

## **SCHEDULE 7**

### **Testing & Acceptance**

#### **1. Introduction**

- 1.1 This **Schedule 7** sets out the procedures to be followed by the Supplier in respect of testing of the New System and the Services (for Pilot Scheme Acceptance as set out in **paragraph 3.2**) in respect of this Agreement.
- 1.2 The Supplier shall test all elements of the New System and the Services (for Pilot Scheme Acceptance) in accordance with the relevant Test Strategy, Test Plans and Test Specifications (all as defined below, and together the "**Testing Documentation**") in order to demonstrate that they meet the requirements and comply with the Functional Specification.

#### **2. Definitions**

MPT	The Existing System
MPT-IP System	The system that will have digital base sites and the ability for current iBus radios to work in MPT Classic Mode
DMR System	The New System

### 3. Testing Stages - Summary

#### 3.1 Factory Acceptance Test (FAT Acceptance Tests)

##### 3.1.1 Pre Factory Acceptance Test ("PFAT")

Subject to the detailed requirements set out in this **Schedule 7** in relation to tests and testing (including in relation to Test Strategy, Test Plans, Test Specification and Test Reporting), PFAT testing will be successful and acceptance in relation to this phase will occur if the following high level criteria are met:

3.1.1.1 Verification of the New System (operating in full isolation of the Existing System), at Trapeze's iBus facility in Schaffhausen, Switzerland. The purpose is to demonstrate correct functioning of the New System and the interfaces to the Existing System using at least one representative base station and the core network elements of the MPT-IP System and DMR System.

3.1.1.2 PFAT will also test compatibility of the dual mode Tait TM9300 radio interface with the iBus on-board systems. The testing will also qualify the TM9300 radio as compatible across the air-interface (over the air radio signalling and voice communication path) in MPT mode.

3.1.1.3 Load testing using simulated sites and radios will demonstrate that the DMR node and Inter-System Gateway (the TN9500 used to interconnect the New System and Existing System) to the existing dispatch sub-system will sustain the traffic carried by the fully deployed network.

##### 3.1.2 Pilot 0

Subject to the detailed requirements set out in this **Schedule 7** in relation to tests and testing (including in relation to Test Strategy, Test Plans, Test Specification and Test Reporting), and subject to the successful completion and acceptance of PFAT, Pilot 0 testing will be successful and acceptance in relation to this phase will occur (with such acceptance being the required criteria that must be met before the Supplier may begin installing the Base Stations) if the following high level criteria are met:

3.1.2.1 The Pilot 0 stage integrates and verifies the MPT-IP System and the Existing System in a test environment using TfL's additional FFAT frequencies (i.e. frequencies which are not used for the live Existing System), an additional base station in MPT-IP mode and a TM9300 radio installed in the TfL test van. The purpose is to: (i) exercise an agreed sub-set of end-to-end process flows and demonstrate the correct functioning of the MPT-IP System; and (ii) demonstrate readiness for the replacement of the MPT base stations with IP connected DMR base stations in MPT mode (MPT-IP). The MPT-IP core, Cisco switch and Inter-System Gateway are required to be installed for Pilot 0.

3.1.2.2 This phase will be performed in conjunction with the FFAT phase as described in **paragraph 3.1.3** below and shall demonstrate the ability to roam between a dual mode digital enabled base site configured to operate in MPT-IP mode and an existing analogue base site (TB8100) to prove operation of the new Bus radio on both an MPT-IP site and the existing analogue system.

##### 3.1.3 Final Factory Acceptance Test ("FFAT")

Subject to the detailed requirements set out in this **Schedule 7** in relation to tests and testing (including in relation to Test Strategy, Test Plans, Test Specification and Test Reporting), and subject to the successful completion of Pilot 0, FFAT testing will be successful (with such acceptance being the required criteria that must be met before the Supplier may begin the Bus Radio Rollout) and FATM will occur if the following high level criteria are met:

- 3.1.3.1 FFAT integrates and verifies the New System and the Existing System using the core elements at the Hosting Centre) of the New System. The purpose is to exercise an agreed sub-set of end-to-end process flows and demonstrate the correct functioning of the complete system (being the New System and the Existing System at this stage). The network (New System and Existing System) is intended to operate as it would in the live working environment after full implementation of the New System and demonstrate readiness for the Pilot stage where operational Buses will be integrated into the MPT-IP System.

The DMR core is required to be installed at the Hosting Centre and a DMR test site is to be connected to the DMR core. This test site will operate on TfL's FFAT frequencies. The TfL test van will be configured with a TM9300 Bus radio and in order for the FFAT phase to be passed the Supplier must successfully demonstrate (to TfL's reasonable satisfaction) the ability to roam between a TB9300 Base Station configured to operate in DMR mode and an existing analogue base site (TB8100), in order to prove operation of the new Bus radio on both the new DMR sites and Existing System (analogue).

## 3.2 Pilot Scheme Acceptance

### 3.2.1 Pilot A

Subject to the detailed requirements set out in this **Schedule 7** in relation to tests and testing (including in relation to Test Strategy, Test Plans, Test Specification and Test Reporting), and subject to the successful completion and acceptance of FFAT, Pilot A testing will be successful and acceptance in relation to this phase will occur if the following high-level criteria are met:

- 3.2.1.1 Pilot Phase A demonstrates the functioning of the final DMR system using two (2) of the installed TB9300 Base Sites (working in part DMR & part MPT-IP) and ten (10) operational Buses. The purpose is to test functionality across all interfaces and demonstrate end-to-end conformance in line with the Functional Specification. The system will also be used to prove operational processes. This will be based in a single Garage and the ten (10) Buses with new Equipment installed will operate on a single route.
- 3.2.1.2 At least one TfL Mast Location providing coverage over the required test area will be fully converted to MPT-IP with TB9300 Base Stations installed and operating in MPT mode. The test Buses will be installed with TM9300 dual mode radios operating in MPT mode. At the start of each test window, the nominated channel(s) on the Base Stations at the TfL Mast Location will be switched over to DMR mode and the radios in the test Buses enabled to hunt for DMR. At the end of each test window, Base Stations and Buses will be reverted to MPT mode of operation.

### 3.2.2 Pilot B

Subject to the detailed requirements set out in this **Schedule 7** in relation to tests and testing (including in relation to Test Strategy, Test Plans, Test Specification and Test Reporting), and subject to the successful completion and acceptance of Pilot A, Pilot B testing will be successful and acceptance in relation to this phase will occur if the following high level criteria are met:

- 3.2.2.1 Pilot Phase B proves the installation rate of the Buses and extends the number of installed Buses up to 120 operating on the New System (DMR). The purpose is to allow meaningful testing of the network and system management tools from the TfL desktop environment and prove the stability of the New System and the Services, (such Services to be agreed between the parties in the service transition workshops) under real operating conditions.
- 3.2.2.2 For Pilot B the designated channels will operate continuously in DMR mode. Bus radios will have the ability to roam to DMR or MPT according to available service and configured hunting parameters which will be agreed with TfL.
- 3.2.2.3 The successful installation of up to 120 Buses and their successful operation in accordance with **paragraphs 3.2.2.1 and 3.2.2.2** shall constitute Pilot Scheme Acceptance pursuant to **clause 6.14**.

