Digital Traffic Enforcement System (DTES) and PES Solution (PES) Supply of Hardware, Software and Services

Schedule 2

Statement of Requirements

TfL_scp_001211

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APPENDICES

STATEMENT OF REQUIREMENTS

This Schedule 2, including its Appendices, sets out the requirements that the Service Provider must meet.

This document should be read in conjunction with other component documents of the Agreement as these play an integral part in understanding the requirements.

The structure and layout of this document is ordered into sections. Each section has a heading with an introductory statement. This is followed by sub-headings containing requirements. Each requirement has two rows containing the following information (see example of layout of Statement of Requirements):

- *requirement number;*

- *Mandatory, For Information Only or Request For Information (RFI); and*

- *requirement detail.*

Example of Layout of Statement of Requirements

DT.1.1.1		Mandatory
Individual requirements are located from here onwards.		

The requirement number indicates the number of the individual requirement and is made up of two (2) letters and three (3) numbers. The letters indicate the Statement of Requirements to which this requirement relates to (e.g. DT = Digital Traffic Enforcement System Agreement). The first number relates to the section number, the second number relates to the sub-section and the third number relates to the requirement number within that sub-section.

Mandatory, For Information Only or RFI (Request For Information) denotes the type of requirement. The Service Provider shall ensure that a mandatory requirement is met. RFI denotes information requested by TfL from the Service Provider which shall be provided to TfL in due course.

1. STANDARDS, WORKING PRACTICES AND PRINCIPLES

1.1 General

This section covers the generic requirements applicable to the Service Provider in relation to working practices and principles.

DT.1.1.1		Mandatory
The Service Provider shall develop and comply with all standards, policies, processes, procedures, and measures requested by TfL during the Term of the Agreement and any changes to these standards, policies, processes, procedures and measures shall be managed in accordance with Schedule 9 *(Change Control Request Procedure)*.		

DT.1.1.2		Mandatory
The Service Provider shall maintain the Compliance Matrix throughout the Term.		

DT.1.1.3		Mandatory
The Service Provider shall ensure that Compliance Matrix is updated at the end of Milestone D3 ("Design Complete") and as part of the planning for the demonstrations taking place in Milestone D4 ("PES Ready for Go Live and DTES Ready for Transition") and D7 ("DTES New Functionality Ready for Go Live").		

DT.1.1.4		Mandatory
The Service Provider shall complete and maintain the IPR Summary Table in accordance with Schedule 12 *(Asset Management)* throughout the Term and any updates made to the IPR Summary Table shall be Approved by TfL.		

DT.1.1.5		Mandatory
The Service Provider shall ensure that, unless otherwise agreed in writing by TfL, at all times throughout the Term, all Sub-Contracts, equipment rental or lease agreements, licences of Intellectual Property Rights, and all other non-employment contracts which are necessary for the performance of the Services, are assignable to TfL (without any transfer charge) upon the occurrence of any of the events that result in termination or expiry of this Agreement.		

DT.1.1.6		Mandatory
The Service Provider shall manage the System and the Services to meet availability requirements, performance requirements and all other Performance Indicators contained in this Agreement in accordance with Schedule 5 *(Service Level Agreement)*.		

DT.1.1.7		Mandatory
The Service Provider shall ensure that all equipment supplied to perform the Services is manufactured in accordance with International Electrotechnical Commission (IEC) standards and any applicable codes of practise of the IEC or British Standards Institute.		

DT.1.1.8		Mandatory
The Service Provider shall develop and comply with a framework, such as ITIL or ISO 20000 to undertake Service Management, and shall submit such framework to TfL for Approval by the Milestone Date for Milestone D4 ("PES Ready for Go Live and DTES Ready for Transition") and shall operate such processes procedures and tools for the Term.		

DT.1.1.9		Mandatory
The Service Provider shall ensure that the Service Provider and any Sub-Contractors are certified in the Approved Service Management framework prior to the Effective Date of the Agreement. Any change to this certification shall be managed in accordance with Schedule 9 *(Change Control Request Procedure)*.		

DT.1.1.10		Mandatory
The Service Provider shall ensure (and shall ensure that all Documentation shows) that, all development work, all development of Documentation, and any other work carried out by the Service Provider or any Sub-Contractor in connection with the provision of the Services has been or is (as applicable) carried out or conducted only at the Service Provider's Premises and not at any other site, premises, facility, location or jurisdiction without TfL's prior written consent.		

DT.1.1.11		Mandatory
The Service Provider shall ensure (and shall ensure that all Documentation shows) that, all development work, all development of Documentation, and any other work carried out by the Service Provider or any Sub-Contractor in connection with the provision of the Services is		

not used by or on behalf of any other customer of the Service Provider (or otherwise in relation to the Service Provider's business) without TfL's prior written consent.

DT.1.1.12		Mandatory
The Service Provider shall in the performance of its obligations under this Agreement comply with all obligations in relation to the Computer Misuse Act 1990, as may be amended or superseded by equivalent legislation from time to time.		

DT.1.1.13		Mandatory
The Service Provider shall in the performance of its obligations under this Agreement comply with all obligations in relation to the Environmental Information Regulations 2004, as may be amended or superseded by equivalent legislation from time to time.		

DT.1.1.14		Mandatory
The Service Provider shall abide by applicable legislation and regulations, including, but not limited to, the following, and such other applicable legislation and regulations that may amend or supersede the same from time to time: a) Health and Safety at Work Act 1974; and b) Electricity at Work Regulations 1989.		

DT.1.1.15		Mandatory
The Service Provider shall develop and comply with processes and procedures for the Full Support and maintenance of the System and shall submit these processes and procedures to TfL for Approval two (2) months prior to the Operational Commencement Date.		

DT.1.1.16		Mandatory
The Service Provider shall adhere to the standards and working practices of internationally recognised organisations as referenced in Section 1 *(Organisations)* and Section 2 *(Standards)* below, or, where such standards and working practices have been amended and/or superseded, by the latest revisions or superseding standards and working practices, or any standard which is generally recognised as being equivalent to it. Section 1 - Organisations		

BSI British Standards Institution

NEMA National Electrical Manufacturers Association

EIA Electronic Industries Alliance

ISO International Organisation for Standardisation

IET Institution of Engineering and Technology

W3C World Wide Web Consortium HSE Health and Safety Executive

TfL Transport for London

Section 2 – Standards

TfL Information Security Controls Framework (ISCF) - for IT Security and Service Management of TfL Services

ISO/IEC 20000: IT Services Management, Information Technology Infrastructure Library

BS ISO/IEC 26514:2008 - Guidelines for the Documentation of computer-based application systems

BS EN ISO 9000-3 - Guidelines for the application of ISO 9001:2000 to the development, supply, installation and maintenance of computer Software

BS EN 60950-1:2006 - Specification for safety of information technology equipment, including electrical business equipment

BS EN 60529 - Specification for degrees of protection provided by enclosures (IP codes)

BS EN 60073 - Basic and safety principles for man-machine interface, marking and identification. Coding principles for indication devices and actuators

CESG GPG13 - Good Practice Guide 13 for Protective Monitoring, Security framework for addressing risks to government systems

BSI 10012:2009 - Information Governance Best Practice

CPNI SCADA - Centre for the Protection of National Infrastructure Security Guidance

ISO 9001 - Quality Management

SANS20 - Critical Security Controls

2. THE SYSTEM

2.1 Operational Processes and Procedures

This section sets out the requirements relating to the System. Please read this section in conjunction with Appendix 1 (*Overview of the DTES System*) and Appendix 17 (*PES Overview*).

DT.2.1.1		Mandatory
The Service Provider shall maintain the System in accordance with the Service Provider's solution and implement any changes in accordance with the Schedule 9 *(Change Control Request Procedure)*.		

DT.2.1.2		Mandatory
The Service Provider shall not customise any COTS products which may render the product subject to limited support under the vendor's standard support package, or impede the ability to upgrade.		

DT.2.1.3		Mandatory
The Service Provider shall maintain and support the System in accordance with Appendix 2 (*Asset List*).		

DT.2.1.4		Mandatory
The Service Provider shall provide and maintain a common standard build for all ACCU workstations and Combined Workstations and servers used in the provision of the System.		

DT.2.1.5		Mandatory
The Service Provider shall ensure that all Software, Hardware, and Information installed on ACCU workstations and Combined Workstations and servers used in the provision of the System are for business purposes only.		

DT.2.1.6		
The Service Provider shall ensure that the ACCU workstations and Combined Workstations and servers used in the provision of the System shall have limited capabilities (such as managed access to certain websites, programmes and applications) upon written request by TfL.		

DT.2.1.7		Mandatory
The Service Provider shall ensure that all Hardware to be used within the System is in accordance with TfL's standards as detailed in this Schedule 2.		

DT.2.1.8		Mandatory
The Service Provider shall ensure that the System is configured to capture Contraventions in accordance with Appendix 4 (*DTES PCN Codes*) and Appendix 19 (*PES Forms).*		

DT.2.1.9		Mandatory
The Service Provider shall ensure that the System continues to support the operational processes as outlined in Appendix 7 (*DTES Key Processes*) and Appendix 18 (*PES Key Processes).*		

2.2 System Hosting

[Not Used]

2.3 System Functions

DT.2.3.1		Mandatory
The Service Provider shall develop and implement a mechanism to allow wildcard searches on search fields and shall submit such mechanism to TfL for Approval.		

DT.2.3.2		Mandatory
The Service Provider shall make use of Parameters to facilitate the maintenance of the System and future Changes to the Services and the System.		

DT.2.3.3		Mandatory
The Service Provider shall ensure that the following Parameterised Change elements are		

not hard coded within the System. These values include, without limitation:

• codes;

• statuses;

• dates;

• times;

• percentages;

• timeouts;

• operational hours and days;

• reference Data; and

• other Parameters.

In the event that solution components do not meet this requirement, the Service Provider shall not be afforded any performance or financial relief.

DT.2.3.4		Mandatory
The Service Provider shall develop and comply with a proposed list of Parameterised Change elements and shall submit such a list to TfL for Approval three (3) months prior to the Operational Commencement Date.		

DT.2.3.5		Mandatory
The Service Provider shall allow each Parameterised Change element to be varied by value and type using a Parameter driven configuration approach.		

DT.2.3.6		Mandatory
The Service Provider shall store each Parameterised Change element centrally, for example in Parameter tables.		

DT.2.3.7		Mandatory
The Service Provider shall ensure that each Parameterised Change element can be configured by authorised Service Provider's Personnel and at no cost to TfL.		

DT.2.3.8		Mandatory
The Service Provider shall ensure that any Change to a Parameterised Change element is Approved by TfL and at no additional cost to TfL.		

2.4 Time

DT.2.4.1		Mandatory
The Service Provider shall ensure all System times are consistent with Co-ordinated Universal Time (UTC) and are adjusted to conform to UK Daylight Savings Time (DST) when in effect.		

DT.2.4.2		Mandatory
The Service Provider shall ensure that, in the event that the NTP Time Server is unavailable, the System clock must, at all times, be within 10 seconds of UTC in accordance with Appendix 8 *(Civil Traffic Enforcement of Approved Devices).*		

DT.2.4.3		Mandatory
The Service Provider shall ensure that the local time displayed by each of the servers in the System is either Greenwich Mean Time (GMT) or British Summer Time (BST) (as adjusted for daylight saving). The Service Provider shall ensure that any adjustment for daylight saving is made at a time agreed with TfL (such agreement not to be unreasonably withheld or delayed) in accordance with Appendix 8 (*Civil Traffic Enforcement of Approved Devices*).		

DT.2.4.4		Mandatory
The Service Provider shall ensure that in the event that an error is detected with or there is a failure in the time signal, or if the Service Provider is notified by TfL of an issue with the time signal, the System shall provide and switch to an alternate time source, in the form of a UTC signal in accordance with Appendix 8 (*Civil Traffic Enforcement of Approved Devices*).		

DT.2.4.5		Mandatory
The Service Provider shall ensure that the System provides appropriate sequencing and timestamps across all System Elements for each activity.		

DT.2.4.6		Mandatory
The Service Provider shall ensure that in the event that any component of the System is not able to synchronise its time, this shall be reported as an Incident and recorded in the Incident log in accordance with Appendix 8 (*Civil Traffic Enforcement of Approved Devices*).		

DT.2.4.7		Mandatory
The Service Provider shall ensure that the ACCU workstation and Combined Workstation Authorised User timeout function is Parameterised and can be altered as instructed by authorised and designated TfL staff.		

2.5 Network and System Resilience

DT.2.5.1		Mandatory
The Service Provider shall ensure that all Hardware has the functionality to switch to an alternative power supply so that no degradation of the Services occur in the event that the primary power supply is unavailable or degraded.		

DT.2.5.2		Mandatory
The Service Provider shall perform Tests annually, or as agreed from time to time with TfL, to ensure that primary and alternative power sources achieve resiliency.		

DT.2.5.3		Mandatory
The Service Provider shall ensure that the System has the functionality to switch to a standby working System Element or load sharing, so that the failure of a single System Element within a group of similar System Elements does not cause degradation of the Services. i.e. all System Elements shall be provided in terms of n+1 redundancy.		

DT.2.5.4		Mandatory

The Service Provider shall ensure that the network and the System have the functionality to automatically switch to standby ancillary network working System Elements or load sharing, such that the failure of a single ancillary network System Element within a group does not cause degradation of the Services.

DT.2.5.5		Mandatory

The Service Provider shall ensure that the System will support more than one (1) office location for Compliance Officers, with each office being located on its own network subnet. The System will be configured such that the physical location of the enforcement Hardware (ACCU workstations, Combined Workstations, the SFTP server) will have no affect operationally.

DT.2.5.6		Mandatory

The Service Provider shall ensure that automatic failovers prevent the need for physical relocation of personnel between production and disaster recovery locations unless absolutely necessary.

DT.2.5.7		Mandatory

The Service Provider shall ensure that two (2) copies of the System, Audit, Error and SIEM logs shall be held, one (1) as a primary copy and the second (2) as a backed up copy.

DT.2.5.8		Mandatory

The Service Provider shall ensure that the System, Audit, Error and SIEM logs back up copies are kept updated on a daily basis, so that they are never more than one (1) day behind the state of the primary copies.

