

Revenue Collection Services

Schedule 11.5 – Information and Reporting Services

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1 Introduction

1.1 Scope and Purpose

- 1.1.1 This Schedule sets out the scope of and requirements for the provision of Data, information and reporting which includes but is not limited to Data related to:
- (a) Assets, Devices and Modules;
 - (b) Customers;
 - (c) Tokens and media;
 - (d) Customer journeys; and
 - (e) performance and Availability,
- (the "**Information and Reporting Services**").
- 1.1.2 The objective of this Schedule is to ensure that TTL and the other members of the TTL Group are able to meet their business and management information needs.
- 1.1.3 The Contractor shall ensure that the Prestige Back Office Modules and FTP Back Office Modules produce and deliver reports and files in accordance with this Schedule 11.5 (Information and Reporting Services) on a daily, weekly, Periodic and annual basis. These reports and files not only provide information which TTL requires for accounting and business purposes but also demonstrate that the Contractor is properly managing the System processes to collate, organise and structure Data in order to support TTL in the running of its own reports on Data.
- 1.1.4 In addition to the reports and files set out in this Schedule, TTL may reasonably request the Contractor to develop and deliver additional ad hoc reports in order to Assure TTL in relation to issues arising on the System. Where the requirement of such reports has not arisen from a System Failure or a failure of the Contractor to comply with its obligations under the Contract and the Contractor reasonably considers that the development and/or delivery of such ad hoc reports will involve costs or expenses of an exceptional magnitude or nature, the Contractor shall notify TTL and request that TTL issues a Variation to instruct the development and delivery of the relevant report.
- 1.1.5 The FTP Back Office Modules are connected to an Interfacing System: the TTL Data Warehouse. Data from the FTP Back Office Modules is transferred to the TTL Data Warehouse on a near real time basis. If requested by Variation, TTL may request the Contractor to provide a similar capability from the TTL ITSO HOPS and Prestige Back Office Modules during the Term.

2 Data Requirements

2.1 Generally

2.1.1 The Contractor shall deliver the Data Entities and Critical Output Files in accordance with the requirements set out in Appendices 1 to 3 of this Schedule.

2.2 Surface Transport Services

2.2.1 With regards to the ST Services set out in Schedule 4.2 (Surface Transport Services), the Contractor shall ensure that:

- (a) all Transaction Data is transmitted by the Card Reader and received by the Bus Data Gathering Centre;
- (b) details of cash sales and counts of the boarding of Passengers will be captured by bus ETMs and shall be transferred from the ETM to the Garage Computer;
- (c) details of cash, ticket sales and counts of the boarding of Passengers will also be captured by Bus PTIDs and shall be transferred from the PTID to the Garage Computer via the PTID Base PC;
- (d) details of cash, ticket sales and counts of the boarding of Passengers will also be captured by River PTIDs and shall be transferred from the PTID to the Garage Computer via the River PTID Basestation;
- (e) details of the transactions set out in (a) to (d) will be communicated from the Garage Computers and Bus PTID Basestations and made available to the Bus Operating Companies and the Back Office Modules;
- (f) revenue control Data (including but not limited to Prestige Hotlists, ITSO Hotlists and Status Lists appropriate to the types of Cards accepted by the Device) will be transferred on a daily basis to Bus Card Readers, Bus PTIDs and River PTIDs, subject to those Devices being on-line; and
- (g) where a Driver Module has failed or been lost, transactions that have occurred on that bus since the previous successful bus driver sign off are to be reconstructed where possible from other Data within a reasonable time frame, taking into account TTL configuration of the transaction resolution period.

