Government of **Western Australia**
Department of **Transport**
**and Major Infrastructure**

Empowering a
thriving community

# On-demand booking services integration service

# Contents

# 1 Executive Summary

This document specifies the technical API used to exchange data between on-demand booking services (ODBSs) and the Department of Transport and Major Infrastructure (DTMI) systems for the Driver and Vehicle Dashboard, Industry Data Collection and the Passenger Transport Subsidy Scheme (PTSS).

# 2 Introduction

The integration service is a RESTful style web service Application Programming Interface (API). The service is exposed via a secure public endpoint.

The operation and data element names used in this document are indicative only, to assist readability. A technical definition of the service, in a standardised form, is provided as an addendum to this document.

## 3.1 Service Security

The security of the API communication is of the utmost importance, to ensure the integrity, confidentiality, and authenticity of the data being transmitted. All interactions with our APIs must be conducted following strict security protocols, to mitigate potential threats such as unauthorised access, data breaches, and tampering. This section outlines the security measures and requirements for vendors who will be integrating with our APIs.

### 2.1.1 Authentication and Authorisation

To ensure that only authorised users and applications can access the API, the following authentication methods must be used:

**OAuth 2.0**

- Our APIs require OAuth 2.0 for authentication. Vendors must implement OAuth 2.0 client credential flow to acquire access tokens (client ID and secret key) for API access. Tokens must be securely stored and should never be exposed in public repositories.
- The tokens are generated upon the vendor's initial sign-up for On-Demand Transport web access, via DoTDirect. Vendors are advised to securely copy and store the token details, as they will not be accessible once the web page is closed. If access to the tokens is lost, vendors should request new tokens via DoTDirect.

**Bearer token**

To obtain the Bearer Token required for accessing the service APIs, vendors should call the following API *https://auth2.<env>.bis.transport.wa.gov.au/oauth2/token* where

| Environment | Environment value |
|-------------|-------------------|
| Test        | test              |

| Environment | Environment value |
|---|---|
| Production | Blank |

**Data Security & Encryption**

- All API endpoints must be accessed over HTTPS, ensuring the use of TLS1.2

## 2.2  Service Implementation

This section provides the guidelines and instructions for implementing and integrating with the API's services. ODBSs must follow these steps, to ensure a smooth and secure integration with the system, maintain performance, and keep data consistent across the service. The instructions will cover service setup, endpoints, data handling, and error management.

### 2.2.1 Service Architecture and Components

The services are based on a RESTful API architecture, which uses standard HTTP methods for communication. ODBSs will interact with the following key components:

**API Endpoints**

- The collection of URLs that define the various service operations. These are the entry points for performing actions such as creating, reading, updating, or deleting resources.

**Request and Response Formats**:

- The service expects requests in JSON format and will return responses in JSON as well. All payloads should adhere to the specified schema, as described in the API documentation.

**Authentication and Authorisation**

- Each request must be authenticated and authorised, using the prescribed methods (for example, bearer token, client ID and client secret) to access the relevant resources.

**Data Handling and Validation**

- ODBSs are required to validate data before sending requests to the API. The API will return an error response for invalid data, and the request will not be processed. Example validation rules include checking for required fields, correct data formats (for example, dates and numerical ranges), and valid enumerated values.
- Ensure that data sent to and received from the API is handled carefully, to avoid data loss or corruption. Vendors should implement data integrity checks, including using proper formats (for example, proper date-time formatting and correct number formats).
- The API will return standard HTTP status codes to indicate the outcome of the request.

## 2.3  Configuration Items

### 2.3.1 Base URL

Endpoints are exposed through API gateway. This section describes the protocols required to access the endpoints.

The following table presents the Base URL to be called per environment.

| Environment | Resulting Base URL |
|---|---|
| Test | https://testb-ondemand-industry-api.test.bis.transport.wa.gov.au/testb-ondemand-industry-api/ |
| Production | https://ondemand-industry-api.bis.transport.wa.gov.au/ondemand-industry-api/ |

The following is an example of an URL. The path URLs are provided in the YAML specification attached in Section 3.

| Base URL | Example URL |
|---|---|
| <baseURL><pathURL> | https://ondemand-industry-api.bis.transport.wa.gov.au/ondemand-industry-api/v1/ondemand-industry-api/passenger-transport-subsidy-scheme/booking-service-payments/5678/driver-payments |

# 3 Service Operations

This section describes the structure and behaviour of the API services, including the request and response formats and the corresponding YAML specifications. It outlines how information must be submitted and returned by each endpoint, providing the required data fields, example payloads, and validation rules defined within the YAML file.

The YAML specification for the services is attached below

YAML_file_Passenger
_transport_web_servic

## 3.1 Passenger Transport Subsidy Scheme (PTSS)

### 3.1.1 Service Operation: Get Participant Status

#### 3.1.1.1 Description

This operation provides the subsidy level for the participant at a given point in time.