### 3.2.3 Pilot Stabilisation

Subject to the detailed requirements set out in this **Schedule 7** in relation to tests and testing (including in relation to Test Strategy, Test Plans, Test Specification and Test Reporting), and subject to the successful Pilot Scheme Acceptance, Pilot Stabilisation

will be successful and acceptance in relation to this phase will occur if the following high level criteria are met:

- 3.2.3.1 The New System and the Services, as outlined in **paragraph 3.2.2.1**, will continue to operate and must operate successfully for a consecutive period of at least thirty (30) calendar days without a critical failure (that being a Priority 1 or Priority 2 incident as set out in **Schedule 2**) occurring (such successful operation for thirty days without critical failure being "Pilot Stabilisation").
- 3.2.3.2 If a critical failure does occur after Pilot Scheme Acceptance and before Pilot Stabilisation occurs then the thirty day period will be restarted and shall be repeated until Pilot Stabilisation is achieved.
- 3.2.3.3 The date on which Pilot Stabilisation is achieved is the Operational Commencement Date.

### 3.3 Critical Mass Milestone

Subject to the detailed requirements set out in this **Schedule 7** in relation to tests and testing (including in relation to Test Strategy, Test Plans, Test Specification and Test Reporting), and subject to the successful completion and acceptance of Pilot Stabilisation, the Critical Mass Milestone will be achieved if the following high level criteria are met:

- 3.3.1 Once approximately 3,700 Buses have been installed with TM9300 Bus Radios the system will be checked for registrations at Crystal Palace Base Site for 1,000 DMR capable radios over a five-day period.
- 3.3.2 The Grade of Service on the New System (in relation to both DMR capable and all other Bus radios) shall be no less than the Grade of Service baseline for the Existing System established at the start of the migration.

### 3.4 Rollout Activities

- 3.4.1 Base Site Acceptance
  - 3.4.1.1 Subject to the detailed requirements set out in this **Schedule 7** in relation to tests and testing (including in relation to Test Strategy, Test Plans, Test Specification and Test Reporting), Base Station Installation and Commissioning activities will commence following the successful completion of Pilot 0. The Supplier will submit a Base Site Installation and Commissioning Certificate for each TfL Base Site once complete (see Appendix 2 of this Schedule).
  - 3.4.1.2 Payment for the Installation and Commissioning for each Base Site will be made in accordance with **Schedule 3 paragraph 3.4** upon acceptance of the Base Site Installation and Commissioning Certificate by TfL.
- 3.4.2 Bus Radio TM9300 Acceptance
  - 3.4.2.1 Subject to the detailed requirements set out in this **Schedule 7** in relation to tests and testing (including in relation to Test Strategy, Test Plans, Test Specification and Test Reporting), Bus Radio Installation and Commissioning activities will commence following the successful completion of FATM. Bus Radios will be installed in accordance with the Supplier's 'Bus Radio Install Procedure'.

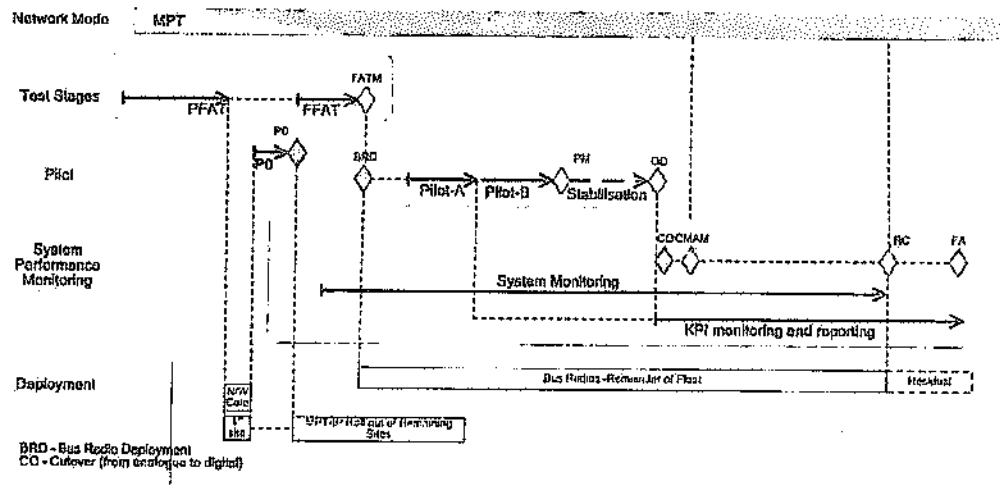
- 3.4.2.2 The Supplier will submit all the Installation and Commissioning Certificates (appendix 2 of this schedule) in relation to the number of Bus Radios the Supplier has installed in each TfL Period in a single batch following the end of each TfL Period.
- 3.4.2.3 Subject to **paragraph 3.4.2.4**, payment of the Charges for the number of Bus Radios successfully installed in a TfL Period (being those Bus Radios in relation to which TfL has accepted the Supplier's Installation and Commissioning Certificates) will be made in accordance with **Schedule 3 (Charges), paragraph 3.3.5** following receipt by TfL of an invoice prepared and submitted to TfL by the Supplier in accordance with the terms of the Agreement. TfL shall follow the process at **paragraph 5.2 of Schedule 6, Annex B** with regards to the acceptance or rejection of such Installation and Commissioning Certificates.
- 3.4.2.4 Unless otherwise agreed by the parties in writing, TfL shall only be required to pay Charges in relation to Bus Radio Acceptance in any TfL Period where the number of unpaid accepted Installation and Commissioning Certificates (such acceptance pursuant to **paragraph 3.4.2.3**) (excluding any Installation and Commissioning Certificates which TfL has previously accepted and paid the relevant Charges for, or which TfL has not accepted) is equal to or greater than one hundred (100). However, TfL acknowledges that for the final Period of Bus Radio Installation the number of unpaid accepted Installation and Commissioning Certificates may be less than one hundred (100) and for such final Period, the terms of this **paragraph 3.4.2.4** shall not apply and TfL shall pay the Charges.

