation Account shall contain details of all activities undertaken related to the other Entity or organisation and all data passing between them. It shall be structured so that it is a self-contained record of activities forming part of the business relationship and allows audit and clear provision of data in the event of any dispute.
- 4.17.4 The Contractor shall prepare and or take over (or receive) statements/Tax Invoices for/from each Entity/organisation that the Contractor has a business relationship with. Statements received shall be checked/ verified and any discrepancies or errors taken up with the issuer. Where queries are raised, the Contractor shall check/ verify any queries raised on statements/Tax Invoices issued by him and shall respond appropriately. Inter Entity payments or payments to/from another organisation shall be made and recorded in accordance with the agreed terms of the service level agreement.
- 4.17.5 Each month, the TCH shall prepare a summary statement on inter Entity payments or payments to/from other organisations with which it is involved for submission to the Employer. This shall highlight any significant discrepancies and the resolution of any issues, if appropriate and explanation of any un-resolved issues.

4.18 LAW ENFORCEMENT

- 4.18.1 No law enforcement is expected to be carried out by the Contractor. The Contractor shall, however, fully support the VPC in their activities in dealing with Violations. This will include, but not be limited to:
- 4.18.2 Provision of Transaction Records generated by Opt-In Toll Agencies to the VPC associated with Automatically Allocated Accounts or the Unidentified Vehicle Account for which no payment has been received during the Grace Period within a maximum period as defined in the performance requirements;
- 4.18.3 Provision of Customer Account details and associated Transaction Record details for which no payment has been received and where the Contractor has exhausted all agreed processes to collect the outstanding debt;
- 4.18.4 Full investigation of any alleged payment that a potential Violator claims to have made but does not appear as a payment record on the TCH System.
- 4.18.5 Make available up to date Validation List (Red) and VOSI lists to Toll Agencies as required to prevent unauthorised use of the toll facilities and to assist enforcement personnel with the apprehension of Violators.

4.19 MAINTENANCE

- 4.19.1 The Contractor shall ensure that all maintenance services required to ensure that the System and its operation is able to meet the required KPIs are performed. Where it is found that by operation of the existing system, the Contractor is not able to meet the KPIs, the Contractor shall take appropriate steps to upgrade the system to enable the requirements to be met. Such upgrading shall only be undertaken after a full report has been provided to and accepted by the Employer.
- 4.19.2 The maintenance services shall include replacement of any equipment that is damaged or life expired, including ensuring that Spare Parts provided under the Design Build part of the Contract are properly maintained and replaced if utilised for provision of maintenance services.
- 4.19.3 The Contractor shall ensure that full system support is provided during operation to ensure that issues that arise in relation to system operation can be speedily resolved without affecting the KPIs.
- 4.19.4 The Contractor shall ensure that the system and all aspects of its operation are fully functional as part of their hand back requirements.

4.20 PERFORMANCE MONITORING

- 4.20.1 The Contractor shall ensure that the performance of the system and operations and, as appropriate the performance of connected Entities or other parties that interfaces to and whose performance may affect the ability of the Contractor is monitored in order to meet the prescribed KPIs as set out in C3.5
- 4.20.2 The methods proposed for Performance Monitoring described in the TCH Operations and Maintenance Plan shall be approved by the Employer. In proposing methods, the Contractor shall ensure that such methods are easy to monitor and audit.

4.21 REPORTING

4.21.1 Introduction

4.21.1.1 C3.3.1 - General Operations Specification provides requirements for general reports that are required to be provided by the Contractor. This section defines specific report required related to TCH Operations.

4.21.1.2 The Contractor shall regularly supply at least two different TCH Operations related reports to the Employer, The first being the Financial and Revenue Report that will be produced during the Operations Period and will detail revenue received and the overall financial situation as it relates to the TCH. The second being a report on Operations and Performance that will be related to the Operation and Maintenance Plan but will deal with actual operations rather than planning, although it may include some planning data when it is necessary to modify operations to meet KPIs or for other reasons throughout the duration of the Contract.

4.21.1.3 The requirements for each of the reports are listed below, but this will be developed as the Contract proceeds and it will be expected that the Operation and Maintenance Plan will contain detailed proposals for the reports for consideration and approval by the Employer. The TCH system will provide a flexible report generating function that enables the Contractor to extract and present in a tabular format, any data that is resident in the TCH System. This capability will ensure that report contents and formats can be developed as the Contract proceeds to meet both the requirements of the Contractor and those of the Employer. It will remain the Contractor duties to develop the reports as requested by the Employer to meet their requirements. The reports should be in a consistent format with those generated by the Contractor (responsible for VPC) and the Contractor (responsible for ORT BO) so that comparison/ reconciliation between data is straightforward.