#### 3.1.1.2 Request

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Participant card number | String | Alphanumeric | Mandatory | The unique identifier assigned to the participant's card. |
| Card expiry date | String | Date | Mandatory | The expiry date of the participant's card. |
| ODBS authorisation number | Integer | Numeric | Mandatory | The On-demand ODBS authorisation number for the ODBS's customer |

#### 3.1.1.3 Response

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Data | Object | participantStatusData | Mandatory | |

#### 3.1.1.4 participantStatusData Object Definition

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Participant status | String | Alpha | Optional | An indication as to whether the participant is valid or not. The list of values are: <br>• ACTIVE<br>• EXPIRED<br>• CANCELLED<br>• CHANGED |

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Code | String | Alphanumeric | Optional | The code used to reference a specific subsidy level.<br><br>The list of values are:<br>• STANDARD<br>• WHEELCHAIR<br>• WHEELCHAIR_LEGACY |
| Description | String | Alphanumeric | Optional | The description of a specific subsidy level. |
| Percentage<br><br>Wheelchair accessible vehicle wheelchair carried | Integer | Numeric | Optional | The subsidy percentage, between 0 and 100, for instances where the journey is in a wheelchair accessible vehicle and a wheelchair is carried. |
| Percentage<br><br>Non-wheelchair accessible vehicle<br><br>Wheelchair carried | Integer | Numeric | Optional | The subsidy percentage, between 0 and 100, for instances where the journey is in a non- wheelchair accessible vehicle and a wheelchair is carried. |
| Percentage<br><br>Wheelchair accessible vehicle<br><br>No wheelchair carried | Integer | Numeric | Optional | The subsidy percentage, between 0 and 100, for instances where the journey is in a wheelchair accessible vehicle and no wheelchair is carried. |
| Percentage<br><br>Non-wheelchair accessible vehicle<br><br>No wheelchair carried | Integer | Numeric | Optional | The subsidy percentage, between 0 and 100, for instances where the journey is in a non-wheelchair accessible vehicle and no wheelchair is carried. |
| Subsidy cap<br><br>Wheelchair accessible vehicle wheelchair carried | Integer | Numeric | Optional | The maximum subsidy which can be applied, in cents, for instances where the journey is in a wheelchair accessible vehicle and a wheelchair is carried. |
| Subsidy cap<br><br>Non-wheelchair accessible vehicle<br><br>Wheelchair carried | Integer | Numeric | Optional | The maximum subsidy which can be applied, in cents, for instances where the journey is in a non-wheelchair accessible vehicle and a wheelchair is carried. |
| Subsidy cap<br><br>Wheelchair accessible vehicle<br><br>No wheelchair carried | Integer | Numeric | Optional | The maximum subsidy which can be applied, in cents, for instances where the journey is in a wheelchair accessible vehicle and no wheelchair is carried. |

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Subsidy cap<br><br>Non-wheelchair accessible vehicle<br><br>No wheelchair carried | Integer | Numeric | Optional | The maximum subsidy which can be applied, in cents, for instances where the journey is in a non-wheelchair accessible vehicle and no wheelchair is carried. |

### 3.1.1.5 Response Codes

| Response Code | Description |
|---|---|
| 200 | Successful operation. |
| 400 | The request does not include the required values, or the values are not in the expected format. |
| 401 | The interface consumer is not authorised to perform this operation. |
| 500 | An unexpected internal error has occurred. |

## 3.1.2 Service Operation: Start Journey

### 3.1.2.1 Description

This operation allows the ODBS to notify DTMI of the commencement of a journey involving a PTSS participant. This service may be called "live" when the journey commences, or at a later date after the journey has been completed.

### 3.1.2.2 Request

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Booking ID | String | Alphanumeric | Mandatory | The ODBS's unique reference number for the journey. |
| ODBS authorisation number | Integer | Numeric | Mandatory | The ODBS authorisation number. |
| Passenger Transport Driver (PTD) number | Integer | Numeric | Mandatory | The PTD authorisation number of the driver undertaking the journey. |
| Plate number | String | Alphanumeric | Mandatory | The licence plate of the vehicle that was used for the journey. |
| Participant number | Integer | Numeric | Mandatory | A unique number issued to the participant. |
| Participant card number | String | Alphanumeric | Mandatory | A unique identifier assigned to the participants card, starting with a P followed by 9 digits. |
| Participant card expiry date | String | Date | Mandatory | The expiry date of the participant's card, in yyyy-mm-dd format. |
| Pickup datetime | String | Date and time | Mandatory | The date and time the journey commenced, in yyyyy-mm-dd'T'HH:mm:ssXXX format. |
| Pickup latitude | String | Numeric | Mandatory | The GPS latitude of the location where the journey commenced. Minimum of 5 decimal places, up to 10 decimal places allowed. |
| Pickup longitude | String | Numeric | Mandatory | The GPS longitude of the location where the journey commenced. Minimum of 5 decimal places, up to 10 decimal places allowed. |

### 3.1.2.3 Response

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| External journey reference ID | String | UUID | Mandatory | The Department's unique reference ID for each journey. This must be used in all other service calls for this journey. |

### 3.1.2.4 Response Codes

| Response Code | Description |
|---|---|
| 200 | Successful operation. |
| 400 | The request does not include the required values, or the values are not in the expected format. |
| 401 | The interface consumer is not authorised to perform this operation. |
| 500 | An unexpected internal error has occurred. |

## 3.1.3 Service Operation: Submit Journey Location Captures

### 3.1.3.1  Description

This operation allows the ODBS to notify DTMI of the GPS location points that have been collected for a given journey. This service may be called "live" during the journey itself, or at a later date after the journey has been completed.

