

Payment- TPH(CSR)

SYSTEM DESIGN DOCUMENT

Version 1.0

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**Table 1: DOCUMENT REVISION LIST**

|  |  |  |  |
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| Revision No. | Revision Date | Author | Revision Description |
| 1.0 | 17-Nov-2021 | Pranav Gandhi | This document covers payment process operated by CSR |

CONTENTS

[1 Introduction 8](#_Toc88056399)

[1.1 Purpose 8](#_Toc88056400)

[1.2 List of Abbreviations 8](#_Toc88056401)

[1.3 Audience 9](#_Toc88056402)

[2 Process Description 10](#_Toc88056403)

[2.1 Payment Configurations 11](#_Toc88056404)

[2.1.1 Pre-Requisite 11](#_Toc88056405)

[2.1.2 Business Process Map 11](#_Toc88056406)

[2.1.3 Form Specifications 12](#_Toc88056407)

[2.1.4 Validations and Business Rules 15](#_Toc88056408)

[2.1.5 Outcome of the Process 15](#_Toc88056409)

[2.2 View Payment Account 15](#_Toc88056410)

[2.2.1 Pre-Requisite 15](#_Toc88056411)

[2.2.2 Business Process Map 15](#_Toc88056412)

[2.2.3 Form Specifications 16](#_Toc88056413)

[2.2.4 Validations and Business Rules 18](#_Toc88056414)

[2.2.5 Outcome of the Process 18](#_Toc88056415)

[2.3 Payment Details 18](#_Toc88056416)

[2.3.1 Pre-Requisite 18](#_Toc88056417)

[2.3.2 Business Process Map 19](#_Toc88056418)

[2.3.3 Form Specifications 20](#_Toc88056419)

[2.3.4 Validations and Business Rules 21](#_Toc88056420)

[2.3.5 Outcome of the Process 21](#_Toc88056421)

[3 Annexure 22](#_Toc88056422)

[3.1 Fees Configuration 22](#_Toc88056423)

Table of Figures

[Figure 1: Business Process Map: Configure Fees/ Charges 10](#_Toc88056383)

[Figure 2: Business Process Map: View Payment Account 14](#_Toc88056384)

[Figure 3: Business Process Map: Payment Details Screen 18](#_Toc88056385)

Table of Tables

[Table 1: DOCUMENT REVISION LIST 3](#_Toc88056388)

[Table 2: List of Abbreviations 7](#_Toc88056389)

[Table 3: Process and Sub-process List 9](#_Toc88056390)

[Table 4: Form Specifications-Configure Fees/ Charges 11](#_Toc88056391)

[Table 5: Alert and Notifications – Configure Fees/ Charges 13](#_Toc88056392)

[Table 6: Business Rules and Validations- Configure Fees/ Charges 14](#_Toc88056393)

[Table 7: Form Specifications-View Payment Account 15](#_Toc88056394)

[Table 8: Alert and Notifications – View Payment Accounts 17](#_Toc88056395)

[Table 9: Form Specifications – Payment Details Screen 19](#_Toc88056396)

[Table 10: Alert and Notifications – View Payment Accounts 19](#_Toc88056397)

[Table 11: Fee Details 21](#_Toc88056398)

# Introduction

## Purpose

The objective of this document is to outline design for payment processes, configurations and other functionalities that will be initiated/ used by CSR/ Authorised user via Backoffice Portal. This document specifies Pre-Requisites, Business Process Maps associated with each process, Form Specifications, Actions and Stakeholder details, Business Rules and Validations, Alerts and Notification, and Integration. Following processes will be covered as part of the document.

* Payment Configurations
* View Payment Account
* Payment Details Screen

## List of Abbreviations

**Table 2: List of Abbreviations**

|  |  |
| --- | --- |
| Abbreviation | Expanded Form |
| TfL | Transport for London |
| TCS | Tata Consultancy Services Ltd. |
| TPH | Taxi and Private Hire |

## Audience

This document is intended to provide an understanding on business functions to different teams:

* TfL Project Management
* TfL SME
* TCS Project team for Designing and developing Payment Process

# Process Description

This section covers process of Payment Configurations, Taking Payment request from customer and redirect to Lot 2 IVR and User Interface to view all the payment details of customer paid via any channel. This section will consist of Pre-requisites, Business Process Map, Form Specifications, Validations & Business Rules and Outcome of the process.