DT.2.5.9		Mandatory

The Service Provider shall ensure that the disaster recovery management process and the backup copies of the System, Audit, Error and SIEM logs shall be held in a location remote from the primary copies.

2.6 Backup and Recovery

DT.2.6.1		Mandatory
The Service Provider shall ensure that Data can be recovered from loss and/or corruption to ensure that no more than a single Business Day's Data is lost. Such recovery shall be completed within four (4) hours.		

DT.2.6.2		Mandatory
The Service Provider shall provide a data archiving function in the System. This function will also be used to ensure that Data is available and recoverable in accordance with Appendix 12 *(Data Retention)*.		

DT.2.6.3		Mandatory
The Service Provider shall ensure that the back-up and restore processes of the System and Services do not have any impact on Evidential Integrity requirements.		

DT.2.6.4		Mandatory
The Service Provider shall ensure that back-ups do not affect the System's ability to capture, store or process Evidence Packs during Core Hours.		

DT.2.6.5		Mandatory
The Service Provider shall ensure that all backup and recovery operations related to the System are automatically logged in the System log.		

DT.2.6.6		Mandatory
The Service Provider shall ensure that the System Elements as agreed with TfL are backed up each day.		

DT.2.6.7		Mandatory
The Service Provider shall ensure the backup regime of the System is documented and		

includes regular, auditable recovery exercises.

DT.2.6.8		Mandatory
The Service Provider shall provide to TfL for Approval and, when Approved, comply with the processes, procedures and schedules for backups of the System, including media rotation, maintenance of the backup System and regular recovery exercises.		

2.7 Enforcement Sessions

DT.2.7.1		Mandatory
The Service Provider shall ensure that the System receives, compiles, logs and reports alarms and other events which impact the Evidential Integrity of Evidence Packs and PES PCN Packs against the enforcement Session within which they occurred.		

DT.2.7.2		Mandatory
The Service Provider shall agree with TfL and, when agreed, comply with a list of alarms and other events which may impact Evidential Integrity and associated enforcement Sessions.		

2.8 System Monitoring

DT.2.8.1		Mandatory
The Service Provider shall maintain the comprehensive Service Monitoring System which has the capability to monitor the status of all components of the System and Infrastructure and to raise alarms in the event of component failure, System performance degradation and any other potential issues that affect the operation and performance of the Services.		

DT.2.8.2		Mandatory
The Service Provider shall ensure that the Service Monitoring System runs continuously twenty four (24) hours a day, seven (7) days a week, three hundred and sixty five (365) days a year and any alarms are immediately raised in accordance with the Incident management		

process.

DT.2.8.3		Mandatory

The Service Provider shall ensure that its support personnel are notified of alarms raised on the Service Monitoring System. This shall include the provision of notifications by SMS and email.

DT.2.8.4		Mandatory

The Service Provider shall provide mechanisms to ensure that alarms from the Service Monitoring System are received by the nominated member of the Service Provider's Personnel at any location or site, and at any time.

DT.2.8.5		Mandatory

The Service Provider shall ensure that the Service Provider's Personnel are able to receive error notifications raised by Other Service Providers' Interfaces.

DT.2.8.6		Mandatory

The Service Provider shall continuously and automatically monitor all agreed Interfaces for the following including, but not limited to:

• availability;

• throughput;

• performance;

• buffer usage;

• queue lengths;

• Hardware status;

• Security Incidents;

• System alarms and warnings; and

• any other diagnostic Data provided by the Service Provider's implementation of the Interfaces in accordance to Appendix 13 *(Interface Catalogue)*.

DT.2.8.7		Mandatory
The Service Provider shall provide a dedicated service desk telephone number and email for reporting Incidents, Problems, System events and any other issues, which shall be available twenty four (24) hours a day, seven (7) days a week, 365 days a year. For all notifications received, Incidents, Problems, System events and any other issues the relevant details shall be recorded, following the processes in requirement DT.5.1.3.		

DT.2.8.8		Mandatory
The Service Provider shall ensure that the System alerts the Service Provider's Personnel who shall respond to notifications or alarms such that the Service Levels are maintained in accordance with Schedule 5 *(Service Level Agreement)*.		

DT.2.8.9		Mandatory
The Service Provider shall ensure that the System copies automated e-mail alerts to TfL contacts, such as notified by TfL.		

DT.2.8.10		Mandatory
The Service Provider shall categorise System events into the following categories, including but not limited to: • required for information; • a warning; • a failure; and • an exception.		

DT.2.8.11		Mandatory
The Service Provider shall ensure that System events are prioritised.		

DT.2.8.12		Mandatory
The Service Provider shall ensure that the System is capable of receiving and recording the results of diagnostic tests.		

DT.2.8.13		Mandatory
The Service Provider shall ensure that alarms for monitoring the System are stored in a format that can be read by TfL without the use of proprietary tools.		

DT.2.8.14		Mandatory
The Service Provider shall log all tasks that are performed by the System, whether documented in the processes and procedures or not, in the System log. This shall include both automated tasks and manual tasks.		

DT.2.8.15		Mandatory
The Service Provider shall ensure that all alarms for monitoring the System are recorded in the System and/or Error log where appropriate.		

2.9 Logging

DT.2.9.1		Mandatory
The Service Provider shall not carry out any System monitoring actions without a documented procedure. Where a required action is not documented in a procedure, the Service Provider shall log the action before action is allowed to be taken, and update the System processes and procedures to reflect the action taken.		

DT.2.9.2		Mandatory
The Service Provider shall ensure that all System diagnostic messages and alarms provide at least the following information: • date and time; • name or ID of the affected component; and • status message.		

DT.2.9.3		Mandatory
The Service Provider shall ensure that all log(s) are maintained and retained in accordance		

with Appendix 12 *(Data Retention)*.

DT.2.9.4		Mandatory
The Service Provider shall ensure that all log(s) are available for review by TfL Personnel at any time.		

DT.2.9.5		Mandatory
The Service Provider shall ensure that all logging activities are carried out in accordance with Appendix 10 *(ELISE DVLA Code of Connection)* and Appendix 11 *(TfL Code of Connection Policy)* and meet the security standards of the TfL Information Security Controls Framework set out in Annex 1 to Schedule 14 *(Security)*.		

DT.2.9.6		Mandatory
The Service Provider shall record all System processes, user interactions, and events in the System log.		

DT.2.9.7		Mandatory
The Service Provider shall record all errors in an Error log.		

DT.2.9.8		Mandatory
The Service Provider shall ensure that the System log shall record all System events including but not limited to: • start-up, • shut-down, and; • Evidence Pack creation and deletion.		

DT.2.9.9		Mandatory

The Service Provider shall ensure that the Error log shall record System Incidents including but not limited to:

• Hardware errors;

• Software errors; and

• user authentication failures.

DT.2.9.10		Mandatory

The Service Provider shall ensure that the System log shall contain additions, deletions and amendments to any Data held within the System.

DT.2.9.11		Mandatory

The Service Provider shall ensure the System shall maintain a System audit trail. This shall include the following but not limited to:

• a record of the configuration of the System;

• all login attempts, and whether or not they were successful;

• all Authorised User logouts;

• the privileges and any amendments to those privileges of logged-in Authorised Users;

• the deletion (manual and automatic) of Evidence Packs; and

• all modifications made to Evidence Packs for Blue Badge Holders.

DT.2.9.12		Mandatory

The Service Provider will make available the logs in an electronic form to TfL upon request.

2.10 Technology Compatibility and Flexibility

DT.2.10.1		Mandatory

The Service Provider shall not make any change to the System which affects compatibility without TfL's prior written consent.

DT.2.10.2		Mandatory
The Service Provider shall provide TfL on request with Data and other information regarding the operating environment, Hardware, Software or System constraints and other operating Parameters applicable to the System.		

3. SYSTEM MAINTENANCE, SUPPORT, AND DEVELOPMENT
3.1 General

The section covers the requirements relating to the enhancements to the System, the standard of Software development in providing these enhancements and compliance to Vehicle Certification Agency (VCA) certification.

DT.3.1.1		Mandatory
The Service Provider shall ensure that all existing functionality in the System is maintained, supported and enhanced in accordance with this Agreement.		

DT.3.1.2		Mandatory
The Service Provider shall ensure the standard of System development, support and maintenance and associated Documentation is maintained as a minimum to the standard set by the Incumbent Service Provider.		

DT.3.1.3		Mandatory
The Service Provider shall submit to TfL for Assurance and when Assured comply with a High Level Design (HLD) and Detailed Design (DD) for System Changes prior to development and build.		

DT.3.1.4		Mandatory
The Service Provider shall ensure that all Changes to the System are maintained and supported in accordance with this Agreement.		

DT.3.1.5		Mandatory
The Service Provider shall maintain Documentation and Source Code of the System under the Service Provider's responsibility, which shall be provided to TfL within five (5) Business Days of a request from TfL.		

3.2 Vehicle Certification Agency (VCA) Certification

DT.3.2.1		Mandatory
The Service Provider shall ensure that the System is compliant with, supports and is maintained in accordance with the VCA certification requirements.		

DT.3.2.2		Mandatory
The Service Provider shall keep the VCA Technical Construction File document up to date following any Changes made to the System and as and when requested by TfL from time to time.		

3.3 System Enhancements

DT.3.3.1		Mandatory
The Service Provider shall submit to TfL for Approval and when Approved comply with the High Level Design (HLD) for System enhancements by the Milestone date for Milestone D1 ("Mobilisation of Project Team Complete").		

DT.3.3.2		Mandatory
The Service Provider shall submit to TfL for Approval and when Approved, comply with the Detailed Design (DD) for System enhancements by the Milestone date for Milestone D3 ("Design Complete").		

DT.3.3.3		Mandatory
The Service Provider shall ensure all digital video and images are persisted in the original Video Stream format of MPEG4 Part(ii) in accordance with Appendix 8 (*Civil Traffic Enforcement of Approved Devices*).		

DT.3.3.4		Mandatory
The Service Provider shall ensure all digital video and images are persisted in the original Video Stream format of H.264 format in accordance with Appendix 8 (*Civil Traffic Enforcement of Approved Devices*).		

DT.3.3.5		Mandatory
The Service Provider shall ensure all System enhancements remain the Intellectual Property of TfL.		

3.4 ACCU System Enhancements

DT.3.4.1		Mandatory
The Service Provider shall ensure that the ACCU disconnects from all Cameras when the Authorised User ends the enforcement Session.		

DT.3.4.2		RFI
The Service Provider should ensure the ACCU has the ability to select Camera control from within each Quad via a single mouse click.		

DT.3.4.3		RFI

The Service Provider shall ensure the Authorised User can select functions on the ACCU screen (such as drop down menu options and Camera selection) through the mouse and the keyboard in accordance with Appendix 6 *(DTES ACCU and OVDS Hotkeys).*

The Service Provider shall configure additional Hotkey mappings as requested, from time to time by TfL, at no additional cost to TfL.

DT.3.4.4		RFI

The Service Provider shall ensure the Authorised User can use standard keyboard navigation for menu items and user input fields, including, but not limited to:

• a 'tab' key to move to the next item;

• cursor arrows to choose values; and

• an 'enter' key to confirm selection.

DT.3.4.5		RFI

The Service Provider shall ensure that the ACCU allows the Authorised User to store up to four (4) user defined favourite Cameras lists consisting of up to fifty (50) Cameras in each list.

DT.3.4.6		Mandatory

The Service Provider shall ensure that both the ACCU and the OVDS show a summary for each Enforcement Zone of the days and times of restrictions and dispensations applicable.

DT.3.4.7		Mandatory

The Service Provider shall ensure that an Authorised User can filter the list of available Enforcement Zones by entering a two (2) character suffix. The two (2) character suffix relates to the type of restriction and is contained within the identifier for each Enforcement Zone.

DT.3.4.8		Mandatory
The Service Provider shall ensure that the System auto-populates standard Contravention descriptions by Contravention Code, and allows the Authorised User to manually change the information.		

DT.3.4.9		RFI
The Service Provider shall ensure that the ACCU displays the Trigger Time for each of the chosen Cameras once recording has started.		

DT.3.4.10		Mandatory
The Service Provider shall ensure that the System enables the Authorised User to extend the length of the Video File by variable time periods for Pre and Post Trigger Time for up to a configurable maximum of twenty-one (21) minutes.		

DT.3.4.11		Mandatory
The Service Provider shall ensure that when deleting a Contravention at the ACCU Live Viewing Stage, the Authorised User shall be required to confirm the deletion before proceeding.		

DT.3.4.12		Mandatory
The Service Provider shall ensure the System highlights Memorandum of Understanding (MOU) sites to the Authorised User during the OVDS Review Stage. This reminds them that extra checking is required, as the vehicle may be permitted in the Enforcement Zone.		

DT.3.4.13		Mandatory

The Service Provider shall ensure that consistent time formats and units are displayed across the ACCU and OVDS.

DT.3.4.14		RFI
The Service Provider should ensure that opposing action keys such as 'confirm' and 'reject' are reasonably spaced on the screen to minimise inadvertently clicking the wrong key.		

3.5 Unattended Outstation System Enhancements

DT.3.5.1		RFI
The Service Provider shall ensure the System is capable of receiving and processing all Data provided from Unattended Outstations in accordance with Appendix 3 *(Volumetrics),* Appendix 13 *(Interface Catalogue)* and Schedule 5 *(Service Level Agreement)*.		

DT.3.5.2		RFI
The Service Provider shall ensure that the System allows the remote upload of Enforcement Schedules to Unattended Outstations.		

DT.3.5.3		RFI
The Service Provider shall ensure the System allows the remote upload of Vehicle Registration Mark (VRM) lists to the Unattended Outstations.		

DT.3.5.4		RFI
The Service Provider shall ensure that the System processes Evidence Packs generated from Unattended Outstations and presents them for Validation to Authorised Users in the OVDS.		

DT.3.5.5		**Mandatory**

The Service Provider shall ensure the ACCU Review Stage screen provides the same video viewing functionality as is currently available in OVDS Review Stage screen.

i.e. playback of Video File at speeds of 0.5x, 1x, 2x, 4x, 8x normal speed, forward and back, showing current position in the overall sequence with a slider/progress bar.

The slider shall allow rapid navigation to any frame within the Video File.