### 3.1.3.2  Request

| Element | Type | Format | Constraint | Description |
|---------|------|--------|-----------|-------------|
| External journey reference ID | String | UUID | Mandatory | The Department's unique reference ID for this journey. This reference ID is returned from the "Start journey" service. |
| Final location details | Boolean | True/false | Mandatory | A flag to indicate if this is the last set of location details for this journey. |
| Location points | Object | Location details | Mandatory | An array of one or many location points captured for the journey. The maximum array size is 100 locations. |

### 3.1.3.3  Location details object definition

| Element | Type | Format | Constraint | Description |
|---------|------|--------|-----------|-------------|
| Latitude | String | Numeric | Mandatory | The GPS latitude reading of this journey location point, at a given point in time. |
| Longitude | String | Numeric | Mandatory | The GPS longitude reading of this journey location point, at a given point in time. |
| Location determined time | String | Date and time | Mandatory | The time at which this location point was determined, in yyyy-mm-dd'T'hh:mi:ssXXX format. |
| Horizontal accuracy metres | String | Numeric | Optional | The accuracy level of the latitude and longitude coordinates in meters. |
| Altitude metres | String | Numeric | Optional | The height of the position in meters above the ellipsoid. |
| Vertical accuracy metres | String | Numeric | Optional | The accuracy level of the altitude coordinate in meters. |
| Speed metre per second | String | Numeric | Optional | The current ground speed of the device, specified in meters per second. |
| Speed accuracy metre per second | String | Numeric | Optional | The accuracy level of the ground speed in meters per second. |
| Bearing degrees | String | Numeric | Optional | The direction of the vehicle at the time of this journey location point. |

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Bearing accuracy degrees | String | Numeric | Optional | The accuracy of the direction of the vehicle at the time of this journey location point. |

### 3.1.3.4 Response

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Data | Object | SaveLocationPointsResponseData | Mandatory | An array of location data confirmations, one element for each location point. |

### 3.1.3.5 SaveLocationPointsResponseData object definition

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Location determined time | String | Datetime | Mandatory | The time at which this location point was determined, in yyyyy-mm-dd'T'hh:mi:ssXXX format.  This is the time that was passed in the request. |
| Location reference number | Integer | Numeric | Mandatory | The Department's unique reference number for this location point. |

### 3.1.3.6 Response Codes

| Response Code | Description |
|---|---|
| 200 | Successful operation. |
| 400 | The request does not include the required values, or the values are not in the expected format. |
| 401 | The interface consumer is not authorised to perform this operation. |
| 500 | An unexpected internal error has occurred. |

## 3.1.4 Service Operation: Complete Journey

### 3.1.4.1  Description

This operation allows the ODBS to notify DTMI of the completion of a given journey. This service may be called "live" during the journey itself, or at a later date after the journey has been completed. A journey will not be processed by DTMI until this service is called.

### 3.1.4.2  Request

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| External journey reference ID | String | UUID | Mandatory | The Department's unique reference ID for this journey. This reference ID is returned from the "Start journey" service. |
| Drop off date/time | String | Date and time | Mandatory | Date and time the journey ended, in yyyy-mm-dd'T'hh:mi:ssXXX format. |
| Drop off latitude | String | Numeric | Mandatory | The GPS latitude of the location where the journey finished. Minimum of 5 decimal places, up to 10 decimal places allowed. |
| Drop off longitude | String | Numeric | Mandatory | The GPS longitude of the location where the journey finished. Minimum of 5 decimal places, up to 10 decimal places allowed. |
| Wheelchair carried flag | Boolean | True/false | Optional | (Default to false) A flag to indicate that the participant travelled with a wheelchair. |
| Distance | Integer | Numeric | Mandatory | The distance travelled for the journey in meters. Format is 999999. |
| Total fare | Integer | Numeric | Mandatory | The total fare charged for the journey in cents. Format is 99999. |
| Passenger payment amount | Integer | Numeric | Mandatory | The amount of the total fare that the passenger is required to pay in cents. Format is 99999. |
| Subsidy amount claimed | Integer | Numeric | Mandatory | The amount of the subsidy claimed for the trip in cents. Format is 99999. |
| Subsidy percentage claimed | String | Numeric | Mandatory | The subsidy percentage that was used to calculate the subsidy amount, in the format 999.99. For example, 50% would be represented as "50.00". This is mandatory. |

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Subsidy cap claimed | Integer | Numeric | Mandatory | The subsidy cap that was used to calculate the subsidy amount in cents. Format is 99999.<br><br>This is mandatory. |
| Additional participants data | Array | | Optional | A list of any additional PTSS participants that travelled in the vehicle. |