2.3 LU Services

2.3.1 With regards to the LU Services set out in Schedule 4.3 (LU Services), the Contractor shall ensure the availability in the relevant Prestige Back Office Modules, TTL ITSO HOPS or FTP Back Office Modules of, and provide to TTL, pursuant to Schedule 4 (The Services), all Data including:

- (a) Prestige, CPC, ITSO and Magnetic Ticket Travel Product sales and validation Data and details of Device status and availability of all Devices; and
- (b) all Data from the Fulfilment Parties' systems detailed in Schedule 4.5 (Support Services) including:
 - (i) Ad hoc Load requests;

- (ii) Autoload configuration requests; and
- (iii) transactions from Gates to indicate whether Ad hoc Loads were successful or not.

2.3.2 The Contractor shall ensure that revenue control Data (including but not limited to Prestige Hotlists, ITSO Hotlists and Status Lists) will be distributed at specified intervals, which must be at least daily, to all Card Readers.

2.3.3 The Contractor shall ensure (where applicable) that all Devices transfer Data into the relevant Back Office Modules in accordance with Schedule 4 (The Services). The Contractor shall be responsible for reporting upon the completion of Data on a daily basis for all parts of the System and shall ensure that all Device Data will be available in the relevant Back Office Modules within three (3) days from being generated. This excludes Data from Third Parties where the information has not been made available to the Contractor by the Third Party or TTL.

2.4 Rail Services

2.4.1 With regards to the Rail Services set out in Schedule 4.4 (Rail Services), the Contractor shall ensure the availability in the relevant Prestige Back Office Modules, TTL ITSO HOPS or FTP Back Office Modules of, and provide to TTL, pursuant to Schedule 4 (The Services), all Data, including:

- (a) details of journeys, PAYG value and balances captured by Gates and Validators; and
- (b) Data related to Prestige sales transactions.

2.4.2 The Contractor shall ensure that revenue control Data (including but not limited to Prestige Hotlists, ITSO Hotlists and Status Lists) will be distributed at specified intervals, which must be at least daily, to all Card Readers.

2.5 Retail Network and Bulk Customers

2.5.1 With regards to the Retail Network Services set out in Schedule 4.9 (Retail Management Services) and the Sales and Consumables Management Services set out in Schedule 4.10 (Sales & Consumables), the Contractor shall ensure, pursuant to Schedule 4 (The Services), the availability in the Prestige Back Office Modules of, and provide to TTL, all Data, including:

- (a) Transaction Data and details of Magnetic Ticket sales through Retail Agents on a daily basis;
- (b) accounting Data from the Sales Services Accounting System on a weekly basis; and
- (c) details of Magnetic Ticket and Token sales including:
 - (i) Staff Passes and permits;
 - (ii) sales by TICs;
 - (iii) sales by FTICs;

- (iv) sales to companies in relation to resale to UK and overseas tourist Customers (including Overseas Agents);
- (v) corporate sales;
- (vi) LEAs;
- (vii) Concessionary Permits (purchased by London Councils); and
- (viii) online and telesales (operated by TTL).

2.5.2 The Contractor shall ensure that revenue control Data (including but not limited to Prestige Hotlists, ITSO Hotlists and Status Lists) will be distributed at specified intervals, which must be at least daily, to all Card Readers.

2.6 Revenue Inspection

2.6.1 The Contractor shall ensure that Transaction Data from Revenue Inspection Devices is available in the Back Office Modules in accordance with the performance requirements set out in Schedule 4 (The Services).

3 Information Services

3.1 Generally

3.1.1 The Contractor shall:

- (a) ensure that the information collected and maintained within the Prestige Back Office Modules, TTL ITSO HOPS and FTP Back Office Modules includes all Data necessary for the performance of the requirements set out in Schedule 4 (The Services);
- (b) ensure that the Detailed Data as set out in Appendix 1 and the Detailed Derived Data as set out in Appendix 2 is available within the relevant Back Office Modules;
- (c) create Summarised Level Data, as reasonably required by TTL, from the Detailed Data and Detailed Derived Data;
- (d) ensure the integrity of all Data from time of capture, checking for consistency, completeness and reconciling information and Assure TTL in accordance with Schedule 10.5 (Assurance) that the integrity of Data is being maintained;
- (e) hold a transaction log and audit log for all Data item additions and changes, enabling TTL to audit all aspects of the process;
- (f) provide a metadata function which provides TTL with status information on Data and the ability to control and release information to users;
- (g) provide an access-controlled, secure environment for transmission and storage of Data;
- (h) provide, in accordance with Schedule 11.1 (Document Management), all TTL Authorised Users and other authorised Operator Personnel (as relevant) with the Documentation they need to use the Prestige Back Office Modules and FTP Back Office Modules; and
- (i) capture within the Prestige Back Office Modules records of all sign-on and sign-off details to ticket selling Devices such that TTL Authorised Users can interrogate these records.