### 3.5 Final Acceptance

Subject to the detailed requirements set out in this **Schedule 7** in relation to tests and testing (including in relation to Test Strategy, Test Plans, Test Specification and Test Reporting), and subject to the successful completion and acceptance of the Critical Mass Milestone and Base Site Acceptance, Final Acceptance will be achieved if the following high level criteria are met:

- 3.5.1 Once 100% of TfL's Contracted Bus Fleet at Final Acceptance has been through successful installation and acceptance, (with the exception of an approved number of Buses that will be agreed between the parties at the end of the TfL Period preceding Final Acceptance), and the New System and the Buses are fully operating in DMR Mode there will be a period of 30 consecutive calendar days across which all KPIs set out in **Schedule 2** shall be monitored and recorded by the Supplier (the "Stability Period").
- 3.5.2 Final Acceptance will occur once the Supplier has demonstrated to TfL's reasonable satisfaction that the New System and the Services have operated and met all the relevant KPIs set out in **Schedule 2** across the Stability Period which, for the avoidance of doubt, entails meeting all the relevant KPIs set out in **Schedule 2** when measured across a period of 30 consecutive days.
- 3.5.3 If the New System and the Services fail to meet all of relevant the KPIs set out in **Schedule 2** across the Stability Period then the Stability Period will be repeated (with the Supplier taking such action as is necessary to ensure that the relevant KPIs set out in **Schedule 2** are met) until Final Acceptance occurs in accordance with **paragraph 3.5.2**.

### 3.6 Diagram showing Testing Stages and Key Milestones



## 4. Test Strategy

- 4.1 The Supplier shall in accordance with the Project Plan and this **Schedule 7** develop a draft test strategy for the Tests (as defined in **Schedule 6** (Milestones and Deliverables)) in support of the New System and shall submit such draft test strategy to TFL for approval (such approved test strategy being the ("Test Strategy")).
- 4.2 The Test Strategy shall include, but shall not be limited to, the following:
- 4.2.1 the requirements, objectives and scope of all Tests;
  - 4.2.2 a description of the approach to testing and acceptance, including:
    - 4.2.2.1 a description of all testing methodologies to be employed;
    - 4.2.2.2 a rationale for the use of these testing methodologies in the context of the overall development methodologies and lifecycles to be employed;
    - 4.2.2.3 a description of how the scope and depth of the testing of the constituent parts of the New System) will be matched to the design and development complexity of those constituent parts; and
    - 4.2.2.4 a description of how consistency of testing will be achieved across the use of the testing methodologies employed to ensure adequate testing across all constituent parts of the New System under Test;
  - 4.2.3 a description of how Tests will be grouped for organisational, management and reporting purposes into a more granular format (including, for example, test levels, phases, increments and test cycles) including, but not limited to:
    - 4.2.3.1 a high level plan for the Tests of the New System , including the scheduling of all Tests to be completed consistent with the Project Plan and **Schedule 6** (Milestones and Deliverables);

- 4.2.3.2 a description of dependencies between different elements of the high level plan, including dependencies between proposed test levels, phases, increments and cycles; and
- 4.2.3.3 the identification of which of those elements will be associated for planning and reporting purposes with the generation of Test Plans as envisaged under **paragraph 5** of this **Schedule 7** prior to their commencement and will conclude with the generation of Final Test Reports as envisaged under **paragraph 7.6** of this **Schedule 7**, so as to ensure the resulting set of Test Plans and Test reports cover all of the New System under Test;
- 4.2.4 a description of how the approach and structuring of the Tests will ensure that:
  - 4.2.4.1 all the required aspects of the test coverage defined in **Appendix 1** of this **Schedule 7** will be addressed; and
  - 4.2.4.2 any aspects of the test coverage defined in **Appendix 1** of this **Schedule 7** that the Supplier believes are not required are identified;
- 4.2.5 for each Milestone, descriptions of the anticipated processes relating to Tests for achieving Acceptance of that Milestone including the performance of the Supplier's obligations in determining whether the test criteria have been met;
- 4.2.6 any dependencies affecting the Tests, including reliance on TFL and third parties;
- 4.2.7 any assumptions made by the Supplier that may have an impact upon Tests including how test assurance activities will be accommodated;
- 4.2.8 the regular testing of all aspects of the Disaster Recovery Plan;
- 4.2.9 any perceived risks to Tests together with the impact of such risks and proposed methods of mitigation;
- 4.2.10 an outline of the resource requirements, including the Supplier's Personnel, the Supplier's Personnel training, test environments and test tools and how they will be used at each stage of the Tests;
- 4.2.11 the roles and responsibilities of all those involved with the Tests programme, including TFL's Personnel or the Supplier's Personnel and/or third parties Personnel where applicable;
- 4.2.12 the full address of the location where all Tests are to be performed;
- 4.2.13 the sources and the mechanisms for specification, creation management and secure destruction of Test data, in compliance with Data Protection Legislation where applicable; and
- 4.2.14 the quality management tools and processes to be used in the Tests including:
  - 4.2.14.1 the standards to be applied to Tests;
  - 4.2.14.2 test design techniques to be employed during the Tests;
  - 4.2.14.3 requirement traceability mechanisms;



- 4.2.14.4 the incident management process;
- 4.2.14.5 configuration management;
- 4.2.14.6 release management & Test assurance;
- 4.2.14.7 test results capture, logging and tracking;
- 4.2.14.8 test progress reports; and
- 4.2.14.9 final test reports.

## 5. Test Plans

- 5.1 The Supplier shall in accordance with **paragraph 9** and **paragraph 5** of this **Schedule 7** develop a test plan or test plans for all Tests required in support of:

- 5.1.1 the development of the New System which:
  - 5.1.1.1 Is consistent with the Test Strategy;
  - 5.1.1.2 meets the relevant requirements set out in **Appendix 1** of this **Schedule 7**;
- 5.1.2 each change to the New System made in accordance with **clause 24** and **Schedule 8** (Change Control Procedure) (a "Change") and the resolution of each incident addressed by the Supplier that might arise from time to time impacting on the live operation of the New System; and shall submit each such test plan to TfL for acceptance unless, in the case of Change and issue(s) testing only, TfL has specifically agreed in advance in writing that such a test plan need not be so submitted (such accepted test plan being the ("Test Plan")).

- 5.2 The Supplier shall re-submit to TfL any Test Plan which has been rejected by TfL with five (5) Business Days following the date that TfL issued its rejection of the relevant Test Plan.