### 3.1.4.3 Additional Participants Array Definition

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Participant number | Integer | Numeric | Mandatory | The PTSS participant number of the additional participant who undertook the journey. Up to 6 digits in length. |
| Card number | String | Alphanumeric | Mandatory | Card number presented by the additional participant, starting with a P followed by 9 digits. |
| Participant card expiry date | String | Date | Mandatory | Card expiry date of the additional participant's card used on the journey, in yyyy-mm-dd format. |
| Pickup date/time | String | Datetime | Mandatory | Date and time the journey commenced, in yyyy-mm-dd'T'hh:mi:ssXXX format. |
| Pickup latitude | String | Numeric | Mandatory | The GPS latitude of the location where the additional participant's journey commenced. Minimum of 5 decimal places, up to 10 decimal places allowed. |
| Pickup longitude | String | Numeric | Mandatory | The GPS longitude of the location where the additional participant's journey commenced. Minimum of 5 decimal places, up to 10 decimal places allowed. |
| Drop off date/time | String | Date and time | Mandatory | Date and time the journey ended, in yyyy-mm-dd'T'hh:mi:ssXXX format. |
| Drop off latitude | String | Numeric | Mandatory | The GPS latitude of the location where the additional participant's journey finished. Minimum of 5 decimal places, up to 10 decimal places allowed. |

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| Drop off longitude | String | Numeric | Mandatory | The GPS longitude of the location where the additional participant's journey finished. Minimum of 5 decimal places, up to 10 decimal places allowed. |
| Distance | Integer | Numeric | Mandatory | The distance travelled for the additional participant's journey in meters. |
| Total fare | Integer | Numeric | Mandatory | The total fare charged for the additional participant's journey in cents. |
| Passenger payment amount | Integer | Numeric | Mandatory | The amount of the total fare that the additional participant is required to pay in cents. |
| Subsidy amount claimed | Integer | Numeric | Mandatory | The amount of the subsidy claimed for the additional participant's trip in cents. |
| Subsidy percentage claimed | String | Numeric | Mandatory | The subsidy percentage that was used to calculate the subsidy amount, in the format 999.99. For example, 50% would be represented as "50.00". |
| Subsidy cap claimed | Integer | Numeric | Mandatory | The subsidy cap that was used to calculate the subsidy amount in cents. |
| Wheelchair carried flag | Boolean | True/false | Optional | A flag to indicate that the additional participant travelled with a wheelchair. |

### 3.1.4.4  Response

| Element | Type | Format | Description |
|---------|------|--------|-------------|
| Nil. | | | |

### 3.1.4.5  Response Codes

| Response Code | Description |
|---------------|-------------|
| 200 | Successful operation. |
| 400 | The request does not include the required values, or the values are not in the expected format. |
| 401 | The interface consumer is not authorised to perform this operation. |
| 500 | An unexpected internal error has occurred. |

## 3.1.5 Service Operation: Get ODBS payments

### 3.1.5.1 Description

This operation provides a list of payments for an ODBS for a given period of time.

### 3.1.5.2 Request

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| Start date | String | Date | Mandatory | The starting date for the list of ODBS payments, in yyyy-mm-dd format. |
| End date | string | Date | Mandatory | The end date for the list of ODBS payments, in yyyy-mm-dd format. |

### 3.1.5.3 Response

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| data | Array | BookingServicePaymentData | Optional | A list of all ODBS payments made between the given start date and end date. |

### 3.1.5.4 BookingServicePaymentData Array Definition

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| DoT payment number | Integer | Numeric | Optional | The unique number assigned by the Department to each ODBS payment. |
| Remittance date | String | Date | Optional | The date the payment was approved, in yyyy-mm-dd format. |
| Number of records | Integer | Numeric | Optional | Total number of original journey records included in this payment. |
| Subsidy | Integer | Numeric | Optional | Total value of the subsidy component of original journey records included in this payment, in cents. |
| Co-payment | Integer | Numeric | Optional | Total value of the co-payment component of original journey records included in this payment, in cents. |
| Adjustments | Integer | Numeric | Optional | Total value of the subsidy and co-payment components of any adjustments applied to previously paid journeys, in cents. |
| Total | Integer | Numeric | Optional | Total value of all journeys and adjustments included in this payment run, in cents. |
| Bank reference | String | Alphanumeric | Optional | The direct credit reference number issued for this payment. |

### 3.1.5.5 Response Codes

| Response Code | Description |
|---|---|
| 200 | Successful operation. If no data is found, this service call will return 200 but no response data. |
| 400 | The request does not include the required values, or the values are not in the expected format. |
| 401 | The interface consumer is not authorised to perform this operation. |
| 500 | An unexpected internal error has occurred. |

## 3.1.6 Service Operation: Get driver payments for an ODBS payment

### 3.1.6.1  Description

This operation provides a list of the driver payments for a given ODBS payment.