Following is the list of process and sub processes list

**Table 3: Process and Sub-process List**

|  |  |  |  |
| --- | --- | --- | --- |
| **Process** | | **Application** | **Description** |
| 1 | Payment Configurations | Configure Fee/Charges | The CSR will be able to configure fee for the services and the applications in the system. CSR can also change the fees for a particular licence type and can add the new fees |
| 2 | View Payment Account | View Payment Account | CSR will have provision to see the account details of customer in terms, Total Amount paid, Outstanding Amount, Payment history etc. |
| 3 | Payment Details | Payment Details | Customer will call to CSR and request to make payment for any request. At that time, CSR will be shown with Payment Details and then CSR will redirect the call to Lot 2 IVR for Payment |

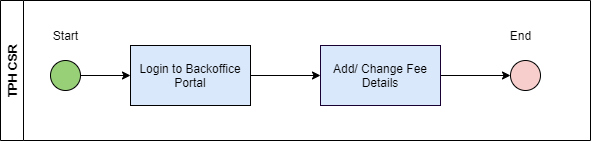
## Payment Configurations

This Process will be available at BackOffice portal. CSR will have provision to Configure respective fees against an application (like Apply for New PHV Driver Licence, Apply for Stage 1 Taxi Driver Licence). Moreover, CSR can search fees and make changes in the parameters of the fees like amount, validity etc.

### Pre-Requisite

* CSR should have logged in the system and have privileges to view the Configure Fees/charges screen.

### Business Process Map



**Figure 1: Business Process Map: Configure Fees/ Charges**

**Process Flow Description**

* CSR will login into the backoffice application and Chose the option for Configure Fees
* If CSR wants to add the new type of fee, then CSR can select add fee button and new fee can be created
* If CSR wants to change the existing fees then, CSR can search any fee type and make changes in the parameters of the fees

### Form Specifications

This section describes form specifications for Viewing Payment Details.

**Field Name** – Indicates name of the field

**Field Type** – Indicates Data Type of field e.g., Textbox, Label, Datebox, Dropdown etc.

**Field Length** – Indicates Length of the field

**Description** – Details like brief description, condition, information etc.

**M/ O/ C/ A** – Indicates field is Mandatory, Optional, Conditional or Auto-populated

#### Form: Configure Fee/Charges

This form will be available at back-office portal for the admin to configure and modify different fee/charges in the system. The user will be able to Add a new charge/fee or edit the existing ones. The user shall be able to make future dated configurations when upcoming change is already known (i.e., based on the effective date). The user shall be able to configure if a charge can have instalments or not. If yes, how many instalments the user may choose from, when the second Instalment shall be due.

For Edit - The New configuration shall be applicable on the new applications. For old applications on an instalment profile will remain as is and shall not be impacted by the change in configuration of instalments.

For Delete – the record to be marked as inactive. Once marked as inactive and user tries to apply for that product then ‘fee not found’ error shall be shown to the user. No Impact of delete/Inactive on the instalment profile already attached to the subscribers when config is changed to inactive.

##### **Form Details**

**Table 4: Form Specifications-Configure Fees/ Charges**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sub Section** | **Field Name** | **Field Type** | **Field** | **Description** | **M/O/ C/A** | **Remarks** |
|  |  | **Length** |  |  |  |
| **Search Fee** | Fee Name | Dropdown |  | This will contain all the fees that are created from this screen | O |  |
| Process Name | Dropdown |  | This will contain all the Process for which fess are configured | O |  |
| Status | Dropdown |  | This will contain the status like Active/ Inactive | O |  |
| Search | Button |  |  |  |  |
| Reset | Button |  |  |  | To clear the search fields. |
| **Result Grid** | Sr. No. | Label |  |  | A |  |
| Fee Name | Label |  | This will contain name of the fee | A |  |
| Process Name | Label |  | This will display, associated process with respect to selected fee | A |  |
| Account Code | Label |  | Account Code | A |  |
| Cost Object | Label |  | Cost Object | A |  |
| Fixed/ Calculated | Label |  | Yes or No | A |  |
| Amount in (£) | Label |  | Amount set at the time of configuration | A |  |
| Status | Label |  | Status of the fee | A |  |
| Action | Edit/ View |  | On click shall Open the saved configuration for editing. | O |  |
| **Configure Fee** | Fee Name | Textbox |  | Values Like:  General  Taxi Driver  Private Hire Driver  Knowledge Applicant  PHV Operator Licence  Private Hire Vehicle Licence  Taxi Vehicle Licence | M | Auto-populate-Non Editable if edit button is clicked,  user will enter if Add button is clicked |
| Following section will be as multiple add row for one fee type | | | | | |
| Process Name | Dropdown |  | This fields will have values like:  Apply for New PHV Driver Licence  Apply for New Taxi Stage 1 | M |  |
| Account Code | Dropdown |  | Values Like:  Driver Applications (411020)  Driver Licences (411030)  Operator Applications (411040) | M |  |
| Cost Object | Dropdown |  | This field will have the values like:  Taxi Vehicles (3604163)  Taxi Drivers (3604162)  Operator (3604166)  Private Hire Drivers (3604164) | M |  |
| Fixed or Calculated? | Radio button |  | Yes or No | M |  |
| Amount in (£) | Decimal |  | Amount up to 2 decimal points | C |  |
| Mandatory or Deferred? | Radio button |  |  | M |  |
| Start Date | Datebox |  |  | M |  |
| End date | Datebox |  |  | O |  |
| Is instalment allowed? | Radio Button |  | Yes or No | M |  |
| No. of Instalments | Numeric |  | Maximum no. of installments allowed for the fee | C |  |
| Active / Inactive | Radio Button |  |  |  |  |
| Save | Button |  |  |  |  |
| Cancel | Button | NA | On click, cancel the changes, and navigate to previous screen. | O |  |