- 5.3 Each Test Plan shall include, but shall not be limited to:

- 5.3.1 an overview of the specific testing approach for the applicable Tests covered by the Test Plan;
- 5.3.2 the scope of the Tests for the New System (or relevant part thereof), including a description of the functions, the Interfaces, constituent parts or functional areas of the New System under test;
- 5.3.3 any specific test requirements or objectives the New System (or relevant part thereof) and applicable Tests covered by the Test Plan, including any Proposed Change Papers or Change Control Notices to be addressed;
- 5.3.4 the identification and details of the test environment(s) to be used in carrying out the Tests covered by the Test Plan;
- 5.3.5 the detailed entry and exit criteria applicable to the Tests covered by the Test Plan;
- 5.3.6 any specific dependencies, pre-requisites, assumptions and risks related to testing any part of the New System;
- 5.3.7 identification of the test scripts to be executed;

- 5.3.8 a detailed schedule for the Tests including the frequency of delivery of any and all required test progress reports;
- 5.3.9 named roles and responsibilities for all those involved with Tests; and
- 5.3.10 a description of where the test activities described in the Test Plan represent a deviation from the earlier Test Strategy (subject always to the requirement that such deviation must be permitted in accordance with **paragraph 8** of this **Schedule 7**, together with the reasons and rationale for such deviation.

## 6. Test Specifications

- 6.1 For each Test Plan required by **paragraph 5.1** of this **Schedule 7**, the Supplier shall in accordance with **paragraph 9** of this **Schedule 7** develop a test specification or specifications for all Tests in each such Test Plan which:

- 6.1.1 are consistent with the Test Strategy;
- 6.1.2 are consistent with the Test Plan;
- 6.1.3 set out the relevant Acceptance Criteria for the Tests; and
- 6.1.4 are in accordance with the applicable Milestones and Milestone Dates;

and shall submit each such test specification to TfL for acceptance unless, in the case of Change and issue(s) testing only, TfL has specifically indicated that such a test specification need not be submitted for acceptance (such accepted test specification being the ("**Test Specification**")).

- 6.2 The Supplier shall re-submit to TfL any Test Specification(s) which has been rejected by TfL within five (5) Business Days following the date that TfL issued its rejection of the relevant Test Specification.

- 6.3 Each Test Specification shall include, but shall not be limited to:

- 6.3.1 the Acceptance Criteria with traceability back to the relevant requirements, through the Functional Specification, the VCRM and any other documents relevant to the Tests;
- 6.3.2 a set of test scenarios and test cases designed to exercise all the test criteria identified within the Test Specification, each with a reference to the Acceptance Criteria covered by the Tests;
- 6.3.3 a set of test scripts corresponding to the test scenarios and test cases describing the purpose of the Test, the data requirements for the Test, any pre-requisites for the Test, the actions to be taken during the Test, and the expected results for each step or action of the Test against which success or failure of the Test shall be judged; and
- 6.3.4 a description of where the Test Specification represents a deviation from the earlier Test Plan (subject always to the requirement that such deviation must be permitted in accordance with **paragraph 8** of this **Schedule 7**) together with the reasons and rationale for such deviation.

## 7. Test Reporting

- 7.1 During periods of test execution covered by a Test Plan as required by **paragraph 5.1** of this **Schedule 7**, the Supplier shall submit test progress reports to TfL for acceptance with the frequency detailed in that Test Plan and in accordance with **paragraph 7.5** of this **Schedule 7**.

- 7.2 On completion of any period of test execution covered by a Test Plan as required by **paragraph 5.1** of this **Schedule 7**, the Supplier shall submit a final test report to TfL for:

7.2.1 Acceptance, where the test report is being submitted in respect of Milestone Acceptance Criteria; or

7.2.2 acceptance in relation to all other final test reports;

in accordance with **paragraph 7.6** and **paragraph 9** of this **Schedule 7**.

- 7.3 The Supplier agrees that, notwithstanding anything to the contrary in this Agreement, TfL may share test progress reports and final test reports in form or substance with any third party for any purpose in connection with this Agreement and/or the Services.

- 7.4 Unless otherwise agreed in advance by TfL in writing, test progress reports and final test reports shall not include references to any test data which includes Personal Data.

#### **Test Progress Reports**

- 7.5 The Supplier shall ensure that all test progress reports are in the format set out in the relevant Test Plan and include, as a minimum, the following information:

7.5.1 a detailed table which shall include an entry for each test script, with each such entry including:

7.5.1.1 the name of the test script;

7.5.1.2 a unique identifier for the test script sufficient to allow cross-referencing against other Testing Documentation;

7.5.1.3 the current status of test script;

7.5.1.4 the identity of any and all issue(s) associated with the execution of that test script;

7.5.1.5 any observations associated with the execution of that test script; and

7.5.1.6 for a blocked test script, the dependencies and pre-requisites for future execution;

7.5.2 a detailed table setting out the status of any incidents identified which shall include an entry for each incident revealed during the performance of the relevant Tests, including incidents which have been remedied by the Supplier, with each such entry including as a minimum:

7.5.2.1 the name of the incident;

7.5.2.2 a unique identifier for the issue(s) sufficient to allow cross-referencing against other Testing Documentation (as defined below);

7.5.2.3 a concise description of the issue(s);

7.5.2.4 the current status of the issue(s);

7.5.2.5 the identity of the test script(s) associated with the issue(s);

7.5.2.6 the Severity Level of the issue(s);

- 7.5.2.7 dates relevant to the observation, investigation and resolution of the issue(s); and;
- 7.5.2.8 the name of person responsible for progressing the investigation of the issue(s);
- 7.5.3 a table detailing any proposed changes to the relevant Test Plan(s) or Test Specification(s);
- 7.5.4 a detailed graphical and narrative analysis of the progress of the relevant Tests; and
- 7.5.5 a summary of the narrative given pursuant to **paragraph 7.5.4** above including a short narrative of progress since the last test progress report and a description of progress anticipated by the next test progress report.

#### **Final Test Reports**

- 7.6 The Supplier shall ensure that all final test reports are in the format set out in the relevant Test Plan and, as a minimum, include:
  - 7.6.1 any deviations from the Test Strategy or relevant Test Plan or Test Specification(s) (subject always to **paragraphs 4, 5 and 8** of this **Schedule 7**;
  - 7.6.2 the results of those Tests (to the extent that such results can be reported on) with a rationale for any tests that have been agreed to be de-scoped or deferred;
  - 7.6.3 if the testing failed in any way, the extent and cause of such failure;
  - 7.6.4 the detail of any outstanding issue(s), including references to the issue(s) log and the associated Severity Level;
  - 7.6.5 a description of any workarounds used during Tests, the relationship of such workarounds to specific Tests, issue(s) observed or raised, and their impact including their use to progress the testing or any proposal for their operational use;
  - 7.6.6 summary metrics on issue(s) raised during the Tests;
  - 7.6.7 a Remedy Plan in respect of all outstanding issue(s) and the removal of any associated workarounds; and
  - 7.6.8 a description of any risks to the timely performance of the New System or operation of the New System raised during the Tests.

