



Business Operations Agreement

Schedule 2

Appendix 04 – Data Input and Output Requirements for Event Processing

TfL_scp_000555

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1 Introduction

- 1.1 Event Processing is the system process whereby each Detection Event is determined whether it is to be retained or discarded and linked to a Scheme.
- 1.2 Event Processing will then, by Scheme, collate all Detection Events with the same VRM into a Chargeable Item.
- 1.3 Event Processing will then, by Scheme, assign a “*Product Identifier*”, where the Product Identifier is a means of classifying Chargeable Items and determining their treatment within Events Processing from thereon. Note, the term Product Identifier is used here to explain the requirement. The Service Provider may choose to implement this in another way.
- 1.4 In order for Event Processing to assign the correct *Product Identifier* to each Chargeable Item, specific data requirements are required to be provided.
- 1.5 There are five (5) types of *Product Identifier* defined in Event Processing for which there will be specific data requirements:
 - Exempt Product Identifier,
 - Discount Product Identifier,
 - TfL Filter Product Identifier,
 - Settlement,
 - Contravention Candidate Identifier.
- 1.6 Depending on the *Product Identifier* assigned to each Chargeable Item, there will be a specific data output required.
- 1.7 Manual Assurance, Detailed Manual Assurance and CVVC are the processes whereby the images associated with a Chargeable Item are manually validated to confirm that the VRM has been correctly interpreted and provide additional assurance that the correct *Product Identifier* has been assigned.
- 1.8 To assist with the processing of Chargeable Items through Detailed Manual Assurance and CVVC the following details for each Chargeable Item are required:
 - Make,
 - Model,
 - Colour.
- 1.9 As a result of Manual Assurance, Detailed Manual Assurance and CVVC each Chargeable Item will have its VRM confirmed or amended and its *Product Identifier* confirmed or reset.

2 VOSI Identification

2.1 *Input Data Requirements*

2.1.1 Event Processing requires a daily list of Vehicle Registration Marks that are required to be flagged as VOSI Vehicles.

2.1.2 This list (VOSI List) needs to be loaded daily.

2.1.3 The list will need to include the following data fields:

- VRM,
- Date(s) for which valid.

2.2 *Output Data Requirements*

2.2.1 Each Detection Event that matches a VRM on the VOSI List will result in a copy of the Detection Event being sent to the VOSI System.

2.2.2 The copy of the Detection Event must be sent immediately to the VOSI System.

2.2.3 Regardless of whether a Detection Event is identified as being on the VOSI List, the Detection Event needs to continue through Event Processing.

2.3 *Reporting Requirements*

2.3.1 Reporting on the volume of Detection Events sent to the VOSI System must be available by date of capture.

3 Scheme Identification

3.1 *Input Data Requirements*

3.1.1 Event Processing requires a list of Camera IDs that are linked to a Scheme.

3.1.2 Each Camera ID may be linked to more than one Scheme.

3.1.3 The Scheme List will need to include the following data fields:

- Scheme,
- Date(s) for which valid,
- Time,
- Camera ID.

3.2 *Output Data Requirements*

3.2.1 Each Detection Event will need to be updated with the Scheme that it is associated with.

3.2.2 Where a Detection Event is associated with multiple Schemes a copy of that Detection Event should be created for each Scheme.

4 Override Identification

4.1 Input Data Requirements

4.1.1 Event Processing needs to understand which Detection Events are to be discarded

4.1.2 The Override Identification List will need to include the following data fields:

- Camera ID,
- Zone of cameras,
- Scheme,
- Date(s) for which valid,
- Time from,
- Time to,
- Reason.

4.2 Output Data Requirements

4.2.1 Any Detection Event that is captured within the date and time range by the Camera ID and Scheme will be discarded.

4.3 Reporting Requirements

4.3.1 Reporting on volumes of Detection Events discarded must be available by Camera ID, Scheme, reason and date of capture.

5 Exempt Vehicle Identification

5.1 *Input Data Requirements*

5.1.1 Event Processing needs to determine which Vehicles are exempt from the Scheme.

5.1.2 The Exempt Vehicle List will need to include the following data fields:

- VRM,
- Scheme,
- Date(s) for which valid,
- Exempt Product Identifier.

5.1.3 Previous Exempt Vehicle Lists should be retained for audit purposes.

5.1.4 As a result of Enforcement Notice Processing, newly identified exempt Vehicles should be added to the Exempt Vehicle List.

5.1.5 On refreshing the Exempt Vehicle List, the Service Provider will validate that all newly identified exempt Vehicles identified by the Enforcement Operation Service Provider are included within the Exempt Vehicle List.

5.1.6 Where Vehicles provided by the Enforcement Operation Service Provider are not included in the refreshed Exempt Vehicles List these should be reported as exceptions to TfL.