##### **Actions and Stakeholders**

**Stakeholder**: Customer

**Actions**:

**Save**: - On click of save button, new Fee details will be saved.

**Cancel:** On click, cancel the changes, and navigate to previous screen.

##### **Alerts and Notifications**

**Table 5: Alert and Notifications – Configure Fees/ Charges**

|  |  |  |  |
| --- | --- | --- | --- |
| **Channel** | **Notification** | **Trigger Event** | **Notified To** |
| Backoffice Portal | Fee is configured successfully | If Fee configuration is successful | CSR |
| Backoffice Portal | Same fee cannot be mapped with same process | If same fee is mapped to same process again | CSR |

### Validations and Business Rules

**Table 6: Business Rules and Validations- Configure Fees/ Charges**

|  |  |  |
| --- | --- | --- |
| **Sr. No.** | **Business Rules** | **Remarks** |
|  | Same fee cannot be mapped to same process again |  |

### Outcome of the Process

* CSR will be able to Create, Edit and Remove Fees and Charges

## View Payment Account

CSR will have provision to view account details for a customer. CSR can see Total amount paid by customer, outstanding amount, payment transaction details done by customer. CSR can enter customer reference number/ licence number to fetch the Payment Account details of a customer.

### Pre-Requisite

* CSR should have logged in the system and have privileges to view Payment Account Details

### Business Process Map

**Figure 2: Business Process Map: View Payment Account**

**Process Flow Description**

* CSR will login into the backoffice application and Enter customer reference number or Licence Number to view Payment Account for customer
* If customer details are valid then Payment account details will be shown.
* If Customer details are not valid then CSR needs to check and enter valid customer/ licence number

### Form Specifications

This section describes form specifications for Viewing Payment Details.

**Field Name** – Indicates name of the field

**Field Type** – Indicates Data Type of field e.g., Textbox, Label, Datebox, Dropdown etc.

**Field Length** – Indicates Length of the field

**Description** – Details like brief description, condition, information etc.

**M/ O/ C/ A** – Indicates field is Mandatory, Optional, Conditional or Auto-populated

#### Form: View Payment Account

This form will be available at backoffice portal for CSR to check Payment account details for particular customer. These details can be viewed from Single View of the customer. CSR can enter either Customer Reference Number or Licence Number to fetch customer details along with customer details, Payment account details of customer is also displayed.

On View Payment Account screen customer can view the Total Amount Paid, Outstanding Amount, history of payment transactions done by customer along with various search options.