#### **8. Deviations from Testing Documentation**

- 8.1 Subject to TfL's acceptance rights, the Supplier's Tests shall not deviate from previously approved or accepted Tests Documents unless:
  - 8.1.1 for deviations from the approved Test Strategy:
    - 8.1.1.1 an update to that Test Strategy reflecting such deviation has first been accepted or approved by TfL; or
    - 8.1.1.2 if agreed in advance by TfL in writing, the Supplier fully details each such deviation (together with a written explanation detailing the reason for

each such deviation) in the relevant Test Plan(s) submitted to TfL for acceptance;

8.1.2 for deviations from an accepted Test Plan:

8.1.2.1 the Supplier submits in advance to TfL for acceptance an update to that Test Plan reflecting each such deviation; or

8.1.2.2 if agreed in advance by TfL in writing, the Supplier fully details each such deviation (together with a written explanation detailing the reason for each such deviation) in the relevant Test Specification(s) submitted to TfL for acceptance; and

8.1.3 for deviations from an accepted Test Specification:

8.1.3.1 the Supplier submits in advance to TfL for acceptance an update to that Test Specification reflecting each such deviation; or

8.1.3.2 if agreed in advance by TfL in writing, the relevant final test report or final test reports submitted by the Supplier to TfL for:

(a) Acceptance where the final test report is being submitted in respect of a Milestone; or

(b) acceptance in relation to all other final test reports;

fully detail(s) each such deviation (together with a written explanation detailing the reason for each such deviation).

## 9. Timing Requirements

### 9.1 The Supplier shall:

9.1.1 give TfL at least ten (10) Business Days written notice of any Tests to be undertaken by the Supplier;

9.1.2 deliver all relevant Test Plans and Test Specifications for acceptance, no less than ten (10) Business Days prior to the relevant Test;

9.1.3 complete and deliver any required test progress reports in accordance with the relevant Test Plan;

9.1.4 complete and deliver each final test report in accordance with the relevant Test Plan, the Project Plan and in any event at least five (5) Business Days prior to any Milestone Date associated with successful completion of the relevant Test;

9.1.5 ensure that all relevant updates to the issue(s) log are completed no more than five (5) Business Days following completion of the relevant Tests; and

9.1.6 resolve all issue(s) arising as a result of or identified during Tests at its own cost, in accordance with the provisions of **paragraph 7 of Schedule 11** (Governance, Contract Management and Reporting).

### 9.2 For Tests regarding the Disaster Recovery Plan, the Supplier shall, unless otherwise agreed in writing with TfL:

9.2.1 perform the testing in accordance with an agreed Disaster Recovery Plan test schedule;

- 9.2.2 deliver all relevant Test Plans and Test Specifications for acceptance, no less than ten (10) Business Days prior to the relevant Test;
- 9.2.3 complete and deliver any required test progress reports in accordance with the relevant Test Plan;
- 9.2.4 complete and deliver each final test report in accordance with the relevant Test Plan;
- 9.2.5 ensure that all relevant updates to the issue(s) log are completed no more than five (5) Business Days following completion of the relevant Tests; and
- 9.2.6 resolve all issue(s) arising as a result of or identified during Tests at its own cost, in accordance with the provisions of **paragraph 7 of Schedule 11** (Governance, Contract Management and Reporting).

#### 10. Test Witnessing

- 10.1 TfL may, at its sole discretion, require its employees, agents or sub-contractors and any third party nominated by TfL, to witness any of the Tests carried out by the Supplier or the Supplier's Sub-Contractor(s) in relation to:

- 10.1.1 the development of the New System;
- 10.1.2 the implementation of any Change that might arise from time to time; or
- 10.1.3 the resolution of any issue(s) that might arise from time to time,

and the Supplier shall comply with such request.

- 10.2 In relation to all test witnessing, the Supplier shall:

- 10.2.1 provide such access, facilities, information, data, explanation, documentation and assistance to TfL and any third party nominated by TfL in order for TfL (and/or that third party) to prepare for and participate in such test witnessing as TfL may require;
- 10.2.2 follow TfL's reasonable instructions in relation to the form of test witnessing and the way in which test witnessing is to be carried out, including without limitation:
  - 10.2.2.1 TfL witnessing the execution of the Tests being carried out by the Supplier;
  - 10.2.2.2 TfL witnessing a solution demonstration; and
  - 10.2.2.3 TfL carrying out any Tests, including Tests by an TfL nominated third party, in conjunction with the Supplier's Tests;
- 10.2.3 perform any specific sets of business process scenario tests required by TfL;
- 10.2.4 demonstrate to TfL's reasonable satisfaction that adequate modifications and Tests have been performed leading to closure of any issue(s) associated with the Test or the successful completion of the Test; and
- 10.2.5 ensure at all times that it provides a secure means of Test witnessing by TfL (or the relevant Third Party) pursuant to **paragraph 10.2.1 of this Schedule 7** which preserves the confidentiality and security of the test data and other information in connection with the Tests.

**11. Use of Personal Data in Tests**

**11.1** Subject always to any contrary written instructions from TfL (as may be given from time to time), the Supplier shall ensure that:

**11.1.1** so far as practicable, all test data is manipulated, masked or scrambled so that it would no longer constitute Personal Data in a third party's hands; and

**11.1.2** the use of test data which is Personal Data only occurs when essential to verify testing integrity and then only in a secure test environment, in accordance with Good Industry Practice and guidance issued by the Information Commissioner from time to time.

**11.2** Without prejudice to **paragraph 11.1**, all test data shall:

**11.2.1** be stored and held securely and otherwise in a manner that is compliant with any applicable Data Protection Legislation, as shall all Data from which test data is derived;

**11.2.2** in all but exceptional cases, have been processed to permanently and completely preserve the anonymity of the persons whose Data is contained therein in accordance with Data Protection Legislation, best practice guidance that may be issued from time to time by the Information Commissioner, and/or other Good Industry Practice, and **clause 39** (Privacy and Data Protection) and using irreversible procedures and technology agreed by TfL in writing in advance of processing and use of such Data or testing; and

**11.2.3** be securely and promptly destroyed in accordance with relevant Data Protection Legislation and Good Industry Practice following completion of the relevant Tests for which such test data is being used unless it is required to be retained for any purpose compatible with Data Protection Legislation. The Supplier shall provide written confirmation to TfL that such Personal Data has been destroyed, as appropriate.

**11.3** In the exceptional circumstances where the Supplier believes that specific testing requires the use of test data containing Personal Data such that the anonymity of the persons whose data is contained therein is not completely established, then the Supplier shall obtain the prior written approval of TfL for this use and in requesting such approval shall provide to TfL all information that TfL may require in relation thereto. The Supplier acknowledges and agrees that TfL may at its absolute discretion decline such a request.

**12. Disputes**

**12.1** Any issues or disputes arising between the parties in relation to Tests shall be discussed and resolved in accordance with the Dispute Resolution Procedure detailed in **clause 47** (Law and Dispute Resolution) and **Schedule 11** (Governance, Contract Management and Reporting).