5.1.7 Vehicles on the list of newly identified exempt Vehicles must be able to be added/removed as per instruction from TfL.

5.1.8 Currently UK Vehicles are exempted from the Congestion Charging Scheme based on tax class which is currently sourced from the DVLA in the UK. In the future this may also include data for Northern Ireland vehicles. Vehicle exemptions are subject to change based on changes to the tax class data.

5.1.9 The table below details Vehicle exemptions based on tax class under the current Scheme.

ID	Category	Notes
1	Motorbikes and mopeds	This category consists of all Vehicles registered in DVLA Taxation class TC 17 (Motorcycle) and TC 19 (Electric Motorcycle)
2	NHS Vehicles currently Exempt from Vehicle Excise Duty	This category consists of all Vehicles registered in DVLA Taxation class TC 87 (NHS Vehicles).
3	Disabled passenger carrying Vehicles currently exempt from VED	This category consists of all Vehicles registered in DVLA Taxation class TC 85 (Disabled Passenger Carrying Vehicle).
4	Vehicles used by disabled persons exempt from VED	This category consists of all Vehicles registered in DVLA Taxation class TC 78 (Disabled).
5	Licensed Buses with nine (9) or more seats	This category consists of all Vehicles registered in DVLA Taxation class TC 34 (Bus) and TC 38 (Reduced Pollution Bus).
7	Standard Rate Vehicles currently classified by DVLA as emergency Vehicles and those exempt from Vehicle excise duty	This includes Vehicles registered in DVLA Taxation classes: <ul style="list-style-type: none"> a. TC 65 (Ambulance); b. TC 66 (Fire Engine); c. TC 71 (Fire Service); d. TC 72 (Lifeboat Haulage); and e. TC 76 (Police).
8	Other exempt Vehicles	This includes all Vehicles registered in DVLA Taxation classes: <ul style="list-style-type: none"> a. TC 75 (Light House Authorities); b. TC 81 (Gritting Machine); and c. TC 82 (Snow Plough).

5.2 Output Data Requirements

5.2.1 Each Chargeable Item matched against the Exempt Vehicle List will need to be assigned the relevant Exempt Product Identifier.

5.2.2 The Product Identifier should be different for each type of exemption.

5.3 Reporting Requirements

5.3.1 Reporting on volumes of Chargeable Items matched against the Exempt Vehicle List must be available by Camera ID, Scheme, Exempt Product and date of capture.

6 Black List and White List Vehicle Identification

6.1 Input Data Requirements

6.1.1 Event Processing needs to determine which Vehicles are not subject with the Scheme.

6.1.2 The Black List will need to include the following data fields:

- UK VRM,
- Scheme.

6.1.3 The White List will need to include the following data fields:

- Non-UK VRM,
- Scheme.

6.1.4 Previous Black Lists and White Lists should be retained for audit purposes.

6.1.5 As a result of Enforcement Notice Processing or LEZ Registration Processing, newly identified Vehicles should be added to, or removed from, the Black List or White List.

6.1.6 Currently Vehicles are identified as being subject to, or not subject to, the LEZ Scheme using a combination of DVLA, SMMT, VOSA and EDRA Data. This Data will be used to provide the Black List and White List to the Service Provider at the start of the Agreement.

6.2 Output Data Requirements

6.2.1 Each Chargeable Item matched against the Black List or not matched against the White List, will need to be assigned the relevant Product Identifier.

6.2.2 Any Chargeable Item that is not matched against the Black List, or is matched against the White List, is discarded and assigned the relevant Product Identifier.

6.3 Reporting Requirements

6.3.1 Reporting on volumes of Chargeable Items matched and not matched against the Black List must be available by Camera ID, Scheme, Product Identifier and date of capture.

6.3.2 Reporting on volumes of Chargeable Items matched and not matched against the White List must be available by Camera ID, Scheme, Product Identifier and date of capture.

7 Compliant Vehicle Identification

7.1 Input Data Requirements

7.1.1 Event Processing needs to understand what Chargeable Items are to be identified as being Compliant with LEZ Scheme

7.1.2 The Compliant Vehicle List will be created using VOSA Data.

7.1.3 The Compliant Vehicle List will need to include the following data fields:

- VRM,
- Scheme,
- Date(s) for which valid,
- Compliant Product Identifier.

7.2 Output Data Requirements

7.2.1 Each Chargeable Item matched against the Compliant List will need to be assigned the relevant Compliant Product Identifier.

7.2.2 The Compliant Product Identifier should be different for each type of Compliance.

7.3 Reporting Requirements

7.3.1 Reporting on volumes of Chargeable Items matched against the Compliant Vehicle List must be available by Camera ID, Scheme, Compliant Product and date of capture.