3.6 OVDS System Enhancements

DT.3.6.1		Mandatory

The Service Provider shall ensure that the OVDS makes available to the Authorised User a number of selectable reasons for marking an Evidence Pack as 'No Further Action' (NFA). The Service Provider shall ensure that the list of NFA reasons is configurable by Authorised Users from time to time at no additional cost to TfL

DT.3.6.2		Mandatory

The Service Provider shall ensure that the OVDS Contravention search function allows an Authorised User to search under the following fields, including but not limited to:

• Contravention date/time from;

• Contravention date/time to;

• processing date/time from; and

• processing date/time to.

The Contravention date/time is the date and time the Contravention was captured by the Authorised User in the ACCU.

The processing date/time is the date and time of the actions performed through the OVDS.

DT.3.6.3		Mandatory

The Service Provider shall ensure that the OVDS Contravention search function allows an Authorised User to search within a date range using the following fields, including but not limited to:

• Contravention date/time from;

• Contravention date/time to;

• processing date/time from; and

• processing date/time to.

DT.3.6.4		Mandatory

The Service Provider shall ensure that the System does not allow an Authorised User to validate their own captured Contraventions in OVDS review.

DT.3.6.5		RFI

The Service Provider shall ensure that OVDS displays the Contravention day of the week.

DT.3.6.6		RFI

The Service Provider shall ensure that if the System finds Duplicate Contraventions, before making the DVLA call, the Contravention occurring earliest shall be retained for further processing. The other Contraventions in the set shall be set to No Further Action, with reason "duplicate".

The Contravention occurring earliest is the one with the earliest Trigger Time (rather than the one with the earliest Evidence Pack generation time.)

DT.3.6.7		Mandatory

The Service Provider shall ensure the System enables the Memorandum of Understanding (MoU) sites to be configured to the Enforcement Schedule.

DT.3.6.8		RFI

The Service Provider shall ensure that the ACCU applies the default Contravention Code(s) applicable to the operational Enforcement Zone for the time and day in accordance with Appendix 16 *(DTES Contravention Codes by Enforcement Zone).*

DT.3.6.9		Mandatory

The Service Provider should provide a mechanism to allow a batch upload of multiple vehicles in all vehicle databases by Authorised Users.

DT.3.6.10		Mandatory

The Service Provider shall provide new MIS Data fields in accordance with Appendix 14 (*DTES MIS Data Requirements*), and Appendix 20 (*PES Data).*

DT.3.6.11		Mandatory

The Service Provider shall provide to TfL, all supporting Data used in the calculation of the Performance Indicator Reports outlined in Schedule 5 *(Service Level Agreement)* upon request from TfL.

DT.3.6.12		Mandatory

The Service Provider shall ensure that the MIS is accessible from all TfL offices.

DT.3.6.13		Mandatory

The Service Provider shall, within forty-eight (48) hours of a request by TfL, provide ad hoc Data, at no additional cost to TfL, to enable TfL to produce reports.

DT.3.6.14		Mandatory
The Service Provider shall conduct Testing of the System enhancements specified in this Statement of Requirements in accordance with Schedule 4 *(Testing Regime)*.		

3.7 PES Enhancements

3.7.1 General

DT.3.7.1.1		Mandatory
The Service Provider shall ensure that the System is implemented in accordance with any processes, including improvements proposed by the Service Provider and Approved by TfL in relation to Appendix 18 (PES *Key Processes*).		

DT.3.7.1.2		Mandatory
The Service Provider shall ensure that the System can support the creation, update, deletion and searching of : - Tasks; - Duty Statements (including Activities); - Fault Reports; - Observations; and - PES Penalty Charge Notices (PCNs) and associated Contemporaneous Notes.		

3.7.2. Work Management & Tasks

DT.3.7.2.1		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to create a Task in accordance with Appendix 19 *(PES Forms)*.		

DT.3.7.2.2		Mandatory

The Service Provider shall ensure that the System records the following information when a Task is created:

- date and time the Task was created; and

- the Authorised User who created the Task.

DT.3.7.2.3		Mandatory

The Service Provider shall ensure that the System allows an Authorised User to assign a Task to a Team.

DT.3.7.2.4		Mandatory

The Service Provider shall ensure that the PES Mobile Application API makes Task Data available to the PES Mobile Application in accordance with Appendix 20 *(PES Data)*, and Appendix 13 *(Interface Catalogue)*.

DT.3.7.2.5		Mandatory

The Service Provider shall ensure that the PES Mobile Application API facilitates the update of Tasks received from the PES Mobile Application in accordance with Appendix 19 (*PES Forms*) and Appendix 20 (*PES Data*).

DT.3.7.2.6		Mandatory

The Service Provider shall ensure that the PES Mobile Application API allows an Enforcement Officer logged into the PES Mobile Application to start work on a Task and ensure the System records the date, time and Shoulder Number of the Enforcement Officer.

DT.3.7.2.7		Mandatory

The Service Provider shall ensure that the PES Mobile Application API allows an Enforcement Officer logged into the PES Mobile Application to stop work on a Task and ensure the System records the date, time and Shoulder Number of the Enforcement Officer.

DT.3.7.2.8		Mandatory

The Service Provider shall ensure that the PES Mobile Application API prevents an Enforcement Officer from working on a Task if another Enforcement Officer is working on the Task.

DT.3.7.2.9		Mandatory

The Service Provider shall ensure that the System allows an Authorised User to close a Task.

DT.3.7.2.10		Mandatory

The Service Provider shall ensure that the System records the following information when a Task is closed:

- date and time the Task was closed; and

- the Authorised User who closed the Task.

DT.3.7.2.11		Mandatory

The Service Provider shall ensure that the PES Mobile Application API is able to receive an Enforcement Officers Duty Statement when the Enforcement Officers logs off the PES Mobile Application in accordance with Appendix 20 *(PES Data).*

DT.3.7.2.12		Mandatory

The Service Provider shall ensure that the PES Mobile Application API is able to continually receive the Location of Enforcement Officers that are logged into the PES Mobile Application.

DT.3.7.2.13		Mandatory

The Service Provider shall ensure that the System maintains the Location of Enforcement

Officers that are logged into the PES Mobile Application.

DT.3.7.2.14		Mandatory
The Service Provider shall ensure that the PES Mobile Application API is able to make available the Location, Shoulder Number, Role and name (first, last) of Enforcement Officers that are logged into the PES Mobile Application.		

3.7.3 Manage Faults

DT.3.7.3.1		Mandatory
The Service Provider shall ensure that the System allows Fault Reports to be created, stored and updated in accordance with Appendix 19 (*PES Forms*), Appendix 20 (*PES Data*).		

DT.3.7.3.2		Mandatory
The Service Provider shall ensure that the PES Mobile Application API facilitates the creation, storage, and update of Fault Reports in accordance with Appendix 19 (*PES Forms*) and Appendix 20 (*PES Data*).		

DT.3.7.3.3		Mandatory
The Service Provider shall ensure that the PES Mobile Application API makes Fault Data available to the PES Mobile Application in accordance with Appendix 18 *(PES Key Processes)*, Appendix 20 *(PES Data)*, and Appendix 13 *(Interface Catalogue)*.		

DT.3.7.3.4		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to assign a Fault to another Authorised User.		

DT.3.7.3.5		Mandatory

The Service Provider shall ensure that the System allows an Authorised User to assign a Fault to a Team.

DT.3.7.3.6		Mandatory

The Service Provider shall ensure that the System records the following information when a Fault is re-assigned:

- date and time the Fault was re-assigned;

- the Authorised User who re-assigned the Fault; and

- the Authorised User or Team the Fault was re-assigned to.

DT.3.7.3.7		Mandatory

The Service Provider shall ensure that the System allows an Authorised User to update a Fault which is assigned to them or their Team with free text comments.

DT.3.7.3.8		Mandatory

The Service Provider shall ensure that the System records the following information when a Fault is updated:

- date and time the Fault was updated; and

- the Authorised User who updated the Fault.

DT.3.7.3.9		Mandatory

The Service Provider shall ensure that the System allows an Authorised User to close a Fault.

DT.3.7.3.10		Mandatory

The Service Provider shall ensure that the System allows an Authorised User to add photographs and free text comments to a Fault when selecting to close a Fault.

DT.3.7.3.11		Mandatory

The Service Provider shall ensure that the System records the following information when a Fault is closed:

- date and time the Fault was closed; and

- the Authorised User who closed the Fault.

DT.3.7.3.12		Mandatory

The Service Provider shall ensure that the System maintains Fault data in accordance with Appendix 12 *(Data Retention)*.

3.7.4　Manage Observations

DT.3.7.4.1		Mandatory

The Service Provider shall ensure that the System allows Observations to be created, stored and updated in accordance with Appendix 19 *(PES Forms)* , Appendix 20 *(PES Data).*

DT.3.7.4.2		Mandatory

The Service Provider shall ensure that the PES Mobile Application API facilitates the creation, storage and update of Observations in accordance with Appendix 19 *(PES Forms)* and Appendix 20 *(PES Data)*

DT.3.7.4.3		Mandatory

The Service Provider shall ensure that the System maintains Observation data in accordance with Appendix 12 *(Data Retention)*.

3.7.5   Manage PES PCNs

DT.3.7.5.1		Mandatory
The Service Provider shall ensure that the System receives and processes PES PCNs and their associated Contemporaneous Notes and Retrospective Notes transmitted by the PES Mobile Application in accordance with Appendix 18 *(PES Key Processes)*, Appendix 20 *(PES Data)*, Appendix 13 *(Interface Catalogue)*, and Schedule 5 *(Service Level Agreement).*		

DT.3.7.5.2		Mandatory
The Service Provider shall ensure that the PES Mobile Application API facilitates the creation and storage PES PCNs and their associated Contemporaneous Notes and Retrospective Notes transmitted by the PES Mobile Application in accordance with Appendix 18 *(PES Key Processes)*, Appendix 20 *(PES Data)*, Appendix 13 *(Interface Catalogue)*, and Schedule 5 *(Service Level Agreement).*		

DT.3.7.5.3		Mandatory
The Service Provider shall ensure that the PES Mobile Application API makes PES PCN Data available to the PES Mobile Application in accordance with Appendix 18 *(PES Key Processes)*, Appendix 20 *(PES Data)*, and Appendix 13 *(Interface Catalogue)*.		

DT.3.7.5.4		Mandatory
The Service Provider shall ensure that the System maintains PES PCN data in accordance with Appendix 12 (*Data Retention*).		

DT.3.7.5.5		Mandatory
The Service Provider shall ensure that the System receives and processes PES PCNs and their associated Contemporaneous Notes and Retrospective Notes transmitted by the PES Mobile Application in accordance with Appendix 18 *(PES Key Processes)*, Appendix 20 *(PES Data)*, Appendix 13 *(Interface Catalogue)*, and Schedule 5 *(Service Level Agreement).*		

3.7.6 Manage PES Authorised Users

DT.3.7.6.1		Mandatory
The Service Provider shall ensure that the System allows a System Administrator to grant access to the PES System Elements of the System for an Authorised User.		

DT.3.7.6.2		Mandatory
The Service Provider shall ensure that the System allows a System Administrator to grant access to the PES Mobile Application API for an Enforcement Officer.		

DT.3.7.6.3		Mandatory
The Service Provider shall ensure that the System allows a System Administrator to simultaneously grant access to the PES System Elements for multiple Authorised Users.		

DT.3.7.6.4		Mandatory
The Service Provider shall ensure that the System allows a System Administrator to simultaneously grant access to the PES Mobile Application API for multiple Enforcement Officers.		

DT.3.7.6.5		Mandatory
The Service Provider shall ensure that the System allows a System Administrator to revoke access to the PES System Elements for an existing Authorised User.		

DT.3.7.6.6		Mandatory
The Service Provider shall ensure that the System allows a System Administrator to revoke access to the PES Mobile Application API for an existing Enforcement Officer.		

DT.3.7.6.7		Mandatory
The Service Provider shall ensure that the System allows a System Administrator to simultaneously revoke access to the PES System Elements for multiple Authorised Users.		

DT.3.7.6.8		Mandatory
The Service Provider shall ensure that the System allows a System Administrator to simultaneously revoke access to the PES Mobile Application API for multiple Enforcement Officers.		

DT.3.7.6.9		Mandatory
The Service Provider shall ensure that the System retains any historical data relating to an Authorised User and a Enforcement Officer when their access to the PES System Elements and the PES Mobile Application API are revoked.		

DT.3.7.6.10		Mandatory
The Service Provider shall ensure that the System associates Enforcement Officers to their Shoulder Numbers.		

DT.3.7.6.11		Mandatory
The Service Provider shall ensure that the System allows Shoulder Numbers to be transferred from one Enforcement Officer to another.		

DT.3.7.6.12.		Mandatory
The Service Provider shall ensure that the System maintains historical associations between a Enforcement Officer and a Shoulder Number.		

DT.3.7.6.13		Mandatory
The Service Provider shall ensure that the System allows the System Administrator to		

create Roles and grant privileges to these Roles that restrict or allow access to System functions, Data and Forms.

DT.3.7.6.14		Mandatory
The Service Provider shall ensure that the System prevents an Authorised Users access to System functions, Data and Forms unless assigned a Role that permits such access.		

DT.3.7.6.15		Mandatory
The Service Provider shall ensure that the System prevents an Enforcement Officers access to System functions and Data unless assigned a Role that permits such access.		

DT.3.7.6.16		Mandatory
The Service Provider shall ensure that the System allows the System Administrator to assign and revoke Roles to Authorised Users and Enforcement Officers.		

DT.3.7.6.17		Mandatory
The Service Provider shall ensure that the System allows the System Administrator to bulk assign and revoke Roles to Authorised Users and Enforcement Officers.		

DT.3.7.6.18		Mandatory
The Service Provider shall ensure that the System maintains historical associations between an Authorised User and a Role.		

DT.3.7.6.19		Mandatory
The Service Provider shall ensure that the System maintains historical associations between an Enforcement Officer and a Role.		

DT.3.7.6.20		Mandatory
The Service Provider shall ensure that the System allows the System Administrator to create Teams(s).		

DT.3.7.6.21		Mandatory
The Service Provider shall ensure that the System allows the System Administrator to remove Teams(s).		

DT.3.7.6.22		Mandatory
The Service Provider shall ensure that the System allows the System Administrator to create an association between Teams.		

DT.3.7.6.23		Mandatory
The Service Provider shall ensure that the System allows the System Administrator to remove an association between Teams.		