**APPENDIX 1**  
**THE TEST STRATEGY**

*Redacted*



## **SCHEDULE 8**

### **Contract Change Control Procedures**

#### **1. Principles**

- 1.1 Where TfL or the Supplier sees a need or has a preference to amend any of the Agreement, the Milestone Dates, the New System, the Services, Further Services (if any), the Equipment and/or Alternative Equipment, or where in any part of this Agreement it has been set out that the Contract Change Control Process shall be used, the TfL Project Manager or the TfL Service Manager (depending on whether the change is during implementation or after Operational Commencement) may at any time request, and the Supplier's Project Manager or the Supplier's Service Manager (as applicable) may at any time recommend, such amendment only in accordance with the formal Contract Change Control Procedure ("**CCCP**") as set out at **paragraph 2** below.
- 1.2 Neither party shall unreasonably withhold or impose unreasonable conditions upon its agreement to any amendment and it shall not be unreasonable for TfL to withhold its consent if it reasonably believes that an amendment suggested by the Supplier is not necessary.
- 1.3 Until such time as an amendment to the Services and Further Service (if any) is made in accordance with this CCCP the Supplier shall, unless otherwise agreed in writing, continue to perform the Services and Further Services (if any) in accordance with the terms of this Agreement and its associated schedules prior to such amendment.
- 1.4 Any discussions, requests or recommendations which take place between TfL and the Supplier regarding an amendment prior to the formal submission of a Proposed Change Paper ("**PCP**") and any resultant amendment to the Agreement, the Milestone Dates, the New System, the Services and/or the Further Service (if any), the Equipment and/or Alternative Equipment shall be without prejudice to the rights of either party.
- 1.5 Any work undertaken by the Supplier which has not been otherwise agreed in accordance with the provisions of this **Schedule 8** shall be undertaken entirely at the expense and liability of the Supplier.

#### **2. Procedures**

- 2.1 Should TfL want, or the Supplier wish to recommend, an amendment to the Agreement, the Milestone Dates, Equipment and/or Alternative Equipment, Services, and/or the Further Services (if any) and/or the New System (each a "**Change**"), then that party's Project Manager or Service Manager (as applicable) shall submit a brief written paper following the format of the template PCP set out at **Appendix A** to this **Schedule 8** to the other party addressing, as a minimum, the following points:
  - 2.1.1 the title of the PCP and a unique reference number (to be issued by TfL);
  - 2.1.2 the originator and date of the proposal for the proposed Change;
  - 2.1.3 the reason for the proposed Change;
  - 2.1.4 full details of the proposed Change;
  - 2.1.5 the reasonable price if any, of the proposed change based on the Charges in **Schedule 3** and/or the Price Book as set out in **Schedule 4** (solely in the case of any Change raised by the Supplier);
  - 2.1.6 a reasonable timetable for implementation, together with any proposals for

acceptance of the Change; and

2.1.7 in the case of a Change raised by the Supplier, details of the likely impact, if any, of any reasonable changes required to any other aspects of the Agreement, including:

- 2.1.7.1 the term of the Agreement;
- 2.1.7.2 any sub-contracts;
- 2.1.7.3 TfL Obligations;
- 2.1.7.4 the Supplier Personnel to be provided;
- 2.1.7.5 the Charges;
- 2.1.7.6 the payment profile;
- 2.1.7.7 the KPIs and/or Service Levels; and/or
- 2.1.7.8 the Documentation.

2.2 Within ten (10) Business Days of the submission of a PCP (or such other period as may be agreed between the parties) the receiving party's Project Manager or Service Manager (as applicable) or their nominee shall, acting reasonably, respond to the PCP in writing and, if appropriate, the parties' Project Managers or Service Managers (as applicable) or their nominees shall meet to discuss the PCP. Where a change is required by TfL, the Supplier's Project Manager or Service Manager (as applicable) shall, when responding to the PCP submitted by TfL, acting reasonably, update the PCP so it includes the information identified at **paragraph 2.6.8** (to the extent relevant).

2.3 Following submission of the PCP discussions (which may include revisions to the PCP) between TfL and the Supplier concerning an amendment to the Milestone Dates, Equipment and/or Alternative Equipment, Services, and/or the Further Services (if any) and/or the New System shall result in any one of the following in relation to the PCP:

- 2.3.1 no further action being taken;
- 2.3.2 a request to amend the Agreement, the Milestone Dates, Equipment and/or Alternative Equipment, Services, and/or the Further Services (if any) and/or the New System by TfL; or
- 2.3.3 a recommendation to amend the Agreement, the Milestone Dates, Equipment and/or Alternative Equipment, Services, and/or the Further Services (if any) and/or the New System by the Supplier.

2.4 If, following discussions relating to the PCP, TfL requests that the Supplier amends the Agreement, the Milestone Dates, Equipment and/or Alternative Equipment, Services, and/or the Further Services (if any) and/or the New System pursuant to **paragraph 2.3.2**, the Supplier shall, unless otherwise agreed, submit two (2) copies of a Change Control Note ("CCN") following the format of the template CCN set out at **Appendix B** to this **Schedule 8** signed by the Supplier to TfL within seven (7) days of the date of the request or such other period as the Project Managers or Service Managers (as applicable) shall agree (acting reasonably).

2.5 If, following discussions relating to the PCP, TfL accepts the Supplier's recommendation to amend the Agreement, the Milestone Dates, Equipment and/or Alternative Equipment, Services, and/or the Further Services (if any) and/or the New System pursuant to **paragraph 2.3.3**, a recommendation to amend by the Supplier shall be submitted direct to TfL in the form of two (2) copies of a CCN signed by the Supplier at the time of such recommendation and TfL shall give its response within 10 Business days or such other period as the Project Managers or Service Managers shall agree (acting reasonably).

2.6 Each CCN shall contain:

- 2.6.1 the title of the Change;
- 2.6.2 the originator and date of the request or recommendation for the amendment;
- 2.6.3 the reason for the amendment;
- 2.6.4 full details of the amendment including any specifications;
- 2.6.5 the price if any, of the amendment which shall be set out as Capex and/or Opex;
- 2.6.6 a timetable for implementation together with any proposals for acceptance of the amendment;
- 2.6.7 a schedule of payments, if appropriate;
- 2.6.8 details of the likely impact, if any, of the amendment on other aspects of the Services including to:
  - 2.6.8.1 the timetable for the provision of the amendment and any impact on delivery, the Milestone Dates or any CCNs already in progress;
  - 2.6.8.2 the personnel to be provided;
  - 2.6.8.3 the amended charges payable under the Services (as now amended);
  - 2.6.8.4 Documentation to be provided including any listed in the Document Tree that will require updating;
  - 2.6.8.5 TfL Obligations;
  - 2.6.8.6 the training to be provided;
  - 2.6.8.7 working arrangements; and
  - 2.6.8.8 other contractual issues;
- 2.6.9 the date of expiry of validity of the CCN; and
- 2.6.10 provision for signature by TfL and by the Supplier.