3.1.2 In addition to paragraph 3.1.1, the Contractor shall annually Assure TTL in accordance with Schedule 10.5 (Assurance):

- (a) of the effectiveness of the process of exception reporting and reconciliation across the Prestige Back Office Modules and FTP Back Office Modules;
- (b) of the effectiveness of the access control mechanisms of the System;
- (c) of the effectiveness of methods to ensure integrity of Data from time of capture;
- (d) that for the Prestige Back Office Modules, and FTP Back Office Modules the Data base enquiry, information retrieval and report generation facilities provide sufficient flexibility to meet TTL's reasonable business needs, regarding functionality and ease of use;

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- (e) that all Software required to deliver the Information and Reporting Services is supported to the applicable Standards set out in Schedule 9.3 (Standards) and any other agreed standards;
 - (f) that the Contractor's Data communications protocols will interface with the TTL corporate network protocols;
 - (g) that Data is secured in accordance with the requirements of Schedule 9.4 (Security Management); and
 - (h) after any Technical Change instigated by the Contractor, any Detailed Data, Detailed Derived Data, Summarised Level Data, Standing Data, Base Data and Archived Data shall be entirely consistent with its content before the change, unless agreed otherwise by TTL.

3.2 Prestige Information Services

- 3.2.1 The Contractor shall add to the Prestige Back Office Modules, as a minimum, all such additional Detailed Data and Detailed Derived Data as shown in Appendices 1 and 2 of this Schedule.
- 3.2.2 The Contractor shall also add to the Prestige Back Office Modules all such additional Detailed Data, Detailed Derived Data and Summarised Level Data as are required to provide the Services set out in Schedule 4 (The Services) and to meet the requirements of Schedule 11.4 (Revenue and Accounting Services) and this Schedule.
- 3.2.3 The Prestige Back Office Modules maintain information in various separate (but related) Data stores. The exact Data formats and structures in the Prestige Back Office Modules may vary from those used in the other supporting System Modules, with the modification of Data format in such other Modules being undertaken during the filtering and loading processes of the Prestige Back Office Modules.
- 3.2.4 The Contractor shall ensure that:
 - (a) records of transactions generated by Devices ("**Raw Data**") are collected, filtered and loaded as Detailed Data and that other business Data entered into the System is collected and stored in the Central Systems as Detailed Data;
 - (b) Base Data, as reasonably required by TTL, used in the relevant parts of the System is collected and stored in the relevant Back Office Modules by the Contractor;
 - (c) the Prestige Back Office Modules process the Detailed Data to produce additional Detailed Derived Data (as set out in Appendix 2);
 - (d) any additional Data Entities required in the production of the Detailed Derived Data are captured and processed and that the Prestige Back Office Modules aggregate and consolidate the Detailed Data and Detailed Derived Data to produce Summarised Level Data;
 - (e) extra Data entered by TTL into the Prestige Back Office Modules is held as Detailed Data, Standing Data and Summarised Level Data as applicable;

- (f) the Prestige Back Office Modules maintain historical records of all Detailed Data, Detailed Derived Data, Standing Data, and Base Data; and
- (g) the Output Files from the Prestige Back Office Module Data are produced based on a production schedule to meet the performance requirements set out in Schedule 4 (The Services).