DT.3.7.6.24		Mandatory
The Service Provider shall ensure that the System allows the System Administrator to create an association between: • Authorised User(s) and a Team; and • Enforcement Officer(s) and a Team.		

DT.3.7.6.23		Mandatory
The Service Provider shall ensure that the System allows the System Administrator to remove an association between: • Authorised User(s) and a Team; and • Enforcement Officer(s) and a Team.		

DT.3.7.6.25		Mandatory
The Service Provider shall ensure that the System implements a Role based access control mechanism so that Authorised User(s) and Enforcement Officer(s) access to System functions are controlled based on their Roles and Teams.		

DT.3.7.6.26		Mandatory
The Service Provider shall design and submit the processes and procedure for the Role Based access control mechanism to TfL for Assurance two (2) months prior to the Operational Commencement Date and shall operate such processes and procedures for the Term.		

DT.3.7.6.27		Mandatory
The Service Provider shall update the Authorised User and Enforcement Officer access list as and when required by TfL.		

DT.3.7.6.28		Mandatory
The Service Provider shall update the Role(s) assigned to Authorised User(s) and Enforcement Officer(s) as and when required by TfL.		

DT.3.7.6.29		Mandatory
The Service Provider shall update the Teams and Team membership as and when required by TfL.		

3.7.7   MANAGE CONFIGURATION DATA

DT.3.7.7.1		Mandatory
The Service Provider shall ensure that the System allows a System Administrator to maintain all configuration Data related to PES functions and Forms.		

DT.3.7.7.2		Mandatory
The Service Provider shall ensure that the System maintains a list of all configuration Data in accordance with Appendix 19 *(PES Forms)* and Appendix 20 *(PES Data).*		

3.7.8 INTEROPERABILITY

DT.3.7.8.1		Mandatory
The Service Provider shall ensure that the System connects to and securely receives and processes Data from devices using the PES Mobile Application in accordance with Appendix 13 *(Interface Catalogue).*		

DT.3.7.8.2		Mandatory
The Service Provider shall ensure that the System connects to and securely provides Data to devices using the PES Mobile Application in accordance with Appendix 13 *(Interface Catalogue).*		

DT.3.7.8.3		Mandatory
The Service Provider shall implement a PES Mobile Application API and shall provide the PES Mobile Application API services to the Other Service Provider.		

DT.3.7.8.4		Mandatory
The Service Provider shall ensure that the System records the date, time and Location of the Enforcement Officer submitting the Data when processing any Data sent by the PES Mobile Application.		

DT.3.7.8.5		Mandatory
The Service Provider shall design the PES Mobile Application API in accordance with Appendix 19 *(PES Forms),* Appendix 20 *(PES Data)* and Appendix 18 *(PES Key Processes).*		

DT.3.7.8.6		Mandatory
The Service Provider shall ensure that the PES Mobile Application API does not utilise any proprietary communications protocol.		

DT.3.7.8.7		Mandatory
The Service Provider shall submit the PES Mobile Application API design to TfL for Assurance and when Assured implement as designed.		

DT.3.7.8.8		Mandatory
The Service Provider shall ensure that the PES Mobile Application API provides the PES Mobile Application with all necessary configuration Data in accordance with Appendix 19 *(PES Forms)* and Appendix 20 *(PES Data).*		

DT.3.7.8.9		Mandatory
The Service Provider shall ensure that the PES Mobile Application API can only be used by the PES Mobile Application and that no other mobile application or system can connect to and make use of it.		

DT.3.7.8.10		Mandatory
The Service Provider shall ensure that it supports the activities of the Other Service Provider for them carrying out up to a maximum of three (3) software upgrades per annum.		

DT.3.7.8.11		Mandatory
The Service Provider shall ensure that it provides to the Other Service Provider, all documentation (including any certificates and encryption keys) related to the use of the PES Mobile Application API.		

DT.3.7.8.12		Mandatory

The Service Provider shall ensure that it provides a mapping solution that can operate on both a desktop and a mobile device.

DT.3.7.8.13		Mandatory

The Service Provider shall ensure that it uses a mapping solution from the Mapping Provider as advised by TfL.

DT.3.7.8.14		Mandatory

The Service Provider shall ensure that it works with TfL to create and when Assured by TfL, maintain the necessary Data Layers that can be rendered on the mapping solution which shall include but not be limited to:

- Enforcement Zones;
- Enforcement Times;
- Red Routes;
- CCTV Enforcement Cameras;
- PCN Hotspots; and
- Camera Enforcement Zones.

DT.3.7.8.15		Mandatory

The Service Provider shall ensure that the mapping solution and Data Layers are provided to the Other Service Provider.

3.7.9 Reporting & MIS

DT.3.7.9.1		Mandatory

The Service Provider shall ensure that the System allows an Authorised User to create new reports.

DT.3.7.9.2		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to modify existing reports.		

DT.3.7.9.3		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to set and modify the input Parameters of the report.		

DT.3.7.9.4		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to set and modify the Data which will be returned for any new or existing reports.		

DT.3.7.9.5		Mandatory
The Service Provider shall ensure that the System allows a Authorised User to define the rules which will be applied to refine the Data returned for any new or existing reports.		

DT.3.7.9.6		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to extract a report in a number of formats, to include but not be limited to: - CSV; - PDF; - Microsoft Excel; and - Microsoft Word		

DT.3.7.9.7		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to run reports in accordance with Appendix 21 (*PES Reports*).		

3.7.10 Data Analysis

DT.3.7.10.1		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to search for any PES PCNs in the System.		

DT.3.7.10.2		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to view PES PCN Data in accordance with Appendix 20 *(PES Data)*, for each PES PCN returned from a search.		

DT.3.7.10.3		Mandatory
The Service Provider shall ensure that that the System allows an Authorised User to view Contemporaneous Notes for a PES PCN in accordance with Appendix 20 *(PES Data)*.		

DT.3.7.10.4		Mandatory
The Service Provider shall ensure that that the System allows an Authorised User to view Retrospective Notes for a PES PCN in accordance with Appendix 20 *(PES Data)*.		

DT.3.7.10.5		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to search for any Observations in the System.		

DT.3.7.10.6		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to view Observation Data in accordance with Appendix 20 *(PES Data)*.		

DT.3.7.10.7		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to search for any Faults in the System.		

DT.3.7.10.8		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to view all Fault Data in accordance with Appendix 20 *(PES Data)*.		

DT.3.7.10.9		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to search for Locations which have been visited by Enforcement Officers, and the number of times the Location has been visited.		

DT.3.7.10.10		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to search for any Tasks in the System.		

DT.3.7.10.11		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to view all Task Data in accordance with Appendix 20 *(PES Data)*.		

DT.3.7.10.12		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to search for a Duty Statement.		

DT.3.7.10.13		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to view all Activities on a Duty Statement.		

DT.3.7.10.14		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to search across all Data held within the System in accordance with Appendix 20 *(PES Data)*.		

DT.3.7.10.15		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to enter multiple search criteria in accordance with Appendix 20 *(PES Data)* when performing a search.		

DT.3.7.10.16		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to sort search results by any Data returned in a search.		

DT.3.7.10.17		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to filter search results by any Data returned in a search.		

DT.3.7.10.18		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to export the complete result set of a search to excel.		

DT.3.7.10.19		Mandatory
The Service Provider shall ensure that the System allows an Authorised User to export photographs.		

DT.3.7.10.20		Mandatory

The Service Provider shall ensure that the System allows an Authorised User to search for all Data held across the System by the Authorised User User who created the Data.

4   EVIDENCE PACKS AND PES PCN PACKS

4.1 General

This section sets out the requirements for the creation and management of Evidence Packs and PES PCN Packs.

DT.4.1.1		Mandatory
The Service Provider shall ensure that the System creates the content and structure of the Evidence Pack and PES PCN Pack in accordance with Appendix 13 *(Interface Catalogue)* to this Schedule.		

DT.4.1.2		Mandatory
The Service Provider shall encrypt the Data in accordance with Annex 1 *(TfL Information Security Controls Framework)* of Schedule 14 *(Security)* and Appendix 13 *(Interface Catalogue)* to this Schedule.		

DT.4.1.3		Mandatory
The Service Provider shall receive, process and send the Evidence Pack and PES PCN Pack in accordance with Appendix 13 *(Interface Catalogue)* and Schedule 5 *(Service Level Agreement)*.		

4.2 Evidential Integrity

DT.4.2.1		Mandatory
The Service Provider shall implement encryption, authentication and error checking within the Evidence Pack and the PES PCN Pack in accordance with Annex 1 *(TfL Information Security Controls Framework)* of Schedule 14 *(Security)* and Appendix 13 *(Interface Catalogue)* to this Schedule.		

DT.4.2.2		Mandatory
The Service Provider shall ensure that if an unauthorised attempt is made to modify a Video File and associated Metadata, the Video File and associated Metadata is marked as tampered with. In such a case, it shall be beyond reasonable doubt that the Video File and associated Metadata has been tampered with.		

DT.4.2.3		Mandatory
The Service Provider shall ensure that the System is capable of receiving and processing PES PCN Packs from the PES Mobile Application in accordance with Appendix 2 (*Interface Specification*) and Schedule 5 *(Service Level Agreement).*		

DT.4.2.4		Mandatory
The Service Provider shall ensure that PES PCN Packs are treated in the same way as Evidence Packs for evidential purposes.		

5 SERVICE MANAGEMENT

5.1 General

This section sets out requirements related to Service Management.

DT.5.1.1		Mandatory
The Service Provider shall develop, implement and comply with processes, procedures and tools for Service Management and shall submit such processes, procedures and tools to TfL for Approval by the Milestone date for Milestone D4 ("PES Ready for Go Live and DTES Ready for Transition") and shall operate such processes procedures and tools for the Term.		

DT.5.1.2		Mandatory
The Service Provider shall ensure the System automatically registers any Incidents with the Service Provider's service desk.		

DT.5.1.3		Mandatory
The Service Provider shall ensure that TfL Authorised Users can log any Incidents with the Service Provider's service desk and shall submit such a process to TfL for Approval one (1)		

month prior to the Operational Commencement Date, following the processes in requirement DT.2.8.7.

DT.5.1.4		Mandatory

The Service Provider shall ensure that Service Provider's Personnel report any faults on the TfL network to the TfL service desk.

DT.5.1.5		Mandatory

The Service Provider shall ensure that the Service Provider's Incident management process shall update Authorised Users with the resolution to any Incidents raised by that specific Authorised User.

DT.5.1.6		Mandatory

The Service Provider shall classify any reported Incidents by type and Severity Level, in accordance with the Severity Levels set out in this Agreement.

DT.5.1.7		Mandatory

The Service Provider shall develop, review, update and comply with procedures for maintenance and support when Changes are made to the Services, and shall submit such procedures including any updates to TfL for Approval within four (4) weeks of the Change.

5.2 Configuration Management

DT.5.2.1		Mandatory

The Service Provider shall develop and comply with processes for Configuration Management for the System and associated Assets in accordance with this Schedule and shall submit such processes to TfL for Approval by the Milestone Date for Milestone D4 ("PES Ready for Go Live and DTES Ready for Transition") and shall operate such processes procedures and tools for the Term.

DT.5.2.2		Mandatory

The Service Provider shall maintain all components of the System under Configuration Management.

DT.5.2.3		Mandatory

The Service Provider shall develop and comply with a Configuration Management solution that manages relationships between Configuration Items and shall submit such a solution to TfL for Approval.

DT.5.2.4		Mandatory

The Service Provider shall ensure that the Configuration Management solution prevents Configuration Item records from being updated without the appropriate Change approvals and procedures being followed.

DT.5.2.5		Mandatory

The Service Provider shall ensure that the Configuration Management solution displays the current status of Configuration Items.

DT.5.2.6		Mandatory

The Service Provider shall ensure that the Configuration Management solution verifies that correct and authorised versions of Configuration Items exist.

DT.5.2.7		Mandatory

The Service Provider shall ensure that the Configuration Management solution identifies and logs Configuration Items that are affected when related Configuration Items are the subject of:

• an Incident;

• a Problem; and

• a Change.

DT.5.2.8		Mandatory

The Service Provider shall ensure that the Configuration Management solution updates the version number of a Configuration Item if any amendments are made to the Configuration Item with the previous version number.

DT.5.2.9		Mandatory

The Service Provider shall ensure that the Configuration Management solution retains historic details in accordance with Appendix 12 *(Data Retention)* including, but not limited to:

• installation date of the Configuration Item

• records of changes to the Configuration Item; and

• locations of the Configuration Item.

DT.5.2.10		Mandatory

The Service Provider shall ensure that the Configuration Management solution supports the management and use of baseline versions that can be used for reverting to a previous complete, and known to be a working, version.

DT.5.2.11		Mandatory

The Service Provider shall ensure that the Configuration Management solution generates reports on the inventory of Configuration Items.

DT.5.2.12		Mandatory

The Service Provider shall be able to produce reports upon request from TfL from any of the data fields that are held within the Configuration Management solution.

DT.5.2.13		Mandatory

The Service Provider shall ensure that codes, statuses and other Parameters or reference Data are maintained under Configuration Management.

DT.5.2.14		Mandatory

The Service Provider shall maintain and store all System Documentation in the

Configuration Management database.

5.3 Incident Management

DT.5.3.1		Mandatory

The Service Provider shall develop and comply with an Incident management process for the System, the Services and associated Assets and shall submit such Incident management process to TfL for Assurance by the Milestone date for Milestone D4 ("PES Ready for Go Live and DTES Ready for Transition")shall operate such processes procedures and tools for the Term.

DT.5.3.2		Mandatory

The Service Provider shall, at no additional cost to TfL, perform a root-cause analysis to identify the cause of all System Failures and advise TfL of possible actions to prevent a reoccurrence of the same or similar System Failures.

DT.5.3.3		Mandatory

The Service Provider shall, at no additional cost to TfL, be responsible and accountable for the management of such System Failure(s) to resolution in accordance with the Incident management process and other relevant procedures and timescales set out in this Agreement;

DT.5.3.4		Mandatory

The Service Provider shall, at no additional cost to TfL, promptly notify TfL of any System Failure.

DT.5.3.5		Mandatory

The Service Provider shall, at no additional cost to TfL, take the necessary steps to remedy the System Failure if the System Failure is attributable to the Service Provider or a Sub-Contractor.