4.21.1.4 The reports defined below shall be derived from data within the TCH system only and if a Toll Agency fails to provide Transaction Records for some vehicle passages, for example, this will be unknown to the TCH system and cannot be reported.

4.21.2 Financial/Revenue Reports

4.21.2.1 The various reports described below should be taken as indicative of the reports that the Employer will expect from the TCH system. The list shall be developed by the Contractor under the guidance of the Employer and definitive proposals included in the Operation and Maintenance Plan. Where another Toll Agency wishes to utilise the services of the TCH, the Contractor shall agree with that Toll Agency their reporting requirements and with the Employer any modifications necessary to the reports prepared for the Employer.

4.21.2.2 All reports presented shall be consistent in the data that is presented, both within and between reports.

4.21.2.3 Within 25 days or the next working day after the end of each calendar month, starting at the end of the month, the Contractor shall provide to the Employer 2 paper copies and an electronic copy of the Monthly Financial and Tolling Report.

- 4.21.3 The Monthly Financial and Tolling Report shall contain: (in addition to the reporting requirements listed herein, refer to C3.5.3: Financial Reporting for detailed requirements on reporting)
- 4.21.3.1 For each day of each calendar month and for each hour during such day, the aggregate number of vehicles measured at each Tolling Point, categorised by vehicle class showing separately the number of vehicles in each direction with corresponding daily and monthly totals;
- 4.21.3.2 For each day of such month and for each hour during such day, the aggregate value of tolls that have become due at each Tolling Point, categorised by vehicle class, separately showing any passages subject to a Toll Agency or TCH Discount and showing separately the value of tolls in each direction with corresponding daily and monthly totals;
- 4.21.3.3 For each day of such month and for each hour during such day, the aggregate number of Exempt Vehicles measured at each Tolling Point, categorised by vehicle class and Exempt Vehicle operator, showing separately the number of vehicles in each direction with corresponding daily and monthly totals;
- 4.21.3.4 For each day of such month details of the methods of payment used categorised by Customer Account types (including no account), payment during the Grace Period or no payment and by vehicle class;
- 4.21.3.5 For each day of such month, the ratio of the aggregate number of vehicles measured at each Tolling Point, categorised by vehicle class showing separately the number of vehicles in each direction with corresponding daily and monthly totals, to the equivalent information obtained from the Monthly Financial and Tolling Report of the preceding months, and from the second year of operation onwards, to the equivalent information obtained from the Monthly Financial and Tolling Report for the corresponding month in the preceding year;
- 4.21.3.6 For each day of such month, the total number of tolls and the value of such Tolls categorised into different classes, showing separately for different methods of payment and stage in the payment process. The methods of payment shall include: Pre-paid Accounts, Post Paid accounts, Automatically Allocated Accounts with and without payment during the Grace Period and Transaction Records that have been sent to and accepted by the VPC. This report shall show for each day during the month, the payment situation for each class of tolls at the end of the month. It shall include any tolls that had not been finally paid at the end of the previous months and shall show the current status of those. From the second year of operation onwards, the report shall relate and compare the situation for that month to the equivalent information obtained from the Monthly Financial and Tolling Report for the corresponding month in the preceding year;
- 4.21.3.7 Following from the above report, each month the report shall identify any tolls which remain unpaid (excluding those for which payment has been received from the VPC) at the end of the month, and any for which it is expected that payment will not be obtained shall be identified. In each case or group of cases where there are common causes, the report shall describe the circumstances that have led to the anticipated non-payment, shall propose means for reducing or preventing the incidence of such cases in the future. Where it has not been possible to send

the associated Transaction Records to the VPC for debt collection, it shall propose that the outstanding tolls be written off.