### 3.1.6.2  Request

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| DoT payment number | Integer | Numeric | Mandatory | The unique number assigned by the Department to each ODBS payment.<br><br>This payment number is retrieved through the Service Operation: Get ODBS payments as defined in section 5.1.5. |

### 3.1.6.3  Response

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Driver payments | Array | driverActivityReportData | Mandatory | A list of all driver activity reports included in the given ODBS payment. |

### 3.1.6.4  driverActivityReportData Object Definition

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Activity report number | Integer | Numeric | Mandatory | The unique number assigned by the Department to each driver activity report. |
| PTD number | Integer | Numeric | Mandatory | The PTD number of the driver on this activity report. |
| Driver surname | String | Alphanumeric | Mandatory | The surname of the driver on this activity report. |
| Number of records | Integer | Numeric | Mandatory | Total number of original journey records included in this driver activity report. |
| Subsidy | Integer | Numeric | Mandatory | Total value of the subsidy component of original journey records included in this driver activity report, in cents. |
| Co-payment | Integer | Numeric | Mandatory | Total value of the co-payment component of original journey records included in this driver activity report, in cents. |
| Adjustments | Integer | Numeric | Mandatory | Total value of the subsidy and co-payment components of any adjustments applied to previously paid journeys, in cents. |

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| Total | Integer | Numeric | Mandatory | Total value of all journeys and adjustments included in this driver activity report, in cents. |

### 3.1.6.5 Response Codes

| Response Code | Description |
|---------------|-------------|
| 200 | Successful operation. |
| 400 | The request does not include the required values, or the values are not in the expected format or if On-demand booking service payment not found. |
| 401 | The interface consumer is not authorised to perform this operation. |
| 500 | An unexpected internal error has occurred. |

## 3.1.7 Service Operation: Get journey data for an ODBS payment

### 3.1.7.1  Description

This operation provides a list of the journeys that are included in a payment for a given ODBS.

### 3.1.7.2  Request

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| DoT payment number | Integer | Numeric | Mandatory | The unique number assigned by the Department to each ODBS payment.<br><br>This payment number is retrieved through the Service Operation: Get ODBS payments as defined in section 4.1.5 |
| Page | Integer | Numeric | Mandatory | The page number to retrieve, starting at 0. |
| Size | Integer | Numeric | Mandatory | The maximum number of records to retrieve. |

### 3.1.7.3  Response

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| Number of records | Integer | Numeric | Mandatory | The total number of journeys available for the given payment. |
| Journey payment data | Array | JourneyPaymentData | Mandatory | A list of all journeys included in the given ODBS payment. |

### 3.1.7.4  Journey Payment Data Array Definition

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| Activity report number | Integer | Numeric | Mandatory | Reference number for the driver payment. |
| Journey ID | String | Alphanumeric | Mandatory | The booking ID supplied by the ODBS for the journey. |
| PTD number | Integer | Numeric | Mandatory | The PTD number of the driver on this journey. |
| Vehicle | String | Alphanumeric | Mandatory | The licence plate of the vehicle involved in the journey. |
| Journey start time | String | Date and time | Mandatory | The date/time the journey commenced, in yyyyy-mm-dd'T'hh:mi:ssXXX format. |
| Status | String | Alpha | Mandatory | The payment status of the journey. |
| Subsidy | Integer | Numeric | Mandatory | Total value of the subsidy component of the journey, in cents. |
| Co-payment | Integer | Numeric | Mandatory | Total value of the co-payment component of the journey, in cents. |

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| Adjustments | Integer | Numeric | Mandatory | If this record relates to an adjustment of a previous journey payment, then the total value of the subsidy and co-payment components of the adjustment, in cents. |
| Total | Integer | Numeric | Mandatory | Total value of the journey or adjustment for this journey, in cents. |

### 3.1.7.5  Response Codes

| Response Code | Description |
|---------------|-------------|
| 200 | Successful operation. |
| 400 | The request does not include the required values, or the values are not in the expected format, or if On-demand booking service payment not found. |
| 401 | The interface consumer is not authorised to perform this operation. |
| 500 | An unexpected internal error has occurred. |

## 3.1.8 Service Operation: Get status of PTSS journeys for an ODBS

### 3.1.8.1 Description

This operation provides a list and status of a PTSS journey, or all journeys for a given day, for a given ODBS.

### 3.1.8.2 Request

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Booking reference number | String | Alpha | Optional | The ODBS's unique reference number for the journey.<br><br>A list of booking reference numbers is allowed, up to 500 entries. |
| Travel date | String | Date | Optional | The date for which the user is requesting all journeys commenced, in yyyyy-mm-dd format. |

Note: If neither a "Booking reference number" nor "Travel date" is supplied the service will return all PTSS journeys for yesterday.

### 3.1.8.3 Response

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| PTSS journey statuses | Array | journeyStatusData | Mandatory | A list of all PTSS journeys that match the request made by the given ODBS. |

### 3.1.8.4 journeyStatusData Object Definition

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Booking reference number | Integer | Numeric | Mandatory | The ODBS's unique reference number for the journey. |
| Journey status | String | Alpha | Mandatory | The status of journey. Values are:<br><ul><li>Processing</li><li>Approved - pending payment</li><li>Rejected - pending notification</li><li>Rejected</li><li>Paid</li><li>Pending industry data</li></ul> |
| Additional participant flag | Boolean | True/false | Mandatory | A flag to indicate if this was an additional participant. |
| DoT payment number | Integer | Numeric | Optional | If the journey has been included in a payment, the DoT payment number of that payment. |

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| Notification date | String | Date | Optional | If the journey has been included in a payment, the date of that payment. |

### 3.1.8.5 Response Codes

| Response Code | Description |
|---------------|-------------|
| 200 | Successful operation. |
| 400 | The request does not include the required values, or the values are not in the expected format. |
| 401 | The interface consumer is not authorised to perform this operation. |
| 500 | An unexpected internal error has occurred. |

## 3.2  Driver and Vehicle Dashboard

### 3.2.1 Service Operation: Get PTD Status

#### 3.2.1.1  Description

This operation returns the PTD status. This API should be called before initiating the journey submission, to avoid the risk of the journey being rejected due to a passenger being ineligible for PTSS. Only one driver is allowed per request call.