DT.5.3.6		Mandatory
The Service Provider shall ensure that System events relating to System Failures or Hardware failures can be fed directly into the Incident management system.		

DT.5.3.7		Mandatory
The Service Provider shall bear the cost of any work undertaken by a Third Party in order to resolve an Incident within the scope of the Services (such as where the Service Provider has failed to perform this work itself or has attempted to perform this work and been unsuccessful).		

DT.5.3.8		Mandatory
The Service Provider shall develop and comply with escalation procedures for the resolution of Incidents and shall submit such procedures to TfL for Assurance where these are, or are suspected to be, related to: • the System; • Third Parties' systems; • the Interfaces; • Sub-Contractors; and • any Other Service Providers.		

DT.5.3.9		Mandatory
The Service Provider shall ensure that TfL is provided with direct read-only access to the Incident log on request, and shall be provided with full details of specific Incidents in either electronic of paper format.		

DT.5.3.10		Mandatory
The Service Provider shall provide TfL with reports, in electronic format when requested by TfL, from the Incident log including full details of: • Incidents; • Security Incidents;		

• Problems;

• Changes;

• Incidents affecting Performance Indicators; and

• any other Incidents.

DT.5.3.11		Mandatory
The Service Provider shall log the corrective actions taken to resolve Incidents in the Incident log.		

DT.5.3.12		Mandatory
The Service Provider shall distinguish between: • Incidents; • Problems; • Changes; • Security Incidents; and • Incidents affecting Performance Indicators.		

DT.5.3.13		Mandatory
The Service Provider shall not lower the Severity Level of an Incident until the underlying root-cause is determined and written Approval from TfL has been received.		

DT.5.3.14		Mandatory
The Service Provider shall analyse the Incident log to identify recurring Incidents, Problems, Security Incidents and Incidents affecting Performance Indicators and take such action as has been agreed with TfL to prevent their re-occurrence.		

DT.5.3.15		Mandatory
The Service Provider shall identify Incidents that require a Change and create a Change Control Request in accordance with Schedule 9 *(Change Control Request Procedure)*, and		

shall close these Incidents in the Incident log.

DT.5.3.16		Mandatory
The Service Provider shall, at TfL's request, re-evaluate any Incident. In the event of a disagreement between TfL and the Service Provider over the classification of an Incident or the assignment of a Severity Level, the Service Provider shall follow TfL's instructions.		

DT.5.3.17		Mandatory
The Service Provider shall adhere to the response times for each of the Severity Levels for all Incidents in accordance with Schedule 5 (*Service Level Agreement*).		

DT.5.3.18		Mandatory
The Service Provider shall adhere to the resolution times of each of the Severity Levels for all Incidents in accordance with Schedule 5 (*Service Level Agreement*).		

DT.5.3.19		Mandatory
If an Incident cannot be resolved within the resolution time periods as specified for the Severity Level detailed in this Agreement the Service Provider shall deliver to TfL for Approval a Remedy Plan in accordance with Clause 43 *(Enhanced Co-operation and Remedy Plans).*		

DT.5.3.20		Mandatory
The Service Provider shall ensure the time to resolve an Incident is the time from any person and/or the System raising the Incident to the time the Incident is resolved and closed. An Incident is considered to be resolved and closed when corrective action has been completed, Tested and the Incident properly recorded as closed in the Incident log by the Service Provider with the express written agreement of TfL, which agreement may be given retrospectively.		

DT.5.3.21		Mandatory
The Service Provider shall ensure that the time at which an Incident is logged in the Incident log is the earliest of:		

• an alarm being generated by any element of the System;

• notification of an Incident being provided to the Service Provider;

• any of the applications or Services becoming unavailable;

• where an Incident is raised by Service Provider's Personnel; and

• the Incident being notified to the Service Provider by TfL.

DT.5.3.22		Mandatory
The Service Provider shall provide a means for TfL, Other Service Providers, and Third Parties to report Incidents to the Service Provider.		

DT.5.3.23		Mandatory
The Service Provider shall not close Incidents raised by TfL, Other Service Providers, and Third Parties without TfL's Approval.		

DT.5.3.24		Mandatory
The Service Provider shall ensure that the Incident management process includes but is not limited to all repairs and failure replacements to the Assets.		

DT.5.3.25		Mandatory
The Service Provider shall manage and rectify all Incidents in accordance with the Incident management process.		

DT.5.3.26		Mandatory
The Service Provider shall be responsible for managing and coordinating all Incident resolutions. For the avoidance of doubt this includes the resolution of all TfL, Other Service Providers' and Third Parties' Incidents associated with the Services.		

DT.5.3.27		Mandatory
The Service Provider shall develop and comply with escalation procedures for resolution of		

Incidents in accordance with the Incident management process.

DT.5.3.28		Mandatory
The Service Provider shall ensure that the Incident management system maintains accurate records of all Incidents and their resolutions to enable TfL to monitor the Service Provider's performance and to ensure that certification requirements are met and maintained.		

DT.5.3.29		Mandatory
The Service Provider shall maintain the system that automatically logs all Incidents and also allows manual entry of Incidents. The Incidents shall be logged with all relevant information which shall include, but not be limited to: • time reported • location of Incident • description of Incident • type of Incident • raiser of the Incident • the time to respond; ž • time to resolve the Incident to TfL's satisfaction; • a detailed account of the cause of the Incident ; and • the action taken to resolve the Incident. The Service Provider shall ensure that the Incident log shall be made available to TfL upon request.		

DT.5.3.30		Mandatory
The Service Provider shall ensure that the Incident management system is deployed to all ACCU workstations and Combined Workstations.		

DT.5.3.31		Mandatory
The Service Provider shall create an Incident log and shall review Incidents with TfL in accordance with Schedule 10 *(Contract Management and Reporting)*.		

5.4 Release Management

DT.5.4.1		Mandatory

The Service Provider shall develop and comply with processes for Release Management for the System and the Assets and shall submit such processes to TfL for Approval by the Milestone date for Milestone D4 ("PES Ready for Go Live and DTES Ready for Transition") and shall operate such processes for the Term.

DT.5.4.2		Mandatory

The Service Provider shall ensure that the Release Management process includes but is not limited to:

• Hardware;

• Software;

• license renewals;

• Configuration Items; and

• all changes to Parameters and processes and these shall only be updated through formal Releases.

DT.5.4.3		Mandatory

The Service Provider shall provide Release Notes for each Release in accordance with the Release Management process.

DT.5.4.4		Mandatory

The Service Provider shall ensure that the Release Management process tracks, for each Release, at least the following items:

• a unique identifier;

• version number;

• the identity of any individual involved in the workflow surrounding a deployment, including requesting, approving or executing it; and

• the dates on which the Release was deployed into the System.

DT.5.4.5		Mandatory
The Service Provider shall ensure that the Release Management process distinguishes between the following types of Releases: • major; • minor; and • emergency.		

DT.5.4.6		Mandatory
The Service Provider shall ensure that the Release Management process assesses the risks associated with each Release, including without limitation: • impact; • probability of occurrence; • proposed mitigations; and • contingencies.		

DT.5.4.7		Mandatory
The Service Provider shall keep a secure audit log of all Release updates and Release closure dates and times.		

5.5 Risk Management

DT.5.5.1		Mandatory
The Service Provider shall develop and comply with processes for risk management and shall submit such processes to TfL for Approval by the Milestone date for Milestone D4 ("PES Ready for Go Live and DTES Ready for Transition") and shall operate such processes for the Term.		

DT.5.5.2		Mandatory

The Service Provider shall ensure that the risk management process assesses the risks associated with the provision of the Services, including without limitation:

• impact;

• probability of occurrence;

• proposed mitigations; and

• contingencies.

6 QUALITY ASSURANCE

6.1 General

This section covers the generic requirements applicable to the Service Provider in relation to quality assurance

DT.6.1.1		Mandatory

The Service Provider shall operate and maintain a quality assurance system conforming to ISO 9001:2005, or equivalent, deemed acceptable by TfL. The Service Provider's quality assurance group shall be independent of any production, scheduling or costs restrictions and/or pressures.

DT.6.1.2		Mandatory

The Service Provider shall develop a quality plan that ensures that all aspects of the System and the Services are the subject of quality management systems and is consistent with ISO 9001:2005 or any standard which is generally recognised as being equivalent to it and shall submit this quality plan to TfL for Approval by the Milestone date for Milestone D4 ("PES Ready for Go Live and DTES Ready for Transition") and shall operate such processes for the Term.

DT.6.1.3		Mandatory

The Service Provider shall incorporate all comments and recommendations, as required by TfL, into its quality plan and quality assurance processes and shall submit the revised quality plan and quality assurance processes to TfL for Approval by the Milestone date for Milestone D4 ("PES Ready for Go Live and DTES Ready for Transition") and shall operate such processes for the Term.

DT.6.1.4		Mandatory
The Service Provider shall provide the Services in accordance with the quality plan.		

DT.6.1.5		Mandatory
The Service Provider shall review and maintain the quality plan prior to Milestone D7 ("DTES New Functionality Ready for Go Live") and at intervals of not more than twelve (12) months, in the event of a Change Control Request and at the request of TfL, to reflect any changes in the quality assurance system and ISO 9001:2005 or equivalent standard.		

DT.6.1.6		Mandatory
The Service Provider shall ensure that the Configuration Management processes and tools are described in the quality plan.		

6.2 Quality Assurance Audit

DT.6.2.1		Mandatory
The Service Provider shall develop and comply with auditing procedures for audits of the Quality Assurance system and shall submit such procedures to TfL for Approval one month prior to the Operational Commencement Date.		

DT.6.2.2		Mandatory
The Service Provider shall allow TfL and/or Authorised TfL Third Parties to carry out audits of the Service Provider's Quality Assurance system (including Quality Plans and any quality manuals and procedures) at agreed times in accordance with Schedule 14 *(Security)*.		

DT.6.2.3		Mandatory
Quality Assurance audits conducted by TfL shall be to the Service Provider's Quality Plan, system and/or working procedures Approved and accepted by TfL.		

DT.6.2.4		Mandatory

The Service Provider shall ensure that any non-conformances that are identified during Quality Assurance audits are corrected as per the recommended actions of the auditors and within the specified time limits. The Service Provider shall undertake any corrective actions at no cost to TfL.

7 MAINTENANCE REQUIREMENTS

7.1 Preventative Maintenance General

This section covers the requirements applicable to the Service Provider in relation to preventative maintenance and audits and inspections.

DT.7.1.1		Mandatory

The Service Provider shall ensure that preventative maintenance is carried out across the System and Services in accordance with the Preventative Maintenance Plan.

DT.7.1.2		Mandatory

The Service Provider shall ensure that a Preventative Maintenance Plan for the System and Services is developed, submitted to TfL for Approval, complied with during the Term and reviewed on a six (6) monthly basis with TfL in accordance with Schedule 3 *(Milestones and Deliverables)*.

DT.7.1.3		Mandatory

The Service Provider shall ensure that any support activities that are additional to the Preventative Maintenance Plan are agreed with TfL, prior to carrying out these support activities.

DT.7.1.4		Mandatory

The Service Provider shall ensure that all Hardware, Software and equipment used as part of the System is maintained at a supported production Release at no cost to TfL.

DT.7.1.5		Mandatory

The Service Provider shall schedule preventative maintenance to address Incidents and Problems as part of the Preventative Maintenance Plan, where appropriate.

DT.7.1.6		Mandatory

The Service Provider shall ensure that preventative maintenance shall include recommendations to ensure optimal performance.

DT.7.1.7		Mandatory
The Service Provider shall ensure that all installed replacement equipment or components are compatible with the certification of the System.		

DT.7.1.8		Mandatory
The Service Provider shall ensure that any proposed or planned modification shall be implemented in accordance with Schedule 9 *(Change Control Procedure)*.		

DT.7.1.9		Mandatory
The Service Provider shall allow and provide guidance to TfL Personnel to carry out minor swap-outs as and when required.		

7.2 Audit and Inspection

DT.7.2.1		Mandatory
The Service Provider shall ensure any Changes to the System are documented and maintained in a clear audit trail.		

DT.7.2.2		Mandatory
The Service Provider shall ensure that records of regular System Tests and repairs are available for inspection within forty-eight (48) hours as and when required by TfL.		

8 CO-OPERATION WITH OTHER PARTIES

8.1 General

This section covers the generic requirements applicable to the Service Provider in relation to co-operating with Other Service Providers and Third Parties.

DT.8.1.1		Mandatory

The Service Provider shall at all times seek to facilitate good working relationships with Other Service Providers and Third Parties associated with this Agreement in order to facilitate the delivery of the Services. The Service Provider shall make every best endeavours to ensure that these relationships are not compromised in any way and shall act so as to not damage the reputation of TfL.

DT.8.1.2		Mandatory

The Service Provider shall co-operate with and liaise with Other Service Providers and Third Parties to carry out maintenance and manage the resolution of Incidents and Changes.

DT.8.1.3		Mandatory

The Service Provider shall be responsible for and must ensure that all necessary permissions and authorisations from the Other Service Providers are obtained prior to commencing any work on the System.

DT.8.1.4		Mandatory

The Service Provider shall ensure that where Service and operational issues and Incidents that arise in relation to the Services, are considered by the Service Provider to result from an act or omission of TfL, Other Service Providers, and/or Third Parties, the Service Provider shall still manage Incidents and Changes in accordance with this Schedule and Schedule 4 *(Testing Regime)*.

DT.8.1.5		Mandatory

The Service Provider shall be responsible for contacting the relevant Party (such as TfL, Other Service Providers, and/or Third Parties) to rectify the Services and operational issues, Incidents and Changes.

DT.8.1.6		Mandatory
The Service Provider shall maintain Incident management contact details for TfL, Other Service Providers, and Third Parties during the Term of the Agreement.		

DT.8.1.7		Mandatory
The Service Provider shall bear the cost of any work undertaken by TfL, Other Service Providers or Third Parties in order to resolve service and operational issues, where the Service Provider has failed to perform this work successfully in accordance with Schedule 4 *(Testing Regime)*.		

DT.8.1.8		Mandatory
The Service Provider shall, at no additional cost to TfL, co-operate with TfL and Other Service Providers as necessary to resolve System Failures.		