##### **Form Details**

**Table 7: Form Specifications-View Payment Account**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sub-Section** | **Field Name** | **Field Type** | **Field Length** | **Description** | **M/ O/ C/ A** | **Remarks** |
| ***View Payment Account Details*** | Amount Paid till date | Label |  | This field will show how much total amount is paid till now |  |  |
| Outstanding Amount | Label |  | This section will show the outstanding amount |  |  |
|  | Below, above section transaction history will be shown. Customer can see details of each transaction by clicking the link. | | | | | |
| ***Search Transactions*** | Process Name | Dropdown |  | Customer can select particular process name | O |  |
| Application/Licence Reference Number | Textbox |  | Customer can search based on Application/ Licence Reference Number | O |  |
|  |
| Transaction Reference Number | Textbox |  | Customer can search based in Transaction Reference Number as well | O |  |  |
| From Date | Datebox |  | Customer can search based on specific period | O |  |  |
| To Date | Datebox |  | O |  |  |
| Search Button |  |  | On click of search records will be shown in Grid Form as follows |  |  |  |
| ***Transaction History Grid*** | Serial Number | Label |  |  | A | Sequential Serial Number |  |
| Transaction Reference Number | Label |  | Denotes Transaction reference number | A |  |  |
| Transaction Type | Label |  | Payment/ Refund |  |  |  |
| Transaction Date and Time | Label |  | Transaction date and time | A |  |  |
| Application/Licence Type | Label |  | Application/licence type for which payment is made | A |  |  |
|  |
| Application/Licence Reference Number | Label |  | Application /licence reference number | A |  |  |
|  |
| Application/Licence Status | Label |  | Application /licence status | A |  |  |
|  |
| Mode of Payment | Label |  | This denotes mode of payment | A |  |  |
| Online |  |
| PO Check and Send |  |
| Virtual Payment Terminal |  |
| Transaction Status | Label |  | Status of Transaction | A |  |  |
| Action | Label |  | Initiate Refund and View Details | A |  |  |

##### **Actions and Stakeholders**

**Stakeholder**: CSR

**Actions**:

**Search**: - CSR can click on search button to search records based on Date range, status, process name etc.

**Close:** On click Close, this page will be closed

##### **Alerts and Notifications**

**Table 8: Alert and Notifications – View Payment Accounts**

|  |  |  |  |
| --- | --- | --- | --- |
| **Channel** | **Notification** | **Trigger Event** | **Notified To** |
| Backoffice Portal | Please enter valid customer reference number or licence number | If user enters invalid customer reference number/ licence number | CSR |
| Backoffice Portal | Customer record not found | If user enters customer reference number/ licence number for which no records in service system available | CSR |

### Validations and Business Rules

NA

### Outcome of the Process

CSR will be able to View customer record and Payment Account Details of a customer

## Payment Details

CSR will have provision to see the payment details which is due for payment from customer. CSR will then communicate to customer about payment details and if customer selects to pay then CST will divert call to Lot 2 IVR for Payment collection.

### Pre-Requisite

* CSR should have logged in the system and have privileges to view Payment Account Details

### Business Process Map

**Figure 3: Business Process Map: Payment Details Screen**

**Process Flow Description**

* CSR will login into the backoffice application and Enter customer reference number or Licence Number to view Payment Account for customer
* This request may come from customer as well via telephony to CSR.
* If customer details are valid then Payment account details will be shown.
* On View Payment Account screen, CSR can click on Outstanding Payment Details and see which payment details are required to be paid.
* The same will be communicated to customer via telephonic conversation
* After that CSR will transfer the call to Lot 2 IVR for payment processing
* If Customer details are not valid then CSR needs to check and enter valid customer/ licence number

### Form Specifications

This section describes form specifications for Viewing Payment Details.

**Field Name** – Indicates name of the field

**Field Type** – Indicates Data Type of field e.g., Textbox, Label, Datebox, Dropdown etc.

**Field Length** – Indicates Length of the field

**Description** – Details like brief description, condition, information etc.

**M/ O/ C/ A** – Indicates field is Mandatory, Optional, Conditional or Auto-populated

#### Form: Payment Details Screen

This screen will have the details of pending payments. These details will be similar as that of the portal. This screen will have details like type of fees, fee type wise amount.

##### **Form Details**

**Table 9: Form Specifications – Payment Details Screen**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Field Name** | **Field Type** | **Field Length** | **Description** | **M/ O/ C/ A** | **Remarks** |
| Process Name | Label |  | Process Name will be auto populated based on redirection from the process. It will be like Apply for Driver Licence – PHV, Apply for Operator Licence | A |  |
| Application Number | Label |  | Application number generated for specific application | A |  |
| Fees Details |  |  | This will be displayed as table with Sr. No., Fee Type, Amount. Customer will have an option to select fee type based on rules set for various processes | A |  |

##### **Actions and Stakeholders**

**Stakeholder**: CSR

##### **Alerts and Notifications**

**Table 10: Alert and Notifications – View Payment Accounts**

|  |  |  |  |
| --- | --- | --- | --- |
| **Channel** | **Notification** | **Trigger Event** | **Notified To** |
| Backoffice Portal | Please enter valid customer reference number or licence number | If user enters invalid customer reference number/ licence number | CSR |
| Backoffice Portal | Customer record not found | If user enters customer reference number/ licence number for which no records in service system available | CSR |