#### 3.2.1.2  Request

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Driver licence number | String | Alphanumeric | Mandatory | Licence number of the driver. |
| Driver surname | String | Alpha | Mandatory | Last name of the driver. |
| Date of birth | String | Date | Mandatory | Date of birth of the driver using the YYYY-MM-DD. |

#### 3.2.1.3  Response

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Driver status | String | Alpha | Optional | Example values:<br>• Driver found<br>• Driver not found |
| PTD status | String | Alpha | Optional | Example values:<br>• Valid<br>• Invalid |
| PTD number | Integer | Numeric | Optional | The PTD number of the driver on this journey. |

#### 3.2.1.4  Response Codes

| Response Code | Description |
|---|---|
| 200 | Successful operation. |
| 400 | The request does not include the required values, or the values are not in the expected format. |
| 401 | The interface consumer is not authorised to perform this operation. |
| 500 | An unexpected internal error has occurred. |

## 3.2.2 Service Operation: Get PTV Status

### 3.2.2.1 Description

This operation returns the Passenger Transport Vehicle (PTV) status. This API should be called before initiating the journey submission, to avoid the risk of the journey being rejected due to a passenger being ineligible for PTSS. Only one vehicle is allowed per request call.

### 3.2.2.2 Request

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Plate number | String | Alphanumeric | Mandatory | Plate number of the vehicle belonging to the driver. |
| VIN number | String | Alphanumeric | Optional | A unique VIN (Vehicle Identification Number) associated to the vehicle. It is recommended to send the VIN when there are multiple vehicles found. |

### 3.2.2.3 Response

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Vehicle status | String | Alpha | Optional | Status of the vehicle. Example values:<br>• Vehicle found<br>• Vehicle not found<br>• Multiple vehicles found |
| PTV status | String | Alpha | Optional | Example values:<br>• Valid<br>• Invalid<br>• Not found |
| PTV defect status | String | Numeric | Optional | The PTV defect status, if there is any.<br>Example values:<br>• Valid<br>• Invalid<br>• Not found<br>• Not checked |

### 3.2.2.4 Response Codes

| Response Code | Description |
|---|---|
| 200 | Successful operation. |
| 400 | This error will be thrown when:<br><br>• The request does not include the required values, or<br>• The values are not in the expected format, or<br>• Vehicle is not found, or<br>• Multiple vehicles is found |
| 401 | The interface consumer is not authorised to perform this operation. |
| 500 | An unexpected internal error has occurred. |

## 3.2.3 Service Operation: Add driver to the driver dashboard

### 3.2.3.1 Description

This operation adds the driver to the driver dashboard. Only one driver is allowed per request call.

### 3.2.3.2 Request

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Driver licence number | String | Numeric | Mandatory | Licence number of the driver. |
| Driver surname | String | Alpha | Mandatory | Last name of the driver. |
| Date of birth | String | Date | Mandatory | Date of birth of the driver using YYYY-MM-DD. |

### 3.2.3.3 Response

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Result status | String | Alpha | Mandatory | The result of the add driver subscription. Example value:<br>• Driver added<br>• Driver not found<br>• Driver already subscribed |

### 3.2.3.4 Response Codes

| Response Code | Description |
|---|---|
| 200 | Successful operation. |
| 400 | The request does not include the required values, or the values are not in the expected format. |
| 401 | The interface consumer is not authorised to perform this operation. |
| 500 | An unexpected internal error has occurred. |

## 3.2.4 Service Operation: Remove driver from the driver dashboard

### 3.2.4.1  Description

This operation removes the driver from the driver dashboard. Only one driver is allowed per request call.

### 3.2.4.2  Request

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Driver licence number | String | Numeric | Mandatory | Licence number of the driver. |
| Driver surname | String | Alpha | Mandatory | Last name of the driver. |
| Date of birth | String | Date | Mandatory | Date of birth of the driver using YYYY-MM-DD. |

### 3.2.4.3  Response

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Result status | String | Alpha | Mandatory | The result of the add driver subscription. Example value:<br><br>• Driver not found<br>• Driver not subscribed<br>• Driver removed |

### 3.2.4.4  Response Codes

| Response Code | Description |
|---|---|
| 200 | Successful operation. |
| 400 | The request does not include the required values, or the values are not in the expected format. |
| 401 | The interface consumer is not authorised to perform this operation. |
| 500 | An unexpected internal error has occurred. |

## 3.2.5 Service Operation: Add vehicle to the vehicle dashboard

### 3.2.5.1 Description

This operation adds the vehicle to the vehicle dashboard. Only one vehicle is allowed per request call.