DT.8.1.9		Mandatory
The Service Provider shall, at no additional cost to TfL and where the System Failure is attributable to an Other Service Provider or TfL, identify any dependencies on such Other Service Provider or TfL which must be met in order for the Service Provider to remedy the System Failure.		

DT.8.1.10		Mandatory
The Service Provider shall, at no additional cost to TfL and where the System Failure is attributable to an Other Service Provider or TfL, in relation to such Other Service Provider, provide TfL with all necessary information so that TfL can enforce its rights and remedies against such Other Service Provider.		

DT.8.1.11		Mandatory
The Service Provider shall notify TfL of a disagreement between the Service Provider and an Other Service Provider in relation to the responsibility for, or the resolution of, a System Failure disagreement as soon as possible, but no later than the next Business Day.		

DT.8.1.12		Mandatory

The Service Provider shall if requested by TfL, provide TfL with a full explanation of the nature of any disagreement (including all relevant parties' views), and if such disagreement is not resolved within five (5) Business Days, for the purposes of such resolution and without prejudice to the Service Provider's rights under the Agreement, comply with TfL's decision in relation to the subject matter of such disagreement (provided that TfL shall act reasonably when determining its decision).

DT.8.1.13		Mandatory

The Service Provider shall continue to comply with its obligations under the Agreement while any such disagreement continues.

DT.8.1.14		Mandatory

The Service Provider shall co-operate with and liaise with Other Service Providers and Third Parties to plan and execute Testing, and to resolve Incidents.

DT.8.1.15		Mandatory

The Service Provider shall produce processes and procedures to ensure that work with Other Service Providers and Third Parties can be conducted effectively to ensure any Incidents and Changes with the Interfaces are resolved.

8.2 Code of Connection

DT.8.2.1		Mandatory

The Service Provider shall ensure it complies with Appendix 10 *(ELISE DVLA Code of Connection)*, as may be amended or superseded by equivalent working practices from time to time.

DT.8.2.2		Mandatory

The Service Provider shall ensure it complies with Appendix 11 *(TfL Code of Connection Policy)*, as may be amended or superseded by equivalent working practices from time to time.

DT.8.2.3		Mandatory
The Service Provider shall ensure it complies with Appendix 8 (*Civil Traffic Enforcement of Approved Devices*), as may be amended or superseded by equivalent legislation from time to time.		

DT.8.2.4		Mandatory
The Service Provider shall ensure that any file transfer between the DVLA and TfL is in accordance with Schedule 5 *(Service Level Agreement)* and in accordance with Appendix 13 *(Interface Catalogue)*.		

DT.8.2.5		Mandatory
The Service Provider shall ensure it complies with Appendix 9 *(Code of Practice for CCTV Enforcement)*, as may be amended or superseded by equivalent legislation from time to time.		

9   SOFTWARE AND HARDWARE

9.1 General

This section covers the requirements applicable to the Service Provider in relation to Software and Hardware.

DT.9.1.1		Mandatory
The Service Provider shall ensure the standard of software development, and documentation is maintained at its current level during the Term.		

DT.9.1.2		Mandatory
The Service Provider shall ensure Software is modular such that modifications and upgrades have minimal impacts on other functional modules and be such as to permit patches and minor and major upgrades to be readily tested in a non-production environment prior to deployment in the live environment.		

9.2 Software Support

DT.9.2.1		Mandatory

The Service Provider shall develop and comply with processes and procedures for Software support and shall submit these to TfL for Approval by the Milestone date for Milestone D4 ("PES Ready for Go Live and DTES Ready for Transition") and shall operate such processes procedures and tools for the Term.

DT.9.2.2		Mandatory

The Service Provider shall ensure that regular periodic Releases of Software shall be made available as notified by TfL. Releases of Software shall include but not be limited to:

a) bug fixes

b) system upgrades;

c) improvements in quality; and

d) minor functionality.

DT.9.2.3		Mandatory

The Service Provider shall ensure that all Releases are Approved by TfL before implementation of such Releases in to the System.

9.3 Hardware Support

DT.9.3.1		Mandatory

The Service Provider shall be responsible for procuring and supplying all replacement equipment and equipment which TfL and the Service Provider mutually agree has reached end of life.

DT.9.3.2		Mandatory

The Service Provider shall provide an itemised list of the cost of Spares upon request from TfL.

DT.9.3.3		Mandatory

The Service Provider shall provide all necessary termination and distribution, surge protection, fusing and residual current devices.

DT.9.3.4		Mandatory

The Service Provider shall provide, maintain and ensure that all equipment is connected to the mains power.

DT.9.3.5		Mandatory

The Service Provider shall provide where necessary all fixtures, fittings and equipment for the data centre grade accommodation at the operational Premises and Business Continuity Premises.

10 INTERFACES

10.1 Interface Management

This section covers the requirements relating to the Interfaces and should be read in conjunction with Appendix 13 *(Interface Catalogue)* to this Schedule 2.

DT.10.1.1		Mandatory

The Service Provider shall develop, implement, maintain, and support each Interface in accordance with Appendix 13 *(Interface Catalogue)*.

DT.10.1.2		Mandatory

The Service Provider shall ensure that the System is built, operated and maintained in accordance with Appendix 13 *(Interface Catalogue)*.

DT.10.1.3		Mandatory

The Service Provider shall submit to TfL for Approval and when Approved comply with all Interface specifications produced in accordance with Appendix 13 *(Interface Catalogue)*.

DT.10.1.4		Mandatory

The Service Provider shall design and at all times maintain the Interface specification(s) in an up-to-date form.

DT.10.1.5		Mandatory

The Service Provider is responsible for the planning, design, development, testing, operation, maintenance, monitoring, Incident resolution, and Change of all System Interfaces and the co-ordination of TfL's and the Other Service Providers' activities in relation to the provision of the Services and the System Interfaces.

DT.10.1.6		Mandatory

The Service Provider shall organise and lead all meetings and agreements with TfL, Other Service Providers and relevant Third Parties which are required to deliver the System Interfaces and associated Documentation as requested by TfL.

DT.10.1.7		Mandatory

The Service Provider shall ensure that each System Interface at all times (including without limitation during design, development, implementation, Testing and Acceptance or Approval) complies with (and all Documentation shows that each Interface complies with) the Agreement, the relevant Interface specification and any relevant Third Party specifications.

DT.10.1.8		Mandatory

The Service Provider shall provide non-production support and technical facilities to Test interconnections with all Other Service Providers and TfL in accordance with Schedule 4 *(Testing Regime)*.

DT.10.1.9		Mandatory

The Service Provider shall operate the Interfaces and network connections to the Service Levels in accordance with Schedule 5 *(Service Level Agreement)*.

DT.10.1.10		Mandatory

The Service Provider shall notify TfL and Other Service Providers in advance of any scheduled downtime of the System Interfaces. The minimum period of notification shall be

five (5) Business Days in advance for scheduled downtime.

DT.10.1.11		Mandatory
The Service Provider shall ensure that all scheduled downtime of the System Interfaces is Approved in advance in writing by TfL.		

DT.10.1.12		Mandatory
The Service Provider shall request all Changes to the Interface specifications in accordance with the Schedule 9 *(Change Control Request Procedure)*.		

DT.10.1.13		Mandatory
The Service Provider shall re-use existing Interfaces where possible provided that this has been Approved by TfL.		

DT.10.1.14		Mandatory
The Service Provider shall participate in workshops with TfL, Other Service Providers and/or Third Parties to confirm the Detailed Design of any System Interface and any new Interface, if and when requested by TfL.		

DT.10.1.15		Mandatory
The Service Provider shall design, Test and operate all System Interfaces and network connections with TfL and Other Service Providers on request by TfL in order to operate the System.		

DT.10.1.16		Mandatory
The Service Provider shall issue an updated Interface specification to all Other Service Providers and TfL following any Changes to the Service Provider's maintained Interface specifications.		

DT.10.1.17		Mandatory

The Service Provider shall implement the Interfaces to ensure compatibility with prior versions of any defined Interface, unless otherwise agreed in writing by the Other Service Providers and TfL. The proposed features and functionality of such an Interface must be submitted to TfL, for Assurance prior to being implemented.

DT.10.1.18		Mandatory

The Service Provider shall utilise information provided by TfL from time to time which must be used for the configuration of the System and implemented in accordance with Schedule 9 *(Change Control Request Procedure)* at no additional cost to TfL. This shall include but not be limited to the following:

- Camera identification;
- Camera location;

DT.10.1.19		Mandatory

The Service Provider shall ensure that all new Interfaces will be implemented and managed in accordance with Schedule 9 *(Change Control Request Procedure)*.

10.2 Encryption and Decryption Keys

DT.10.2.1		Mandatory

The Service Provider shall utilise the encryption and decryptions keys and any Software or Hardware provided by the Other Service Providers required in accordance with Appendix 13 *(Interface Catalogue)*.

10.3 Authentication Certificate

DT.10.3.1		Mandatory

The Service Provider shall submit to TfL for Approval and, when Approved, comply with a process for managing any encryption key and authentication certificates.

11 MANAGING VOLUME AND ASSETS

11.1 Capacity Planning

This section covers the requirements applicable to the Service Provider in relation to capacity planning, the As-Built Physical Architecture and Asset management.

DT.11.1.1		Mandatory

The Service Provider shall design the System, and all constituent parts of it, to be capable of being scaled smoothly from the initial deployment, which supports only the defined Services in this Agreement, to support Services with up to two-and-a-half (2.5) times the current steady state operational volumes as set out in Appendix 3 (*Volumetrics*).

DT.11.1.2		Mandatory

The Service Provider shall build and implement the System to be scalable, configurable to two (2.0) times the initial volumetric requirements outlined in Appendix 3 (*Volumetrics*) and without the need to Change any Hardware.

DT.11.1.3		Mandatory

The Service Provider shall ensure that network elements and transmission interconnections allow for two-and-a-half (2.5) times the initial volumetric requirements outlined in Appendix 3 *(Volumetrics)*.

DT.11.1.4		Mandatory

The Service Provider shall prepare capacity plans during the operational phase, and shall keep these capacity plans updated throughout the Term.

DT.11.1.5		Mandatory

The Service Provider shall submit a current version of the capacity plans, together with current versions of the Asset Register and the As-Built Physical Architecture, to TfL every six (6) months.

DT.11.1.6		Mandatory

The Service Provider shall prepare the capacity plans in respect of each Asset or logical group of Assets as specified in the As-Built Physical Architecture, and shall include, but not be limited to, the following:

a) actual utilisation of the Asset;

b) 1, 2, 3, 4 and 5 year capacity predictions based on observable trends, foreseeable contingencies and anticipated or planned expansion of the Services (including without limitation in connection with the implementation of the System and any Additional Services); and

c) required or recommended changes to each Asset to enable the Service Provider to achieve the Service Levels.

DT.11.1.7		Mandatory
The Service Provider shall provide the capacity plan(s) to TfL for Approval by the Milestone date for Milestone D4 ("PES Ready for Go Live and DTES Ready for Transition") and shall maintain those capacity plan(s) for the Term.		

DT.11.1.8		Mandatory
The Service Provider shall update the capacity plan(s) to reflect the System performance in relation to projected volumes as specified in Appendix 3 *(Volumetrics)* as and when required.		

DT.11.1.9		Mandatory
The Service Provider shall provide a Change Control Request in accordance with Schedule 9 *(Change Control Request Procedure)* for any increases in capacity where the Service Provider predicts capacity to be insufficient to meet demand.		

DT.11.1.10		Mandatory
The Service Provider shall track and report actual usage against projections from prior capacity plans every six (6) months toTfL.		

DT.11.1.11		Mandatory
The Service Provider shall ensure that there is available capacity to meet the Service Levels		

in accordance with Schedule 5 *(Service Level Agreement)* for the System.

DT.11.1.12		Mandatory
The Service Provider shall ensure that the System is capable of processing up to 200% of throughput of Data as required by Appendix 3 *(Volumetrics)* to this Schedule 2.		

11.2 As Built Physical Architecture

DT.11.2.1		Mandatory
The Service Provider shall prepare, maintain and keep up to date from time to time (and in any event within ten (10) Business Days of any Change) the As-Built Physical Architecture.		

DT.11.2.2		Mandatory
The Service Provider shall ensure the As-Built Physical Architecture includes, but is not limited to, where every Service Provider Asset used in the provision of the Services is physically deployed, what function each Asset supports, and identifies Assets by reference to the Asset Register.		

11.3 Asset Management

DT.11.3.1		Mandatory
The Service Provider shall produce and maintain the Asset management system in accordance with Schedule 12 *(Asset Management)*.		

DT.11.3.2		Mandatory
The Service Provider shall provide and maintain an Asset Register in accordance with Schedule 12 *(Asset Management)*.		

DT.11.3.3		Mandatory

The Service Provider shall develop and comply with processes for Asset Management for the System and associated Assets in accordance with this Schedule, Schedule 12 *(Asset Management)* and Schedule 9 *(Change Control Request Procedure)* and shall submit such processes to TfL for Approval before the Milestone date for Milestone D4 ("PES Ready for Go Live and DTES Ready for Transition") and operate such processes for the Term.

DT.11.3.4		Mandatory

The Service Provider shall provide TfL with a list of all Software products used during the Term (where in current use, past use, or projected future use) as part of the System in accordance with Schedule 12 *(Asset Management)*.

DT.11.3.5		Mandatory

The Service Provider shall review and update the list of all Software products on a quarterly basis, and a new version provided to TfL.

DT.11.3.6		Mandatory

The Service Provider shall update all design and operational Documentation as appropriate, and provide to TfL for Approval as Assets are installed, redeployed, replaced or disposed of.

DT.11.3.7		Mandatory

The Service Provider shall submit a current version of the Capacity Plan(s), together with current versions of the Asset Register and the As-Built Physical Architecture to TfL no later than six (6) Months prior to the expiry of the Agreement or (if earlier) promptly following the issue of a notice of termination.

12 SECURITY
12.1 General

This section covers those requirements relating to the security of the System including the Security Policy. This section should be read in conjunction with Schedule 14 *(Security)*.

DT.12.1.1		Mandatory

The Service Provider shall support the System in accordance with Schedule 14 *(Security)*.

DT.12.1.2		Mandatory
The Service Provider shall ensure that all Software Releases are in accordance with Schedule 14 *(Security)*.		