8 Discount Vehicle Identification

8.1 Input Data Requirements

8.1.1 Event Processing needs to understand what Chargeable Items are to be identified as Discounted.

8.1.2 The Discount Vehicle List will need to include the following data fields:

- VRM,
- Scheme,
- Date(s) for which valid,
- Discount Product Identifier.

8.2 Output Data Requirements

8.2.1 Each Chargeable Item matched against the Discount Vehicle List will need to be assigned the relevant Discount Product Identifier.

8.2.2 The Discount Product Identifier should be different for each type of discount.

8.3 Reporting Requirements

8.3.1 Reporting on volumes of Chargeable Items matched against the Discount Vehicle List must be available by Camera ID, Scheme, Discount Product and date of capture.

9 TfL Filter Vehicle Identification

9.1 *Input Data Requirements*

9.1.1 Event Processing needs to understand what Chargeable Items are to be identified as TfL Filter Products.

9.1.2 The TfL Filter Vehicle List will need to include the following data fields:

- VRM,
- Scheme,
- Date(s) for which valid,
- TfL Filter Product Identifier,
- Notes where appropriate.

9.2 *Output Data Requirements*

9.2.1 Each Chargeable Item matched against the TfL Filter Vehicle List will need to be assigned the relevant TfL Filter Product Identifier.

9.2.2 The TfL Filter Product Identifier should be different for each reason.

9.3 *Reporting Requirements*

9.3.1 Reporting on volumes of Chargeable Items matched against the TfL Filter Vehicle List must be available by Camera ID, Scheme, TfL Filter Product ID and date of capture.

10 Settlement

10.1 Input Data Requirements

10.1.1 Event Processing needs to understand what Chargeable Items have an associated payment.

10.1.2 The Settlement List will need to include the following data fields:

- VRM,
- Scheme,
- Payment Product,
- Date(s) for which valid,
- Notes where appropriate.

10.2 Settlement Rules

10.2.1 The current Settlement Rules, which are parameterised, are as per the following table:

Product	Daily Charge
Exempt Vehicle	£0
100% Discount Vehicle	£0
Daily Charge	£10
Pay Next Day	£12
90% Discount Vehicle	£1
CC Auto Pay	£9
CC Auto Pay Resident	£0.90
Fleet Auto Pay	£9
TfL Filter List	£0
Compliant Vehicle List	£0

10.2.2 The Settlement Rules are subject to change based on changes made to the Scheme Order.

10.3 Output Data Requirements

- 10.3.1 Each Chargeable Item matched against the Settlement List will need to be assigned the relevant Payment Product Identifier.
- 10.3.2 Where the Chargeable Item has a Discount Product Identifier associated with it, the Payment Product should be verified.
- 10.3.3 If the Payment Product does not match the Discount Product then the Chargeable Item should not be matched to the Payment Product.
- 10.3.4 Reporting on volumes of Chargeable Items matched against the Settlement List must be available by Camera ID, Scheme, Payment Product and date of capture.
- 10.3.5 Chargeable Items matched with a Payment Product that requires billing by the Auto Pay Service are to be sent to the Auto Pay Service.

11 Contravention Candidate Identification

11.1 Any Chargeable Items that have not been matched to an Exempt Product, a Discount Product, a TfL Filter Product or a Payment Product must be identified as a Contravention Candidate Product.

11.2 *Output Data Requirements*

11.2.1 Each Chargeable Item matched as a Contravention Candidate Product must be sent to the Enforcement Operations Notice Processing Service Provider.

11.2.2 Reporting on volumes of Chargeable Items identified as Contravention Candidates must be available by Camera ID, Scheme and date of capture.

12 Detailed Manual Assurance and CVVC

12.1 Vehicle Details

12.1.1 For each Chargeable Item that is marked for Detailed Manual Assurance and CVVC, the Service Provider will need to obtain the following details:

- Make,
- Model,
- Colour,
- Notes where appropriate.

12.1.2 These details will be associated with the appropriate Chargeable Item and will be displayed to the Operational User as appropriate.

12.1.3 The Chargeable Item will retain the make, model and colour details and will pass these details on to the Enforcement Operation Service Provider as part of the Contravention Candidate.

12.1.4 Where these details are unavailable the make, model and colour fields of the Chargeable Item will remain unpopulated.

12.2 Notes

12.2.1 For those Chargeable Items that have been marked for Detailed Manual Assurance, the relevant notes also need to be associated with the relevant Chargeable Item.

12.3 Reporting Requirements

12.3.1 All records processed through Manual Assurance, Detailed Manual Assurance and CVVC must be able to be reported on by action, by discard reason, by confidence, by Product ID, by Camera ID and by Operational User.

12.3.2 Details that are required for each report are the VRM, Scheme, date of capture and Event Record ID.