2.7 For each CCN submitted TfL shall, within the period of the validity of the CCN:

- 2.7.1 allocate a sequential number to the CCN; and
- 2.7.2 evaluate the CCN and, as appropriate:
  - 2.7.2.1 request further information, or

2.7.2.2 arrange for two (2) copies of the CCN to be signed by or on behalf of TfL and return one of the copies to the Supplier; or if agreed by both parties a signed scanned copy of the CCN

2.7.2.3 notify the Supplier of the rejection of the CCN.

2.8 A CCN signed by TfL and by the Supplier shall constitute an amendment to the Agreement, the Milestone Dates, Equipment and/or Alternative Equipment, Services, and/or the Further Services (if any) and/or the New System (as applicable) and otherwise no amendment shall have been agreed.

### 3. **Emergency Changes**

3.1 The Emergency Change process is without prejudice to TfL's right to receive Service Credits and shall operate where an ongoing P1 Incident (which shall include a Security Incident of equivalent severity or likely impact to a P1 incident) has occurred or is likely to occur and an immediate Change is required to the New System, Equipment, Alternative Equipment, Services and/or Further Services to return the New System or Existing System (as applicable) to full operation and/or avoid a P1 Incident occurring (an "**Emergency Change**").

3.2 In the event of an Emergency Change being required, the Supplier shall use all reasonable endeavours to contact and co-ordinate with the TfL Project or Change Manager (as applicable) or their nominated representative regarding the proposed Emergency Change, including attending in person or by phone any emergency Change Advisory Board meeting convened.

3.3 The Supplier may implement Emergency Changes without TfL's agreement (solely to the extent required to return the New System or Existing System (as applicable) to full operation and/or resolve or avoid a P1 Incident) if, having made reasonable endeavours to coordinate with TfL in accordance with **paragraph 3.2**, it has not been possible to make contact or to reach agreement at the appropriate level for the Change.

3.4 Where the Supplier implements a Change as an Emergency Change which TfL reasonably considers should not have been an Emergency Change, TfL may notify the Supplier giving its reasons and requesting a corrective Proposed Change Paper within five (5) Business Days.

3.5 Where the Supplier implements a Change as an Emergency Change, the full Change Control Procedure as set out in this **Schedule 8** shall be completed retrospectively in order to fully document all Change(s) made and correctly apportion costs.

## Appendix A

### Proposed Change Paper

PRO number:	
PCP number (provided by TfL):	
Version number:	
Date raised:	

Title of change:	
Originator (name and company):	

Reason for request for change:	
--------------------------------	--

Full details of the proposed change (state "As attached" if provided as a separate document):	
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Proposed timetable for implementation of the change and acceptance criteria / process:	
--	--

<b>(This section only to be completed if the change is proposed by the Supplier)</b>	
Estimated cost of implementing the proposed Change (if not covered under "Charges" below):	
Likely impact (if any) of the proposed change on any other aspects of the Agreement, including in particular:	
<ul style="list-style-type: none"> <li>the term of the Agreement;</li> <li>any sub-contracts;</li> <li>TfL Obligations;</li> <li>the Supplier Personnel to be provided;</li> <li>the payment profile;</li> <li>the KPIs and/or Service Levels; and/or</li> <li>the Documentation.</li> </ul>	

Update to Functional Specification required?	Yes/No (delete as appropriate) and provide details where answer is "Yes")
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Update to Charges required?	Yes/No (delete as appropriate) and provide details where answer is "Yes")
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Date of response:	
Response provided by:	
Response to request for change:	
Cost estimate:	
Will this require a bespoke software change?	Yes / No (delete as appropriate and provide details where answer is "Yes")
IPR Rights Owner of Change:	
Delivery schedule:	

Date of response:	
Response provided by:	
Response:	
Cost estimate:	
Will this require a bespoke software change?	Yes / No (delete as appropriate and provide details where answer is "Yes")
IPR Rights Owner of Change:	
Delivery schedule:	

Authorised on behalf of TfL by:	
Signature:	
Date:	

Authorised on behalf of the Supplier by:	
Signature:	
Date:	

NB: This is not a valid contractual document and no work can be carried out based on a signed PCP. This document is to be viewed as a recommendation for change with agreed indicative scope, timeframe and costs.

## Appendix B

### Contract Change Note

PRO number:	
CCN number (provided by TfL):	
PCP number:	
Version number:	
Date raised:	

Title of change:	
Originator (name and company):	
Reason for request for change:	
Solution:	
Include:	
<ul style="list-style-type: none"><li>• full details of the Change and any specifications;</li><li>• timetable for implementation;</li><li>• proposals regarding testing / acceptance criteria</li></ul>	
Impact:	
Describe likely impact (if any) of the proposed change on any other aspects of the Agreement, including in particular:	
<ul style="list-style-type: none"><li>• the term of the Agreement;</li><li>• the timetable for the provision of the amendment and any impact on delivery, the Milestone</li></ul>	



<p>Dates or any CCNs already in progress;</p> <ul style="list-style-type: none"> <li>• any sub-contracts;</li> <li>• TfL Obligations;</li> <li>• the Supplier Personnel to be provided;</li> <li>• the payment profile;</li> <li>• any training to be provided;</li> <li>• working arrangements;</li> <li>• other contractual issues;</li> <li>• the KPIs and/or Service Levels; and/or</li> <li>• the Documentation to be provided including any listed in the Document Tree that will require updating.</li> </ul>
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Cost of change and payment profile: (Include whether Capex or Opex)	
Delivery schedule:	
Update to Functional Specification required?	Yes/No (delete as appropriate and provide details where answer is "Yes")
Update to Documentation required?	Yes/No (delete as appropriate)  If Yes provide details of all documents to be updated
Will this require a bespoke software change?	Yes / No (delete as appropriate and provide details where answer is "Yes")
IPR Rights Owner of Change	
Update to Charges required?	Yes/No (delete as appropriate and provide details where answer is "Yes")
Change owner after signature (TfL):	
Change owner after signature (Supplier):	

Authorised on behalf of TfL T&D Surface by:	
Signature:	
Date:	

Authorised on behalf of TfL Procurement by:	
Signature:	
Date:	

Authorised on behalf of the Supplier by:	
Signature:	
Date:	

All defined terms in the Agreement shall, unless expressed to the contrary herein or the context otherwise requires, continue to have the same meanings where used in this CCN.