12.2 Access to Systems and Data

DT.12.2.1		Mandatory
The Service Provider shall implement an Access and Identity Management Solution in accordance with Schedule 14 *(Security)*.		

12.3 System - Anti-Virus

DT.12.3.1		Mandatory
The Service Provider shall submit to TfL for Approval, and when Approved, comply with processes and procedures to protect the System from Viruses, spyware, malware and other potentially destructive Software, one (1) month prior to Operational Commencement Date, in accordance with Schedule 14 *(Security)*.		

12.4 Security Incident and Event Management ("SIEM") solution

DT.12.4.1		Mandatory
The Service Provider shall implement an appropriately certified Software tool for Security Incident and Event Management (SIEM) solution in accordance with Schedule 14 *(Security)* and shall submit the details of the tool to TfL for Approval by the Milestone date for Milestone D4 ("PES Ready for Go Live and DTES Ready for Transition") and shall operate such processes procedures and tools for the Term.		

12.5 Audit

DT.12.5.1		Mandatory
The Service Provider shall develop and comply with an audit schedule covering all audits, together with the scope of each audit in accordance with Schedule 14 *(Security)*, and shall submit such an audit schedule to TfL for Approval prior to the Operational Commencement Date.		

Security DT.12.5.2		Mandatory
The Service Provider shall develop and comply with an audit methodology for monitoring and controlling the System and shall submit such audit methodology to TfL for Approval by the Milestone date for Milestone D4 ("PES Ready for Go Live and DTES Ready for Transition") and shall operate such processes procedures and tools for the Term.		

12.6 System - Security

DT.12.6.1		Mandatory
The Service Provider shall ensure that the System does not in any way expose the Source Code, and memory content to the Authorised User should any Data be input unexpectedly or erroneously.		

DT.12.6.2		Mandatory
The Service Provider shall ensure that the System has the functionality to prevent cross-site scripting attacks.		

13 DATA
13.1 Data Migration

This section covers those requirements applicable to the Service Provider in relation to Data.

DT.13.1.1		Mandatory
The Service Provider shall submit to TfL for Approval and, when Approved, comply with a		

Data Migration Strategy in accordance with Schedule 3 *(Milestones and Deliverables)*.

DT.13.1.2		Mandatory

The Service Provider shall ensure that the Data Migration Strategy allows for continuity of business as usual on the Operational Commencement Date.

DT.13.1.3		Mandatory

The Service Provider shall provide TfL with the Data Migration Report in accordance with Schedule 3 *(Milestones and Deliverables)*.

DT.13.1.4		Mandatory

The Service Provider shall analyse the Data from the source System, identify Data quality issues and provide a Data quality report to TfL that details the work required to be completed prior to, during and after Data Migration.

DT.13.1.5		Mandatory

If the Service Provider fails to migrate any Data to the System using the migration process set out in the Data Migration Strategy, it shall submit to TfL a revised Data Migration Strategy for Approval and, when Approved, implement such strategy.

DT.13.1.6		Mandatory

The Service Provider shall co-ordinate, execute, and complete secure Data Cleansing activities in accordance with the Data Migration Strategy, prior to the migration of Data.

DT.13.1.7		Mandatory

The Service Provider shall carry out reconciliation for each Data item being migrated between the source systems and the System as part of the migration process to ensure Data accuracy, correctness and validity. The Service Provider shall inform TfL of the reconciliation results after each dress rehearsal and again prior to the implementation of the System.

DT.13.1.8		Mandatory
The Service Provider shall map and migrate all Data from the Incumbent Service Providers.		

DT 13.1.8 A		Mandatory
The Service Provider shall identify, document and agree any transformation necessary to migrate a Data item.		

DT 13.1.8 B		Mandatory
The Service Provider shall carry out reconciliation for each Data item being migrated between the source systems and the System as part of the migration process to ensure Data accuracy, correctness and validity. The Service Provider shall inform TfL of the reconciliation results after each dress rehearsal and again prior to the Implementation of the System.		

DT.13.1.9		Mandatory
The Service Provider shall develop and comply with a proposed set of actions necessary to resolve source Data quality issues and shall submit such proposed actions to TfL for Assurance.		

DT.13.1.10		Mandatory
The Service Provider shall prove referential integrity, consistency and completeness of all migrated Data for Approval by TfL.		

DT 13.1.10 A		Mandatory
The Service Provider shall create a Data Dictionary during Implementation that contains an entry for each Data item, including without limitation: • Data Structure including without limitation: size, data type, description, validation rules, maximum/minimum values; • Physical location of Data;		

- Processes that create the Data;

- Processes that can edit/delete the Data;

- Changes that have amended the format or content of the Data;

- Applications that use the Data; and

- Owner of the Data.

DT.13.1.11		Mandatory
The Service Provider shall maintain the Data Dictionary for the Term of the Agreement. This shall include without limitation, amending its contents where required after each Change and Release to the System.		

DT.13.1.12		Mandatory
The Service Provider shall supply the Data Dictionary in a human readable format to TfL on request.		

DT.13.1.13		Mandatory
The Service Provider shall ensure that the migrated Data is maintained in accordance with Appendix 12 *(Data Retention)*.		

DT.13.1.14		Mandatory
The Service Provider shall maintain Documentation of all Data processing operations under the Service Provider's responsibility, which shall be provided to TfL within five (5) Business Days of a request from TfL or such other period as TfL may specify from time to time.		

DT.13.1.15		Mandatory
The Service Provider shall ensure that all identities in migrated PES PCN records are preserved.		

13.2 Data Migration Planning

DT.13.2.1		Mandatory
The Service Provider shall submit to TfL for Approval a date by which it shall provide the level 1 Data Migration plan to TfL prior to the Milestone date for Milestone D1 ("Mobilisation of Project Team Complete") and, once Approved, it shall deliver the level 1 Data Migration plan on or before such Approved Date.		

DT.13.2.2		Mandatory
The Service Provider shall develop and comply with a level 2 build and Test Data Migration plan and shall submit such a plan to TfL for Approval.		

DT.13.2.3		Mandatory
The Service Provider shall develop and comply with a level 2 detailed plan for Data Migration execution and shall submit such a plan to TfL for Approval.		

13.3 Data Integrity

DT.13.3.1		Mandatory
The Service Provider shall provide mechanisms and procedures to allow Data to be reconciled between any Data Stores, and to correct inconsistent, incomplete or duplicate Data and shall submit mechanisms and procedures to TfL for Assurance by the Milestone date for Milestone D4 ("PES Ready for Go Live and DTES Ready for Transition") and shall operate such processes procedures and tools for the Term.		

DT.13.3.2		Mandatory
The Service Provider shall develop and comply with a process for the validation of Data at the point such Data is entered in to the System and shall submit this process to TfL for Approval.		

13.4 Data

DT.13.4.1		Mandatory

The Service Provider shall maintain and manage all Data unless otherwise agreed in writing with TfL.

DT.13.4.2		Mandatory

The Service Provider shall identify and populate all Data required for Testing in accordance with Schedule 4 *(Testing Regime)*.

DT.13.4.3		Mandatory

The Service Provider shall identify and populate all Data required for the Operational Commencement Date.

DT.13.4.4		Mandatory

The Service Provider shall ensure that only Authorised Users are permitted to undertake changes to Data.

DT.13.4.5		Mandatory

The Service Provider shall ensure that all modifications to Data records are auditable including, without limitation, recording the Authorised User and date/time of change.

DT.13.4.6		Mandatory

The Service Provider shall ensure that the audit history of Data maintains versioning of the Data.

13.5 Data Security

DT.13.5.1		Mandatory

The Service Provider shall ensure that all transfers of Data are secure, including those using removable media, and shall explicitly prevent the unauthorised use of removable media by its agents, employees, contractors and other persons with access to equipment in accordance to Schedule 14 *(Security)*.

DT.13.5.2		Mandatory
The Service Provider shall store and Process all Personal Data, with the exception of DVLA Data, within the European Economic Area (EEA). The storing and Processing of Personal Data outside of the EEA is prohibited. For avoidance of doubt, Processing shall include (but is not limited to) the ability to read the data.		

DT.13.5.3		Mandatory
The Service Provider shall not store or access DVLA Data outside the United Kingdom (UK) save to the extent agreed by the Parties in accordance with the Change Control Request procedure (such procedure to involve associated discussions with the DVLA).		

DT.13.5.4		Mandatory
The Service Provider shall immediately escalate and report all Incidents relating to unauthorised and unlawful Processing of, accidental loss of, alteration, destruction and damage to Personal Data to TfL in accordance with Schedule 14 *(Security)* and this Schedule 2.		

DT.13.5.5		Mandatory
The Service Provider shall handle any data, including Personal Data, according to the classification given to it by TfL under the TfL Information Security Classification Standard as set out in Schedule 34 *(TfL Policies)*.		

DT.13.5.6		Mandatory
The Service Provider shall notify TfL within five (5) Business Days of all changes to any processes and activities (including locations where they may be undertaken) that will require TfL to update its notification on the Information Commissioner's register of Data Controllers.		

DT.13.5.7		Mandatory
The Service Provider shall ensure that controls are in place to prevent the copying, reproduction and removal of Data from the System except to the extent necessary to provide the Services in accordance with Schedule 14 *(Security)*.		

DT.13.5.8		Mandatory
The Service Provider shall ensure that all Service Provider's Personnel who can and/or do access Personal Data are suitably trained in relation to the obligations to protect Personal Data in accordance with the Privacy Legislation and shall ensure that such training is updated at reasonable intervals.		

DT.13.5.9		Mandatory
The Service Provider shall take reasonable steps to ensure the reliability and integrity of Personnel having access to Personal Data Processed under this Agreement		

13.6 Data Retention

DT.13.6.1		Mandatory
The Service Provider shall comply with all TfL's specific requirements relating to retention periods for all Data as specified in Appendix 12 *(Data Retention)* to this Schedule 2. Where no period has been specified, the Data must be retained for as long as is required for the purpose for which it was collected and no longer in accordance with Appendix 12 *(Data Retention)* to this Schedule 2.		

DT.13.6.2		Mandatory
The Service Provider shall ensure that all Data deleted at the expiry of its retention period cannot be accessed by anyone. Data held on paper shall be securely shredded and Data held electronically shall be deleted using tested deletion scripts in accordance with Annex 1 *(TfL Information Security Controls Framework)* of Schedule 14 *(Security)*.		

DT.13.6.3		Mandatory
The Service Provider shall use industry standard disk-wipe Software and other mechanisms in accordance with Annex 1 *(TfL Information Security Controls Framework)* of Schedule 14 *(Security)*.		

DT.13.6.4		Mandatory
The Service Provider shall ensure that the System provides the functionality to protect Data		

from automatic deletion in the event that it is required for further reference.

DT.13.6.5		Mandatory

The Service Provider shall ensure that the System provides the functionality to remove the protection on Data so that the Data can be destroyed in accordance with Appendix 12 *(Data Retention)*.

DT.13.6.6		Mandatory

The Service Provider shall ensure that the retention and deletion periods for all Data as specified by TfL are treated as a Parameter Change and can be modified as requested by TfL from time to time at no additional cost to TfL.

DT.13.6.7		Mandatory

The Service Provider shall develop and comply with processes and procedures for Data management in accordance with Appendix 12 *(Data Retention)* and shall submit such processes and procedures to TfL for Approval by the Milestone date for Milestone D4 ("PES Ready for Go Live and DTES Ready for Transition")and shall operate such processes procedures and tools for the Term.

13.7 Data Protection Audit

DT.13.7.1		Mandatory

The Service Provider shall develop, implement and comply with a Data Protection audit plan in accordance with Clause 37 (*Data Protection*) and shall submit such Data Protection audit plan to TfL for Approval by the Milestone date for Milestone D3 ("Design Complete Date") and shall operate such processes procedures and tools for the Term.

The Data Protection audit plan shall include:

• timescales for preparation and conduct of an annual audit of the Service Provider's Data management processes and procedures;

• the audit strategy and planned outputs; and

• details of the independent Third Party undertaking the audit.

DT.13.7.2		Mandatory
The Service Provider shall implement any recommendations from any Data Protection audits within timescales set by TfL.		

DT.13.7.3		Mandatory
The Service Provider shall undertake a Data Protection audit at least three (3) months prior to Operational Commencement Date and report the findings to TfL in accordance with Schedule 14 *(Security)*.		

DT.13.7.4		Mandatory
The Service Provider shall maintain a Systems log of any Data changed by it or any Service Provider's Personnel to provide a full audit trail to meet the requirements of (but not limited to): • any System audit; • any of TfL's external audit; • audit by TfL and TfL's internal auditors; • TfL's management with regards to reporting and contract monitoring requirements; and • Privacy Legislation.		

13.8 Reporting of Data Protection Breaches

Data DT.13.8.1		Mandatory
The Service Provider shall report any breach of Data Protection immediately following the point at which the breach comes to the attention of the Service Provider or any of the Service Provider's Personnel.		

14 TESTING

14.1 General

This section covers those requirements relating to Testing including Test environments and should be read in conjunction with Schedule 4 *(Testing Regime)* and Schedule 3 *(Milestones and Deliverables)*.

DT.14.1.1		Mandatory
The Service Provider shall carry out Testing in accordance with Schedule 4 *(Testing Regime)* including, but not limited to Testing following a Release or a Change.		

DT.14.1.2		Mandatory
The Service Provider shall ensure that Test environment(s) are in place, and are supported and maintained.		

DT.14.1.3		Mandatory
The Service Provider shall accept Testing of the System and Services is the responsibility of, and at the risk of the Service Provider.		

DT.14.1.4		Mandatory
The Service Provider shall prepare and submit to TfL for Approval a Test Strategy by the Milestone date for Milestone D3 ("Design Complete") and, when Approved, shall comply with such Test Strategy in accordance with Schedule 4 *(Testing Regime)*.		

DT.14.1.5		Mandatory
The Service Provider shall prepare and submit to TfL for Approval and, when Approved, comply with the Testing Documents as required to reflect the Test Strategy. This shall include but not be limited to Testing Documents to address Testing of: (A) Changes; (B) work undertaken to correct errors or issues; and (C) any work undertaken as a result of Incidents.		

15 DOCUMENTATION

15.1 General

This section covers those requirements relating to Documentation.