### Validations and Business Rules

NA

### Outcome of the Process

CSR will be able to View customer record and Payment Details of a customer

# Annexure

## Fees Configuration

Refer to the following table of Fee to be configured in the system. The following is an excerpt from TPH-Appendix06-Information-Payments.docx

**Table 11: Fee Details**

|  |  |  |
| --- | --- | --- |
| **Service** | **Product** | **Fee** |
| General | Subject Access Request Charge | £10.00 |
| Taxi Driver | Taxi Driver Replacement Badge | £15.00 |
| Private Hire Driver | PHV Driver New Application fee | £124.00 |
| Private Hire Driver | PHV Driver New Licence fee | £186.00 |
| Private Hire Driver | PHV Driver Renewal Application fee | £124.00 |
| Private Hire Driver | PHV Driver Renewal Licence fee | £186.00 |
| Taxi Driver | Taxi Driver New Stage 1 Application fee | £120.00 |
| Taxi Driver | Taxi Driver New Stage 2 Licence Fee | £180.00 |
| Taxi Driver | Taxi Driver Renewal application fee | £120.00 |
| Taxi Driver | Taxi Driver Renewal Licence fee | £180.00 |
| Knowledge Applicant | Knowledge Written Exam | £200.00 |
| Knowledge Applicant | Knowledge Appearances | £400.00 |
| PHV Operator Licence | Operator Application Fee (Tier 0-10) | £400.00 |
| PHV Operator Licence | Operator Licence Fee (Tier 0-10) | £1,600.00 |
| PHV Operator Licence | Operator Application Fee (Tier 11-20) | £1,200.00 |
| PHV Operator Licence | Operator Licence Fee (Tier 11-20) | £4,800.00 |
| PHV Operator Licence | Operator Application Fee (Tier 21-50) | £3,800.00 |
| PHV Operator Licence | Operator Licence Fee (Tier 21-50) Full | £15,200.00 |
| PHV Operator Licence | Operator Licence Fee (Tier 21-50) Annual | £3,040.00 |
| PHV Operator Licence | Operator Application Fee (Tier 51-100) | £6,000.00 |
| PHV Operator Licence | Operator Licence Fee (Tier 51-100) Full | £24,000.00 |
| PHV Operator Licence | Operator Licence Fee (Tier 51-100) Annual | £4,800.00 |
| PHV Operator Licence | Operator Application Fee (Tier 101-500) | £30,000.00 |
| PHV Operator Licence | Operator Licence Fee (Tier 101-500) Full | £120,000.00 |
| PHV Operator Licence | Operator Licence Fee (Tier 101-500) Annual | £24,000.00 |
| PHV Operator Licence | Operator Application Fee (Tier 501-1,000) | £70,000.00 |
| PHV Operator Licence | Operator Licence Fee (Tier 501-1,000) Full | £280,000.00 |
| PHV Operator Licence | Operator Licence Fee (Tier 501-1,000) Annual | £56,000.00 |
| PHV Operator Licence | Operator Application Fee (Tier 1,001-10,000) | £140,000.00 |
| PHV Operator Licence | Operator Licence Fee (Tier 1,001-10,000) Full | £560,000.00 |
| PHV Operator Licence | Operator Licence Fee (Tier 1,001-10,000) Annual | £112,000.00 |
| PHV Operator Licence | Operator Application Fee (Tier 10,001+) | £580,000.00 |
| PHV Operator Licence | Operator Licence Fee (Tier 10,001+) Full | £2,320,000.00 |
| PHV Operator Licence | Operator Licence Fee (Tier 10,001+) Annual | £464,000.00 |
| PHV Operator Licence | Operators add a centre | £300.00 |
| PHV Operator Licence | Operators remove a centre | £50.00 |
| PHV Operator Licence | Operators add and remove a centre | £300.00 |
| Private Hire Vehicle Licence | PHV Vehicle New Application fee | £84.00 |
| Private Hire Vehicle Licence | PHV Vehicle Grant of Licence fee | £56.00 |
| Private Hire Vehicle Licence | PHV Vehicle Renewal Application fee | £84.00 |
| Private Hire Vehicle Licence | PHV Vehicle Renewal Licence fee | £56.00 |
| Taxi Vehicle Licence | Taxi Vehicle New Application fee | £66.00 |
| Taxi Vehicle Licence | Taxi Vehicle Grant of Licence fee | £44.00 |
| Taxi Vehicle Licence | Taxi Vehicle Renewal Application fee | £66.00 |
| Taxi Vehicle Licence | Taxi Vehicle Renewal Licence fee | £44.00 |