- 4.21.3.8 For each day of such month, the ratio of the aggregate number of Exempt Vehicles granted exemption from payment of tolls measured at each Tolling Point, categorised by vehicle class and operator, showing separately the number of vehicles in each direction with corresponding daily and monthly totals, compared to the equivalent information obtained from the Monthly Financial and Tolling Report of the preceding month, and from the second year of operation onwards, to the equivalent information obtained from the Monthly Report for the corresponding month in the preceding year;
- 4.21.3.9 For each day of such month, the numbers of accounts of different types that have been set up on that day and the aggregate number, payments made to the accounts in terms of deposits, pre-payments or post payments and the total cash held for Customers as pre-payments and the total cash owed by Customers as post-payments for charges incurred and not yet paid. The report shall show the numbers of Automatically Allocated Account Transaction Records that are within the Grace Period prior to payment or referral to the VPC. The report shall summarise the overall situation for the month and compare it with preceding months and, from the second year of operation onwards, to the equivalent information from the Monthly Report for the corresponding month in the preceding year;
- 4.21.3.10 For each day of such month, the total number of Transaction Records received from each Toll Agency shall be provided and a reconciliation provided that indicates what has happened to each record to ensure that all are accounted for within the system;
- 4.21.3.11 For each day of such month, the total number of inter-entity messages shall be provided divided up into different categories. Where under an agreement a Service Charge or similar payment is required in relation to the message, this shall be indicated. Any messages rejected by the TCH or rejected by another entity and returned to the TCH shall be identified and any subsequent action defined. The report shall show for the month the total situation on inter entity messages and related Service Charge payments and shall summarise any other inter-entity payments that are due for the month. Where another Entity collects money on behalf of the TCH or the TCH collects on behalf of another Entity, money collected shall be quantified, related to the activities that have undertaken;
- 4.21.3.12 For each day of such month, the total number of messages between the TCH and Appointed Agents shall be provided divided up into different categories. Where under a Service Level Agreement a payment is required in relation to the message, this shall be indicated. Any messages rejected by the TCH or rejected by the Appointed Agent or another entity and returned to the TCH shall be identified and any subsequent action defined. The report shall show for the month the total situation on messages between the TCH and Appointed Agents and related payments and shall summarise any other related payments that are due for the month. Where an Appointed Agent collects cash on behalf of the TCH, cash collected shall be quantified, related to the activities that have undertaken;
- 4.21.3.13 For each month, the report shall provide an overall summary of the cash flow and financial situation, based upon the more detailed reports highlighted above and any other relevant information. The report shall define payments received and due to the TCH from the VPC and payments made or to be made to Toll Agencies. The report shall clearly differentiate between

Service Charges and similar payments in relation to the TCH function as a national Transaction Clearing House and the specific activities related to provision of Transaction Processing Services for Toll Agencies.

- 4.21.4 As soon as reasonably practicable and in any event not later than 20 Working Days following the end of each Contract Year, the Contractor shall provide to the Employer 4 paper copies and an electronic copy of a report, the Annual Financial and Tolling Report including:
- 4.21.4.1 A statement showing any revisions to the Monthly Financial and Tolling Reports that have been found necessary indicating the changes made and the reasons for making these changes;
 - 4.21.4.2 A complete summary for each month of such Contract Year of the information provided in the Financial and Tolling Reports, as so revised, with appropriate totals for the Contract Year;
 - 4.21.4.3 A summary of the main points that arose during the year and trends observed.
 - 4.21.4.4 A forecast for the coming year in terms of each of the main activities covered in the Monthly Reports with a reasoning behind the forecast;
 - 4.21.4.5 Any recommendations for changes to any procedures or other matters, relating to the report that may improve efficiency of operation or revenue collection.
- 4.21.5 Operational Report
- 4.21.5.1 In addition to the Monthly Financial and Tolling Report described above that is focussed more towards financial matters, the Contractor shall provide, at the same time as that report, a report called the Monthly Operation and Performance Report that deals primarily with operation, but relates it where appropriate, to the details in the Financial and Tolling Report. The main focus of the Monthly Operation and Performance Report will be to demonstrate Operational Performance in relation to the KPIs included in the Contract. The report shall include at least the following:
- (a) For each KPI assigned to the TCH (or groups if previously agreed by the Employer), the results of measurements undertaken to assess the actual performance against that required;
 - (b) For each KPI that was not met, a commentary on reasons why it was not met and proposals to be implemented to ensure that performance meets the required standards in the coming months;
 - (c) A commentary on any factors that affected performance those were outside the immediate control of the Contractor such as poor performance of connected Entities. Any such commentary shall be substantiated with detailed examples;