DT.15.1.1		Mandatory
The Service Provider shall provide Documentation to TfL in electronic format using an agreed method of transfer in either Microsoft Office (Word, Visio, Excel or PowerPoint) or PDF format as requested by TfL.		

DT.15.1.2		Mandatory
The Service Provider shall ensure that all System Documentation is complete such that a Third Party with the requisite technical background could reconstruct the System from the Software Source Code and COTS components, configuration files the Operating System (OS) Software, the Hardware and compiling Software.		

DT.15.1.3		Mandatory
The Service Provider shall ensure that all Documentation is complete for a technician familiar with the technologies to perform all necessary developments, support, maintenance and enhancement tasks for the Hardware and Software making up the System.		

DT.15.1.4		Mandatory
The Service Provider shall share the design and technical Documentation relating to Interfaces with TfL, Other Service Providers and Third Parties, and prospective Other Service Providers and Third Parties as specified by TfL.		

DT.15.1.5		Mandatory
The Service Provider shall ensure that the format and the content of the relevant Interface Documentation is agreed with the Other Service Providers and Third Parties such that the same Documentation is used to verify, develop, and test the Interfaces.		

DT.15.1.6		Mandatory
The Service Provider shall provide operational process and procedure Documentation for all tasks to be undertaken by the Service Provider or its Sub-Contractors from the Operational Commencement Date. This shall, without limitation comprise: • procedures for operation of the Services; • procedures for maintenance and support of the Services; and		

• references to relevant System Documentation.

DT.15.1.7		Mandatory

The Service Provider shall ensure that all Key Documents shall be provided and subject to Assurance and Approval in accordance with Schedule 3 *(Milestones and Deliverables)*, and if not specified in the Agreement all Key Documents shall at least be submitted for Assurance.

DT.15.1.8		Mandatory

The Service Provider shall ensure all Documentation described in Schedule 3 *(Milestones and Deliverables)* and Schedule 4 *(Testing Regime)* and all other Documentation requested by TfL, is provided to TfL for review as and when required and/or modified during the Term.

DT.15.1.9		Mandatory

The Service Provider shall submit to TfL for Approval, a review schedule for the Documentation List by the Milestone date for Milestone D2 ("Planning Complete Date") and, when Approved, shall comply with such review schedule for the Term.

The review schedule shall:

• allow time for TfL reviewers to read the Document(s) to be reviewed, including any referenced supporting Documentation;

• allow time to record and return review comments to the Service Provider;

• assume no less than two (2) revisions of each Document; and

• avoid the simultaneous release of each Document.

DT.15.1.10		Mandatory

The Service Provider shall ensure that in addition to the Documentation specified for delivery at the Milestones, any further Documentation as TfL may reasonably request shall be produced by the Service Provider and provided to TfL as required from time to time.

DT.15.1.11		Mandatory

The Service Provider shall ensure that all proprietary Software Documentation and Source Code be lodged in escrow in accordance with the provisions of Clause 6 (*Source Code, Escrow and Verification Services*).

DT.15.1.12		Mandatory

The Service Provider shall develop and keep updated on an ongoing basis during the Term the Documents as listed in Appendix 5 (*DTES System Documentation List*).

16 REPORTING

16.1 General

This section covers those requirements applicable to the Service Provider in relating to reporting.

DT.16.1.1		Mandatory

The Service Provider shall provide TfL with reports in accordance with Schedule 5 (*Service Level Agreement*) and Schedule 10 (*Contract Management and Reporting*).

DT.16.1.2		Mandatory

The Service Provider shall provide TfL with a Performance Indicator Report detailing the Service Provider's performance in respect of the Performance Indicators set out in Schedule 5 (*Service Level Agreement*) in accordance with Schedule 10 (*Contract Management and Reporting*).

DT.16.1.3		Mandatory

The Service Provider shall ensure that database schemas are provided to TfL upon request.

DT.16.1.4		Mandatory

The Service Provider shall ensure that all reports created by the Service Provider are securely transferred.

DT.16.1.5		Mandatory
The Service Provider shall ensure that the Performance Indicator Reports are delivered to TfL prior to the eighth (8) Business Day of each calendar month.		

DT.16.1.6		Mandatory
The Service Provider shall ensure that all new report requests will be managed in accordance with Schedule 9 *(Change Control Request Procedure)*.		

DT.16.1.7		Mandatory
The Service Provider shall provide MIS Data in accordance with Appendix 14 (*DTES MIS Data Requirements*) and Appendix 20 (*PES Data),* and MIS reports in accordance with Appendix 15 (*DTES MIS Master Report Catalogue*) and Appendix 21 (*PES Reports).*		

DT.16.1.8		Mandatory
The Service Provider shall ensure that all reports provided in accordance with Appendix 15 *(DTES MIS Master Report Catalogue)* and Appendix 21 (*PES Reports)* and requests for ad hoc Data are accountable against Performance Indicator 1 as specified in Schedule 5 *(Service Level Agreement)*.		

DT.16.1.9		RFI
The Service Provider shall implement an automated, secure export of all DTES and PES related Data to TfL and shall submit the security methods, formats, frequencies and protocols to TfL for approval and implement as approved by TfL. Please note that DVLA Keeper details, Evidence Packs and PES PCN Packs will not be transferred to TfL.		

17 CHANGE MANAGEMENT
17.1 General

This section covers those requirements applicable to the Service Provider in relation to Change Management.

DT.17.1.1		Mandatory
The Service Provider shall develop and comply with processes for Change Management for the System, the Services, and associated Assets and shall submit such processes to TfL for Approval by the Milestone date for Milestone D4 ("PES Ready for Go Live and DTES Ready for Transition") and shall operate such processes procedures and tools for the Term.		

DT.17.1.2		Mandatory
The Service Provider is responsible for identifying all Documents, including processes, procedures, tools and tasks impacted by planned and agreed Changes, and notifying TfL of these Documents before the Change is agreed with TfL.		

18 BUSINESS CONTINUITY

18.1 General

This section covers those requirements which shall apply to ensure continuity of business operations in the event of a 'disaster' which prevents Services at the normal operational Premises.

DT.18.1.1		Mandatory
The Service Provider shall prepare, implement and maintain a Business Continuity Plan, a Business Continuity Test Schedule and provide the Business Continuity Infrastructure in accordance with Schedule 25 *(Business Continuity)* and shall submit the same to TfL for Approval by the Milestone date for Milestone D4 ("PES Ready for Go Live and DTES Ready for Transition") and shall operate such processes procedures and tools for the Term.		

19 HEALTH AND SAFETY

19.1 General

This section covers those requirements applicable to the Service Provider relating to Health and Safety.

DT.19.1.1		Mandatory
The Service Provider shall ensure that all Premises and equipment used to provide the Services and all work carried out by the Service Provider and Service Provider's Personnel shall be fully compliant with all relevant Health and Safety legislation.		

DT.19.1.2		Mandatory
The Service Provider shall, within two (2) months of the Effective Date, submit to TfL the risk assessments and method statements for all Services activities to be carried out under the Agreement. Such risks may include, but are without limitation to the following: a) impact of moving equipment; b) trip and slip hazards; c) electric shock; d) inhalation of dust, particulates, airborne contaminants; e) fire and smoke; f) noise; g) impact of driving to TfL Premises; and h) lone working.		

DT.19.1.3		Mandatory
The Service Provider shall ensure that specific risk assessments and method statements are submitted for each activity and Premises. Only if the activity and risks are truly identical at each location will TfL accept generic risk assessments and method statements.		

DT.19.1.4		Mandatory
The Service Provider shall comply with the Surface Transport Health, Safety and Environment Policy as set out in Schedule 34 *(TfL Policies)* (which policy may be amended at TfL's sole discretion).		

DT.19.1.5		Mandatory
The Service Provider shall notify TfL immediately should there be an incident relating to Health and Safety involving any of the Service Provider's Personnel whether or not it resulted in an accident or injury. Details shall then be submitted in the next Health and Safety report. This does not release the Service Provider from its legal obligation to inform the HSE in the event of a serious or notifiable incident occurring.		

20 ORGANISATION, PERSONNEL AND TRAINING

20.1 Organisation

This section covers those requirements applicable to the Service Provider relating to the Service Provider's organisation, Personnel and Training.

DT.20.1.1		Mandatory
The Service Provider shall ensure that its organisation is structured to enable and promote clear, accurate and regular communications between the Service Provider's Personnel and TfL's Personnel.		

20.2 Meetings

DT.20.2.1		Mandatory
The Service Provider shall attend regular meetings with TfL and any related Third Parties upon request from TfL.		

DT.20.2.2		Mandatory
The Service Provider shall, upon request from TfL, invite Sub-Contractors to attend regular meetings with TfL, any TfL related Third Parties, and Other Service Providers.		

DT.20.2.3		Mandatory
The Service Provider shall ensure that TfL is invited to all meetings between the Service Provider and any Other Service Providers or Third Party in relation to the provision of the Services.		

DT.20.2.4		Mandatory
The Service Provider shall attend meetings with TfL and Sub-Contractors to discuss potential improvements to the Services, upon request from TfL.		

DT.20.2.5		Mandatory
The Service Provider shall attend and actively contribute in all meetings as listed in Schedule 10 *(Contract Management and Reporting)*.		

20.3 Service Provider Recruitment and Staffing

DT.20.3.1		Mandatory
The Service Provider shall provide job descriptions for those roles identified by the Service Provider to be necessary for the delivery of the Services and as outlined in Schedule 11 *(Employees and Key Personnel)* to TfL for Approval by the Milestone date for Milestone D1 ("Mobilisation of Project Team Complete Date").		

DT.20.3.2		Mandatory
The Service Provider shall ensure that appropriate background checks are performed for new Service Provider's Personnel prior to the commencement of their employment including, without limitation: • reference checks; • Disclosure and Barring Service (DBS) checks; and • right to work.		

DT.20.3.3		Mandatory
The Service Provider shall, in the event of the Service Provider's Personnel taking any action that might compromise the position of TfL, alert TfL within twenty four (24) hours of the Service Provider becoming aware of the action and provide details of their planned resolution of the action within an appropriate timescale.		

DT.20.3.4		Mandatory
The Service Provider shall request TfL Approval for the replacement of any Key Personnel in accordance with Schedule 11 *(Employees and Key Personnel)*.		

DT.20.3.5		Mandatory
TfL reserves the right to request the removal of any member of the Service Provider's Personnel from the provision of the Services in accordance with Schedule 11 *(Employees and Key Personnel)*.		

DT.20.3.6		Mandatory

The Service Provider shall provide a Contract Manager who shall take overall responsibility for management of the Services and shall be TfL's key contact for the operations and contract management of the Agreement in accordance with Schedule 10 *(Contract Management and Reporting)* and Schedule 11 *(Employees and Key Personnel)*.

DT.20.3.7		Mandatory

The Service Provider shall ensure that members of the Service Provider's Personnel are nominated to be responsible for the delivery of the Services and are contactable by TfL, Other Service Providers and Third Parties at all times.

20.4 Training, Training Material and Approach

DT.20.4.1		Mandatory

The Service Provider shall submit all Training Materials to TfL for Approval at least twelve (12) weeks prior to use and, when Approved, comply with such processes and procedures.

DT.20.4.2		Mandatory

The Service Provider shall ensure that all Training Materials and courses are updated to reflect changes to operational practices and lessons learned.

DT.20.4.3		Mandatory

The Service Provider shall ensure that updated Training Materials are provided to TfL upon request.

DT.20.4.4		Mandatory

The Service Provider shall ensure that updated Training Materials and courses are provided to TfL for the purposes of training TfL Personnel upon request from TfL.

DT.20.4.5		Mandatory

The Service Provider shall ensure that Documentation shall accompany all training courses and shall include all aspects of the course material.

DT.20.4.6		Mandatory
The Service Provider shall devise and implement training (including on going training, for the nominated TfL Personnel) on new technology, where a technology change is necessary for the provision of the Services.		

DT.20.4.7		Mandatory
The Service Provider shall revise Training Materials and courses to incorporate updates on any future amendments to applicable laws and provide such revised Training Materials and courses to TfL for Approval.		

DT.20.4.8		Mandatory
The Service Provider shall provide training on the MIS to TfL Personnel, including but not limited to Compliance Officers, as requested by TfL from time to time during the Term.		

DT.20.4.9		Mandatory
The Service Provider shall provide training on the System to TfL Personnel as requested by TfL from time to time during the Term.		

DT.20.4.10		Mandatory
The Service Provider shall state the costs of each course identified together with the maximum numbers of attendees, duration and location.		

DT.20.4.11		Mandatory
The Service Provider shall take into account the need for TfL to maintain operations during Core Hours when scheduling training.		

21 EXIT PLANNING

21.1 General

This section covers those requirements relating to the Exit Plan. Additional requirements regarding the Service Provider's Exit Strategy, Exit Plan and Service Transfer Plan are

contained within Schedule 16 *(Exit Plan)*.

DT.21.1.1		Mandatory
The Service Provider shall produce the Exit Plan and the Service Transfer Plan for the Approval of TfL in accordance with Schedule 3 *(Milestones and Deliverables)* and Schedule 16 *(Exit Plan)*.		

22 TECHNOLOGY REFRESH
22.1 General

This section describes how a technology refresh needs to be under taken.

DT.22.1.1		Mandatory
The Service Provider shall maintain, and if necessary replace and/or upgrade, the technologies supporting the System and the Services such that all equipment, Hardware and Software and the technologies continue to operate and all Service Levels are maintained and met.		

DT.22.1.2		Mandatory
The Service Provider shall advise TfL of advances in technology that may be of benefit to TfL or the Service Provider for consideration.		

DT.22.1.3		Mandatory
The Service Provider shall, as and when they become aware or as a minimum on an annual basis, provide TfL with a status report on the technologies supporting the System and the Services detailing their predicted lifespan in terms of supplier support, age, the ability to source Spares and the ability to support known advances in technology.		

DT.22.1.4		Mandatory
The Service Provider shall carry out, participate in, or support, trials of new or alternative technologies to determine the feasibility and suitability of such technologies for use in the System and the impact this would have on the infrastructure in place at the time. Any such work shall be requested by TfL under the Change Control Request procedure.		

DT.22.1.5		Mandatory
The Service Provider shall provide technical integration services to TfL, Other Service Providers and new Service Providers as required.		