### 3.2.5.2 Request

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| Plate number | String | Alphanumeric | Mandatory | Plate number of the vehicle belonging to the driver. |
| VIN number | String | Alphanumeric | Optional | A unique VIN (Vehicle Identification Number) associated to the vehicle. |

### 3.2.5.3 Response

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| Result status | String | Alpha | Mandatory | The result of the add vehicle subscription. Example value:<br>• Vehicle not found<br>• Vehicle added<br>• Multiple vehicles found<br>• Vehicle already subscribed |

### 3.2.5.4 Response Codes

| Response Code | Description |
|---------------|-------------|
| 200 | Successful operation. |
| 400 | The request does not include the required values, or the values are not in the expected format, or if vehicle is not found, or if multiple vehicles are found. |
| 401 | The interface consumer is not authorised to perform this operation. |
| 500 | An unexpected internal error has occurred. |

## 3.2.6 Service Operation: Remove vehicle from the vehicle dashboard

### 3.2.6.1  Description

This operation removes the vehicle from the vehicle dashboard. Only one vehicle is allowed per request call.

### 3.2.6.2  Request

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| Plate number | String | Alphanumeric | Mandatory | Plate number of the vehicle belonging to the driver. |
| VIN number | String | Alphanumeric | Optional | A unique VIN (Vehicle Identification Number) associated to the vehicle. |

### 3.2.6.3  Response

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| Result status | String | Alpha | Mandatory | The result of the add driver subscription. Example value: <br>• Vehicle not found <br>• Multiple vehicles found <br>• Vehicle removed <br>• Vehicle already removed |

### 3.2.6.4  Response Codes

| Response Code | Description |
|---------------|-------------|
| 200 | Successful operation. |
| 400 | The request does not include the required values, or the values are not in the expected format, or if vehicle is not found, or if multiple vehicles are found. |
| 401 | The interface consumer is not authorised to perform this operation. |
| 500 | An unexpected internal error has occurred. |

## 3.2.7 Service Operation: Export a list of driver subscriptions

### 3.2.7.1 Description

This operation exports a list of driver subscriptions for given parameters

### 3.2.7.2 Request

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| Filter status | String | Alpha | Mandatory | Filtering the driver subscription dashboard. Example value: <ul><li>SHOW_ALL</li><li>MISMATCHED</li><li>INVALID</li><li>VALID</li></ul> |
| Export type | String | Alpha | Mandatory | Example value: |

| Export type | Description |
|-------------|-------------|
| ALL | All driver subscription statuses have been requested. |
| CHANGEDSINCE | All driver subscriptions that have had a change in status since the last export has been requested. |
| NOMATCH | All driver subscriptions that are no longer matched since the last export. |
| VALID | All driver subscriptions that the user has filtered to the status of the valid only. |
| INVALID | All driver subscriptions that the user has filtered to the status of the invalid only. |

### 3.2.7.3  Response

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| Mime file type | String | Alpha | Mandatory | This indicates the format of the file content returned by the API and allows the client to correctly interpret and display or download the file. Example value:<br><br>• application/csv |
| File type | String | Alpha | Mandatory | Represents the file extension associated with the exported file. Example value:<br><br>• CSV |
| Content | String | Alpha | Mandatory | Contains the actual file data, encoded as a Base64 string.<br><br>The booking service must decode this value to reconstruct the original file for download or display. |

### 3.2.7.4  Response Codes

| Response Code | Description |
|---------------|-------------|
| 200 | Successful operation. |
| 400 | The request does not include the required values, or the values are not in the expected format, or if the filter status or export type is not from the enumerations list. |
| 401 | The interface consumer is not authorised to perform this operation. |
| 500 | An unexpected internal error has occurred. |

## 3.2.8 Service Operation: Export a list of vehicle subscriptions

### 3.2.8.1  Description

This operation exports a list of vehicle subscriptions for given parameters.

### 3.2.8.2  Request

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Filter status | String | Alpha | Mandatory | Filtering the vehicle subscription dashboard. Example value:<br>• SHOW_ALL<br>• MISMATCHED<br>• INVALID<br><br>VALID |
| Export type | String | Alpha | Mandatory | Example value: |

| Export type | Description |
|---|---|
| ALL | All vehicle subscription statuses have been requested. |
| CHANGEDSINCE | All vehicle subscriptions that have had a change in status since the last export has been requested. |
| NOMATCH | All vehicle subscriptions that are no longer matched since the last export. |
| VALID | All vehicle subscriptions that the user has filtered to the status of the valid only. |
| INVALID | All vehicle subscriptions that the user has filtered to the status of the invalid only. |

### 3.2.8.3 Response

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Mime file type | String | Alpha | Mandatory | This indicates the format of the file content returned by the API and allows the client to correctly interpret and display or download the file. Example value:<br><br>• application/csv |
| File type | String | Alpha | Mandatory | Represents the file extension associated with the exported file. Example value:<br><br>• CSV |
| Content | String | Alpha | Mandatory | Contains the actual file data, encoded as a Base64 string.<br><br>The client must decode this value to reconstruct the original file for download or display. |

### 3.2.8.4 Response Codes

| Response Code | Description |
|---|---|
| 200 | Successful operation. |
| 400 | The request does not include the required values, or the values are not in the expected format, or if the filter status or export type is not from the enumerations list. |
| 401 | The interface consumer is not authorised to perform this operation. |
| 500 | An unexpected internal error has occurred. |

## 3.3  Industry data collection

### 3.3.1 Service Operation: Get list of ODBS industry data submission requests

#### 3.3.1.1  Description

This operation provides a list of industry data submission requests, issued by DTMI, for a given ODBS.