3.2.5 The Contractor shall:

- (a) create summary level Data in accordance with such Summarisation Rules as are reasonably required by TTL;
- (b) create Critical Output Files as set out in Appendix 3 of this Schedule, in such Data formats as are reasonably required by TTL. Critical Output Files will be defined using a report and extract facility to which TTL will subsequently have access;
- (c) where required, provide sufficient PC client software which will operate on reasonably agreed standard TTL desktop computers;
- (d) utilise Data communication protocols that will interface with the TTL corporate network protocols;
- (e) utilise Data formats which comply with TTL's corporate data standards, where applicable, as specified in Schedule 9.3 (Standards);
- (f) de-personalise all Customer sales and journey Data over eight (8) weeks old to ensure that actual Data, as stored or restored, should not be linkable to any registered individual in the Prestige Back Office Modules, directly or by inference;
- (g) ensure that output reports contain Data that is appropriate to each of the reports as set out in paragraph 4 of this Schedule; and
- (h) reprocess rejected Data files (where possible) within three (3) Business Days of such rejection.

3.3 FTP Information Services

3.3.1 The Contractor shall:

- (a) provide and maintain a database which is an asynchronous copy of the TTL Modules from which the TTL Data Warehouse will obtain any new, incremental data every fifteen (15) minutes (the "**Asynchronous FTP Replica Database**");
- (b) ensure the Asynchronous FTP Replica Database conforms to the data schema of the FTP Back Office Modules and in line with the performance as specified in paragraph 4 of this Schedule. TTL Personnel may query Data contained within the TTL Data Warehouse but not the FTP Back Office Modules or the Asynchronous FTP Replica Database;
- (c) ensure that TTL is able to create and maintain temporary tables or views in the Asynchronous FTP Replica Database;

- (d) ensure that TTL has the capability for other systems to connect to the Asynchronous FTP Replica Database via an application programming interface or other link;
- (e) ensure that TTL Authorised Users can access the Asynchronous FTP Replica Database via individual logins and that such access is fully auditable and usage statistics are compiled and made available to TTL on request; and
- (f) provide a logical and physical data model for the Asynchronous FTP Replica Database and that this is updated when Changes are made.

3.3.2 The transfer mechanism between the FTP Back Office Modules, the Asynchronous FTP Replica Database and the TTL Data Warehouse shall enable TTL Authorised Users to allow regular generation and retention of defined and customised management information, reports and statistics (including fifteen (15) minute, hourly, AM peak, PM peak, off peak, daily, weekly, every Period, and annual).

4 Reporting Services

4.1 Generally

- 4.1.1 The Contractor shall provide documented responses to Subject Access Requests within five (5) Business Days of receipt of request from TTL, in accordance with the provisions of the Data Protection Act.
- 4.1.2 The Contractor shall, each day, provide to TTL exception reports detailing any illogical usage detected from the Prestige Card transactions representing the Traffic Day that has ended on that day. Examples of the checks to be used to determine 'illogical use' are:
- (a) invalid data format;
 - (b) Prestige Card serial number is not known to the System;
 - (c) Prestige Card serial number has not been distributed;
 - (d) Prestige Card serial number has not been issued;
 - (e) Prestige Card serial number indicates that Prestige Card is on the Prestige Hotlist;
 - (f) Prestige Card serial number indicates that the Prestige Card has expired and has been withdrawn;
 - (g) Prestige Card transaction sequence number is a duplicate or invalid number;
 - (h) Device is reported as "not known at this location";
 - (i) Device has been hotlisted;
 - (j) Location ID is not known to the system;
 - (k) Location ID is not valid for this transaction type;
 - (l) Transaction encryption is invalid;
 - (m) sequence of transactions is invalid or questionable; and
 - (n) the PAYG balance on the Prestige Card is not consistent with Prestige Back Office Modules records.
- 4.1.3 The Contractor shall provide reports on the following:
- (a) for TTL and London Councils (formerly ALG) to be available on a quarterly basis:
 - (i) bus journeys, LUL journeys, DLR journeys, EAL journeys, Tram Link journeys, and train journeys, by Travel Product and timeband; and
 - (ii) all LUL Journeys by LUL Zone against timeband; and

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- (b) for Concessionary Permits by London council and Card number, subject to TTL providing the Contractor with a list of Concessionary Permits Card numbers and London Boroughs:
 - (i) Number of bus trips;
 - (ii) Number of LUL trips;
 - (iii) Number of tram trips;
 - (iv) Number of DLR trips; and
 - (v) Number of EAL trips.