- (d) A commentary on any matters that were raised in the previous Monthly Report or before, for which the Contractor undertook to improve performance with an analysis of success of the improvements;
- (e) A commentary on any changes in performance of other Entities that has been noticed as a result of previous reports by the TCH;
- (f) A commentary on any reports that have been provided by other Entities that suggested poor performance by TCH including any denial of their validity, with substantiation, or if accepted, details of steps that have been taken to improve performance;
- (g) Details of any factors expected in the next month or into the future that may have an impact upon performance and will need action by the Contractor. Details of the proposed actions should be provided.
- (h) Reconcilable and /or verifiable reports and statistics related, but not limited to Transactional, Financial, Customer Service, Account Registration, De-Registration, Top-Ups, e-Tag Sales, etc. as well as statistics related to Key Account/ Corporate User Account Holders, Mobility Account and or Value-added service etc.
- (i) Trends related to monthly and /or historical on but not limited to Transactional, Financial, Customer Service, Account Registration, De-Registration, Top-Ups, e-Tag Sales etc. as well as statistics related to Key Account/ Corporate User Account Holders, Mobility Account and or Value added service etc.

SECTION 5. HANDBACK REQUIREMENTS

5.1 INTRODUCTION

- 5.1.1 At the end of the Operation Service Period, the Employer may appoint another Operator and the Contractor must hand back the operations to the Employer and to the new Contractor.
- 5.1.2 For TCH Operation Services that are outsourced by the Contractor such as the Call Centre and for other arrangements with external bodies such as Appointed Agents, the service level agreements reached shall be designed such that, if required by the Employer, the arrangements and agreements can be extended and passed to the new operator.
- 5.1.3 The hand back process will start at least one year prior or otherwise advised by the Employer to the Contractor, of their intention to appoint a new operator or to extend the TCH Operations as allowed for under the Contract. In the event of an extension, the requirements for hand back shall be delayed for the period defined in the Contract.
- 5.1.4 The responsibilities of the Contractor at that time will be to hand over all documentation and other relevant information relating to TCH system operation, to train the new operator and to ensure a smooth handover of operations to the new Contractor. The general requirements are defined in C3.3.1- General Operations Specifications and in this section.
- 5.1.5 After hand back, the Contractor shall continue to provide a full maintenance and support service as defined in C3.3.2 Open Road Tolling Operations Specifications.

5.2 HAND BACK PROCEDURES

- 5.2.1 When notified of the intention of the Employer to require hand back of TCH Operations and at least one year before or otherwise advised by the Employer, the Contractor shall prepare a Hand Back Plan and Programme for agreement/ approval by the Employer.
- 5.2.2 The Hand Back Plan and Programme shall define all activities that the Contractor intends to undertake in relation to hand back and provide a programme when the various activities shall be started and completed. The Hand Back Plan and Programme shall include at least the following:
- 5.2.3 A summary report outlining all aspects of TCH Operation including each activity undertaken, documentation available relating to that activity, relationships and agreements with third parties involved in TCH Operation, arrangements for maintenance and system support and the staff structure used to provide the operational service;
- 5.2.4 A complete listing of all documentation and other relevant information related to the operation of the TCH system and agreements with third parties that relate to TCH Operation with the initial issue date, dates of any updates that have been made, a brief summary of the document relating to its purpose for TCH Operations and any need to update it before hand back;
- 5.2.5 Details of all reports prepared by the Contractor for the Employer together with details for how they are prepared;
- 5.2.6 Details of the performance regime in place with the KPIs that need to be met together with a description of the relevant aspects of operation that are important in ensuring that the performance requirements are met;
- 5.2.7 Details of all arrangements and agreements with third parties and any particular aspect of the arrangement or the performance of the third party that the new operator should give particular attention to;
- 5.2.8 Details of maintenance arrangements in place, the fault identification and reporting process and any issues that the new operator should be aware of in relation to faults and maintenance;
- 5.2.9 Details of the staff structure in place and the training that has been necessary for each type of staff;
- 5.2.10 Proposals for training of the new operator' s staff to ensure that they are able to take over operation and provide continuity of service;
- 5.2.11 Proposals, for a phased handover of responsibilities to the new operator in an orderly fashion in ensuring that sufficient support is provided to the new operator during the handover process.

- 5.2.12 The hand back programme shall allow sufficient time after the new operator' s staff have been trained where the old and new staff work together to ensure that hand back is a seamless operation and there is no reduction in performance during the hand back period.

5.3 HANDBACK TRAINING

- 5.3.1 The Contractor shall supply all training identified in the Hand Back Plan and Programme as being necessary and such additional training as may be considered by the Employer to be necessary.

- 5.3.2 The training shall include working alongside the new operator as part of a phased take over to ensure a smooth transition and that the new operator is fully able to operate the TCH and deal with all circumstances likely to be encountered.