#### 3.3.1.2  Request

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| Outstanding requests only flag | Boolean | True/false | Optional | True (default): Ony return all outstanding submission requests<br><br>False: return all submission requests for the last 12 months. |

#### 3.3.1.3  Response

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| data | Array | submissionRequestData | Mandatory | A list of industry data submission requests for the given ODBS. |

#### 3.3.1.4  submissionRequestData Object Definition

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| Submission request number | Integer | Numeric | Mandatory | A unique identifier for each submission request. |
| Period start date | String | Date (ISO 8601) | Mandatory | The start date of the submission period data is required for. |
| Period end date | String | Date (ISO 8601) | Mandatory | The end date of the submission period data is required for. |
| Due date | String | Date (ISO 8601) | Mandatory | The date this submission is due. |
| Request status | String | Alpha | Optional | The status of the submission request. |
| Submissions | Array | submissionData | Mandatory | A list of any submissions that have been made for this request. |

### 3.3.1.5  submissionData Object Definition

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Submission number | Integer | Numeric | Mandatory | A unique identifier for each submission for the given submission request. |
| Submission date/time | String | Datetime (ISO 8601) | Mandatory | The date/time of the submission, in yyyyy-mm-dd'T'hh:mi:ssXXX format. |
| Submission status | String | Alpha | Mandatory | The status of the submission. |
| Number of records | Integer | Numeric | Optional | The number of records processed in the submission. |
| Number of errors | Integer | Numeric | Optional | If the submission failed, the number of errors found. |

### 3.3.1.6  Response Codes

| Response Code | Description |
|---|---|
| 200 | Successful operation. |
| 400 | The request does not include the required values, or the values are not in the expected format. |
| 401 | The interface consumer is not authorised to perform this operation. |
| 500 | An unexpected internal error has occurred. |

## 3.3.2 Service Operation: Request pre-signed URL for an industry data submission request

### 3.3.2.1 Description

This operation allows the ODBS to request a pre-signed URL, to upload an industry journey data file, for a given submission request.

### 3.3.2.2 Request

| | Type | Format | Constraint | Description |
|---|---|---|---|---|
| Submission request number | Integer | Numeric | Mandatory | A unique identifier for each submission request. |
| Replacement submission flag | Boolean | True/false | Mandatory | Flag to indicate if the On-demand booking service wants to replace an existing industry data submission. True: The request is to replace an industry data submission that is already completed. False: The request is to provide and industry data submission for the first time for the submission request. |

### 3.3.2.3 Response

| | Type | Format | Constraint | Description |
|---|---|---|---|---|
| data | Object | DocumentUploadUrlData | Mandatory | The pre-signed url requested. This url is used to upload the csv file with the industry data for the given submission period. |

### 3.3.2.4 DocumentUploadUrlData Object

| Element | Type | Format | Constraint | Description |
|---|---|---|---|---|
| URL | String | Alphanumeric | Mandatory | The pre-signed url requested. This url is used to upload the csv file with the industry data for the given submission period. |
| Document content ID | String | Alphanumeric | Mandatory | |

### 3.3.2.5 Response Codes

| Response Code | Description |
|---|---|
| 200 | Successful operation. |
| 400 | The request does not include the required values, or the values are not in the expected format, or if submission request is not found. |
| 401 | The interface consumer is not authorised to perform this operation. |

| 500 | An unexpected internal error has occurred. |
|-----|---------------------------------------------|

### 3.3.3 Service Operation: Confirm industry data submission

#### 3.3.3.1  Description

This operation allows the ODBS to confirm the upload of the industry data submission CSV file for a given submission request.

#### 3.3.3.2  Request

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| Submission request number | Integer | Numeric | Mandatory | A unique identifier for each submission request. |
| Document content ID | String | UUID | Mandatory | The Document ID supplied to the On-demand booking service when they used the pre-signed url to upload the CSV industry data file. |
| File number | String | Alphanumeric | Mandatory | The name of the file document. |
| Replacement submission flag | Boolean | True/false | Mandatory | Flag to indicate if the On-demand booking service wants to replace an existing industry data submission. True: The request is to replace an industry data submission that is already completed. False: The request is to provide and industry data submission for the first time for the submission request. |

#### 3.3.3.3  Response

| Element | Type | Format | Constraint | Description |
|---------|------|--------|------------|-------------|
| Nil. | | | | |

#### 3.3.3.4  Response Codes

| Response Code | Description |
|---------------|-------------|
| 200 | Successful operation. |
| 400 | The request does not include the required values, or the values are not in the expected format or if the request number is not incorrect/not found. |
| 401 | The interface consumer is not authorised to perform this operation. |
| 500 | An unexpected internal error has occurred. |