4.2 Prestige Reporting Services

4.2.1 The Contractor shall:

- (a) provide TTL Authorised Users access to Prestige Card management Data, Detailed Data, Detailed Derived Data, Standing Data, central Base Data, Summarised Level Data and Critical Output Files ("**Data Sets**"); and
- (b) provide a set of retrieval, manipulation and reporting tools to TTL Authorised Users to produce Critical Output Files from the Data Sets.

4.2.2 The Contractor may utilise other systems to capture System and Device monitoring and failure information, provided that the Contractor shall facilitate access to this management information in a format and method of delivery agreed by TTL.

4.2.3 The Contractor shall provide an ad-hoc analysis and reporting service to TTL on information held within the sales and retail accounting systems and shall process, if required, at least two (2) new requests for ad-hoc information per Period within two (2) weeks of receiving the request, as reasonably required by TTL, and shall provide the information to TTL within three (3) days of receiving any repeat requests. Where possible, the Contractor shall include such ad-hoc reports in a menu for future on-line access and use by TTL Authorised Users.

4.2.4 The Contractor shall provide:

- (a) an access-controlled facility for TTL Authorised Users to add corrective information and additional Data and as appropriate update the metadata to reflect the changes and additions effected;
- (b) access to new TTL Authorised Users and change of access privileges to existing TTL Authorised Users within three (3) Office Hours of request, except where PC client software is required to be loaded on agreed TTL standard desktop computers in which case within three (3) clear Business Days of request;
- (c) a facility to allow nominated TTL Authorised Users to be given higher priority access to processing resources, subject to the increased priority not affecting the performance measures set out in paragraph 4;
- (d) the facility to allow selected TTL Authorised Users to make additions, as reasonably required by TTL, to the regular Output File generation suite;

- (e) training courses in accordance with Schedule 8.6 (Training) so that TTL trainers, as reasonably required by TTL, have been trained in the use of the Prestige Back Office Modules on-line database retrieval and reporting Software; and
 - (f) notification to designated TTL Authorised Users when reports/output files are available.
- 4.2.5 The Contractor shall provide context sensitive, on-line help facilities for TTL Authorised Users to facilitate the resolution of queries and use of the System and additionally provide on-line details about the help-line facilities.
- 4.2.6 The Contractor shall ensure that access to Data in the Prestige Back Office Modules is controlled such that access can be restricted to:
- (a) any individual member of Operator Personnel or group of Operator Personnel; and
 - (b) for individual members of Operator Personnel or groups of Operator Personnel:
 - (i) specific Data Sets;
 - (ii) specific Data fields;
 - (iii) specific transactions;
 - (iv) specific menus; and
 - (v) specific Data Sets by time (where practical).
- 4.2.7 The Contractor shall ensure that for all additions to the Data completed by an agreed point in time, the system will re-summarise the Data effected by the changes to Detailed Data, and include this in the next Critical Output File of Data for retrieval by TTL. This Data must be clearly indicated on the Critical Output File as re-summarised information.

4.3 FTP Reporting Services

- 4.3.1 The Contractor shall ensure that Data is transferred from the FTP Back Office Modules to the TTL Data Warehouse pursuant to paragraph 3.3 of this Schedule.

Appendix 1 – Detailed Data Entities

This Appendix 1 describes the Detailed Data Entities, as a minimum, which are to be created and maintained by the Contractor in the Central Systems from Devices and business transactions processed in the Modules. In addition to the Detailed Data Entities listed below, the Contractor shall maintain such Detailed Data Entities as exist at the Service Commencement Date and shall not remove any such Detailed Data Entities without TTL's express consent.

Bus

Bus Operating Company sales details

- (a) links to method of payment details
- (b) discounts and bonuses (when implementation agreed)
- (c) sales reversals

Method(s) of payment details (multiple items) (Sterling) (with links to sales transaction)

Revenue Protection Inspector sales / validation details

ETM / PTID sign-on / sign-off details

Bus journey trip details (having been separated out of sales transactions)

Route / operating number / trip / Bus Stop ID / destination

Bus Stop ID time details

Pre-paid Pass and Permit usage details

Device Status change details (including Data Module security locking)

Data Module Driver change details

Data Module Garage sign-on / sign-off details

Ticket selling equipment location details (where practical)

Emergency ticket issue details (LBSL to enter directly into Central Systems)

Device fault times and details, as reported automatically by the Device

Prestige Card disablement (with reason)

Prestige Card use details (every validation) and PAYG residual balance

Prestige Hotlist changes

LUL

Station sales details (multiple items)

- (a) Travel Products and non-Travel Products
- (b) issuing Device
- (c) links to method of payment details
- (d) multi-currency (Sterling)

- (e) sales reversals
- (f) VAT details
- (g) discount and Bonus details (when implementation agreed)

Method(s) of payment details (multiple items) (multi-currency (when implementation agreed))
(with links to sales transactions)

Inspection ticket issued details

Portable Ticket Issuing Device sales details, method of payment details, usage counters

TOM Penalty Fare Notice issue & payment details

POM service audit details

Invalid cash receipt (foreign currency / forged notes etc.) by Device / Operator Personnel

Credit/debit/ cheque card authorisation details and times

Credit/debit/cheque card retention details

Keepsafe bag movement by ticket seller (including bag identifier and contents details)

Keepsafe bag movement witness record detail (if verification performed by separate witness
to ticket seller)

SAF reconciliation balancing transaction details and summarisation values (by Operator
Personnel/shift / day / week)

Duplicate/exchange/refunds details

Device message details (e.g. POM low on change)

Device status change (e.g. on-line, off-line, base fares change, alias status, emergency
enablement)

Device End of Traffic Day Time & Counters

Device/TOM sign on / sign off details (including counters of tickets used, ticket seller details)

Gate Usage Counts by Magnetic Ticket type

Manual Gate (including ABP Manual Gates and MIP Gates) open / close details

Prestige Card manual resolution of incomplete journey and PAYG residual value details

Resolution (of incomplete journey) on Prestige Card

Prestige Card holder details (personalisation of Prestige Card and any changes to these
details)

Prestige Card disablement / re-enablement (with reason)

Prestige Card use details every entry / exit / validation) and PAYG residual balance

Prestige Hotlist changes

Failed ticket usage attempt (with related error code)

RAIL (WHERE DEVICES INSTALLED)

Device status change (Gates and Validators only) (e.g. on-line, off-line, base fares change,
alias status, emergency enablement)

Device message details (Gates and Validators only)

Device End of Traffic Day Time & Counters (Gates and Validators only)

Gate Usage Counts by Magnetic Ticket type

Manual Gate (including ABP Manual Gates and MIP Gates) open / close details

Prestige Card disablement / re-enablement (with reason)

Prestige Card use details (every entry / exit / validation) and PAYG residual balance

Prestige Hotlist changes

Failed ticket usage attempt (with related error code)

RETAIL AGENTS / TICs

Travel Product sales details

(a) linked to method of payment details

(b) voiding of Travel Products

Travel Product method of payment details (Sterling)

(a) linked to Travel Product sales details

Prestige Card stock movement details

Travel Product sale adjustment details

Prestige Card holder details (personalisation of Prestige Card and any changes to these details)

Prestige Card disablement / re-enablement (with reason)

Prestige Card use details (every validation) and PAYG residual balance

Prestige Hotlist changes

Discount and Bonus details (when implementation agreed)

TOURIST AGENTS

Travel Product sales details

(a) linked to method of payment details

(b) voiding of Travel Products

Travel Product method of payment details (Sterling)

(a) linked to Travel Productsales details

Prestige Card stock movement details

Travel Product sale adjustment details

CORPORATE SALES

Travel Product sales details

(a) linked to method of payment details

(b) voiding of Travel Products

Travel Product method of payment details (Sterling)

- (a) linked to Travel Product sales details

Prestige Card stock movement details

Travel Product sale adjustment details

LEA SCHOLAR SALES

Travel Product sales details

- (a) linked to method of payment details
- (b) voiding of Travel Products

Travel Product method of payment details (Sterling)

- (a) linked to Travel Product sales details

Prestige Card stock movement details

Travel Product sale adjustment details

LONDON COUNCIL CONCESSIONARY PERMIT SALES

Prestige Cardstock movement details

Travel Product sales adjustment details

STAFF PASSES

Staff Pass stock movement details

PRESTIGE CARD MANAGEMENT

Prestige Card transactions from Devices

The Central Systems should hold details of all transactions generated by Devices, when interacting with a Prestige Card. Such transactions will be generated on each occasion that the Data on the Prestige Card is updated, and will include the following.

- (a) Card purchase
- (b) Card issue
- (c) add validity
- (d) bus journey
- (e) underground entry
- (f) underground exit
- (g) invalid Prestige usage
- (h) Card disabled (by Prestige Hotlist)
- (i) warning given (by Prestige Hotlist)
- (j) Card re-enabled
- (k) PAYG facility enabled or adjusted

- (l) Travel purchased using PAYG
- (m) PAYG adjusted
- (n) Validity refunded
- (o) Card returned
- (p) Card reported lost
- (q) Card reported faulty
- (r) Card expired
- (s) Card disposed of

Prestige Card transactions from elsewhere

In addition to transactions generated by Devices, the Prestige Back Office Modules hold details of transactions of other Prestige Card related events, including:

- (a) Prestige Card entered onto Prestige Hotlist
- (b) Prestige Card removed from Prestige Hotlist
- (c) manual adjustment to Prestige Card status (input at the Card Management system for reconciliation purposes, or other error correction)

Prestige Card Management system Derived Data

The Card Management system should maintain a current view of the state of Prestige Cards in circulation. This shall include:

- (a) Status of all Prestige Card
- (b) Card holder Details
- (c) Current validities held on all Prestige Cards (includes prepaid tickets, Concessionary Permits, Staff Passes, etc.)
- (d) PAYG held on all Prestige Cards
- (e) Current PAYG balance by operator (LUL, LBSL)
- (f) Prestige Card master Prestige Hotlist

Appendix 2 – Detailed Derived Data and Standing Data

This Appendix 2 describes the Detailed Derived Data Entities, as a minimum, which the Contractor will create and maintain in the Central Systems. Also included in this Appendix 2 are the Standing Data Entities and which of these are to be maintained by the Contractor or TTL.

TTL will, additionally to the above Data Entities, have the capability to enter into the Central System extra Detailed Derived Data Entities and Summarised Level Data Entities for their use in creating Output Files.

Detailed Data

Bus

- (a) Travel Product sale details by Bus Operating Company based on Garage/route
- (b) Completeness of Data

LUL

- (a) Allocation values (TTL, other operator) by apportionment type (e.g. through, agency, extension, railcard) by Travel Product sale including interchange point (if applicable)
- (b) Completeness of Data / reconciliation results
- (c) Those needed for producing Line Target Monitoring System (LTMS)

Retail and sales

- (a) completeness of Data / reconciliation results

Prestige Card management

- (a) incomplete Passenger journey details (when not resolvable by Gate / Validator and resolved manually in sub-system or via TOM/staff Validator)
- (b) complete Passenger journey details (entry and exit transactions known by Gate/Validator)

Standing Data

Buses

- (a) For each identified Garage (Garage number), store the list of relevant route numbers
- (b) For each route (by day of week and / or time of day where relevant) store the associated
 - (i) Bus Stop ID numbers
 - (ii) Bus Stop ID name / description

with details of the standard adult fare from each Bus Stop ID to each other Bus Stop ID

- (c) The Prestige Back Office Modules must store previous versions of the Fares Tables
- (d) The relationship between Bus Stop ID and Zones
- (e) Details of pass / concession tickets which are valid for use by route, trip number and time of day (where relevant)
- (f) The Bus Operating Company for each Garage/route and details
- (g) Interpretation of encoded values. (Text descriptions for each valid code)
 - (i) Fields to be covered include
 - (ii) Ticket (validation) failure reason
 - (iii) Equipment activity type log
 - (iv) Reason for giving credit to Customer
 - (v) Device type error type
 - (vi) Device type fault type
 - (vii) Fault status
 - (viii) Device status (by Device type)
 - (ix) transaction type
- (h) Forecast, budget volumes and values and KPI targets (TTL to maintain)

LUL

- (a) Line
- (b) Station group
- (c) Station
- (d) Locations within Stations
 - (i) Ticket Office / barrier / POM enclosure
 - (ii) TTL to maintain descriptions
- (e) Device / plinth
- (f) Device error type by Device type
- (g) Device status values by Device type
- (h) (including fault type details, fault status details)
- (i) Station/Ticket Office/Device scheduled opening hours (TTL to maintain)

- (j) LUL Base Data (fares details)
 - (i) LUL ticket zones and the relationship to LBSL "zones" (TTL to maintain)
 - (ii) Station to Zone relationships
 - (iii) Price bands for LUL Stations outside the travelcard Zones
 - (iv) Peak / Off Peak Fares
- (k) Reason for giving credit to Customer (could arise if Prestige Card pay in arrears option enabled)
- (l) Operating companies descriptions (TTL to maintain)
- (m) TTL / TOC Through Ticket Allocation Values
- (n) Method of payment descriptions
- (o) Sundry items to be sold on TTL Devices (e.g. event ticketing, retail items)
- (p) Merchandise sale commission values (TTL to maintain)
- (q) Ticket sales commission by ticket type (e.g. for Heathrow Express tickets) (TTL to maintain)
- (r) Commission to ticket seller by ticket type and merchandise item (TTL to maintain)
- (s) Discount / Bonus values (when implementation agreed)
- (t) Period type in day definition (Peak / Off-Peak times by day of week)
- (u) Ticket category (adult, child etc.)
- (v) Ticket group
- (w) Ticket seller details
- (x) Ticket type
- (y) Ticket validation failure reasons
- (z) Valid voucher / warrant types
 - (i) method of payment
- (aa) Forecast, budget volumes and values and KPI targets (TTL to maintain)

NATIONAL RAILWAYS (FOR STATIONS WITH DEVICES)

- (a) NR operator description details (TTL to maintain)
- (b) Station group
- (c) Station

- (d) Device locations within Stations (TTL to maintain)
- (e) Device / plinth
- (f) Device error type by Device type
- (g) Device status values by Device type (Including fault type details, fault status details)
- (h) Device scheduled operating hours (TTL to maintain)

RETAIL AND SALES

- (a) Retail Agent description and geographic details (TTL to maintain geographic details)
- (b) Retail Agent commissions by ticket type
- (c) Tourism Agent description details
- (d) Corporate sale company description details
- (e) LEA description details
- (f) London Borough description details
- (g) TIC description details
- (h) Forecast, budget volumes and values and KPI targets (TTL to maintain)

CARD MANAGEMENT

- (a) PAYG fares tables (or rules for derivation of PAYG fares)
- (b) Discount and bonus tables and structures (when implementation agreed)
- (c) Interpretation of encoded values (text descriptions for each valid code)

Appendix 3 – Critical Output Files