This CCN shall be read in conjunction with the Agreement, all terms and conditions of which shall continue to have full force and effect, except to the extent as varied by this CCN.

## SCHEDULE 9

### Cyber Security Management

#### 1. DEFINITIONS

"Chief Information Security Officer (CISO)"	the senior level executive within TfL responsible for establishing and maintaining the enterprise vision, strategy, and program to ensure information assets and technologies are adequately protected;
"Cloud"	type of internet-based computing service where organisation can have aspects of their IT infrastructure managed by external providers, normally as a Software as a Service (SaaS), Platform as a Service (PaaS) or Infrastructure as a Service (IaaS) basis;
"Cyber Essentials Scheme"	is a UK government scheme encouraging organisations to adopt good practice in information security, focussing mainly on technical controls rather than governance, risk, and policy
"Cyber Security Policy / Policies"	the high level cyber security requirements for all IT Services and Operational Technology and Data owned by TfL or operated and supported by third parties for or on behalf of TfL as set out in <b>Schedule 16</b> and <b>Annex 5</b> of this <b>Schedule 9</b> ;
"Cyber Security Standard(s)"	the technical detail behind the implementation of the high level cyber security requirements as set out in the Cyber Security Policies;
"Data"	means data created, generated or collected, during the performance of the New System, Services and Further Services (if any) (or any part thereof), including Personal Data and data supplied to TfL and members of the TfL Group in connection with the New System, Services or Further Services (if any) or this Agreement;
"HMG Information Security Assurance Standards"	the meaning and definition as well as relevant policy documents and standards can be found at <a href="https://www.gov.uk/government/collections/government-security">https://www.gov.uk/government/collections/government-security</a> or any updated link;
"Information Assets"	a body of information, defined and managed as a single unit so it can be understood, shared, protected and exploited effectively.
"Information Asset Register"	means a register of all Information assets relating to the New System, Services and Further Services (if any) connected to this Agreement as detailed in <b>paragraph 3.2(c)</b> ;
"Information Asset Management"	Information Asset Management is the process responsible for managing the Information Assets throughout their lifecycle (i.e. deployment to decommissioning). The Information Asset Management process, which tracks and reports changes to Information Asset information, shall be part of the Asset Management Process.

<b>"Information Security Management System" or "ISMS"</b>	a framework of governance models, policies and procedures, based on a business risk approach to establish, implement, operate, monitor, review, maintain and improve information security;
<b>ISO/IEC 27001</b>	is an information security standard specification for an information security management system (ISMS), with an emphasis on measuring and evaluating how well an organisation's ISMS is performing;
<b>"IT Services"</b>	means the IT services that support the delivery of the New System, Services and Further Services (if any);
<b>"Malicious Software"</b>	means any software that brings harm to a computer system. Commonly known as malware can be in the form of worms, viruses, trojans, spyware, and adware which steal protected data, delete documents or add software not approved by a user;
<b>"Operational Technology"</b>	means any hardware or software which monitors and/or operates a physical process;
<b>"Outline Security Management Plan"</b>	means the security plan provided by the Supplier as part of their tender submission;
<b>"Removable Media"</b>	any type of storage device that can be removed from a computer while the system is running. Examples of removable media include CDs, DVDs and Blu-Ray disks, as well as diskettes and USB drives;
<b>"Security Incident"</b>	a potential or actual event or attempted breach of security affecting the confidentiality, integrity or availability of the New System, relevant Services and Further Services (if any), IT Services or networks which process or hold Data;
<b>"Security Management Plan"</b>	means the Supplier's security plan developed and revised pursuant to <b>paragraph 14</b> ;
<b>"Security Risk"</b>	meaning all Risks associated with the security of the Services which may have a negative impact upon the agreed security posture, including information security and any risks identified pursuant to this Cyber Security Management Schedule;
<b>"Security Risk Register"</b>	means a register of Security Risks produced and maintained as detailed in <b>paragraph 3.2(b)</b> ;
<b>"TfL Information Security Controls Framework"</b>	means a hierarchy of IT security documents consisting of the high level Information Management Security Policy and ten security principles (Information Security Controls Framework); available upon request;
<b>"TfL Network(s)"</b>	means the network infrastructure and services owned or used by TfL to support the delivery of the IT Services;
<b>"TfL Personnel"</b>	means all employees, agents, consultants and contractors of TfL;

<b>"TfL Restricted"</b>	as defined in the TfL Information Security Classification Standard (listed in <b>Annex 5</b> of this <b>Schedule 9</b> ); and
<b>"TfL Sites"</b>	means all TfL premises where the services are delivered.

## 2. **SCOPE AND PURPOSE**

2.1 The purpose of this Schedule is to:

- (a) set out the principles of protective security to be applied by the Supplier in its delivery of the New System, and where relevant Services and Further Services (if any);
- (b) set out the Supplier's wider security obligations relating to the New System and where relevant Services and Further Services (if any);
- (c) set out the Supplier's requirements to test and audit the New System and where relevant, the Services and Further Services (if any) (see Annex 2) including any Information Security Management System, to ensure compliance with the security requirements set out in this Agreement;
- (d) set out the Supplier's obligations in the event of a Security Incident;
- (e) set out the principles for the Supplier's development, implementation, operation, maintenance and continual improvement of the Security Management Plan;
- (f) set out the principles for the Supplier's development, implementation, operation, maintenance and continual improvement of the Information Security Management System;
- (g) set out the requirements on the Supplier when delivering the New System, Services and Further Services (if any), which are aligned with the 10 Steps to Cyber Security set out by the Government (see Annex 5).

## 3. **SECURITY PRINCIPLES**

- 3.1 The Supplier acknowledges that security, data protection and confidentiality are of fundamental importance in relation to its provision of the New System, Services and Further Services (if any) and TfL's ability to retain public confidence. The Supplier shall at all times comply with the security principles set out in this **paragraph 3** in the delivery of the New System, Services and Further Services (if any).
- 3.2 In recognition of the importance that TfL places on security, data protection and confidentiality, the Supplier shall ensure that a director or relevant individual, as agreed by TfL, is made aware of the risks set out in the Security Management Plan and is assigned overall responsibility for ensuring that:
- (a) appropriate members of Supplier Personnel and the Supplier's management team take responsibility for managing the different levels of security risk and promoting a risk management culture;
  - (b) a Security Risk Register is produced and maintained and that all Security Risks are documented in an appropriate manner and is included in any contract risk register, if one is in place. This Security Risk Register must be available for audit when reasonably required by TfL as set out in **paragraph 7** of this **Schedule 9**;
  - (c) an Information Asset Register is produced and maintained and that all assets are documented in an appropriate manner in the Information Asset Register and shall identify the criticality of the relevant Assets in the delivery of the New System,

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Services and Further Services (if any). This register must be available for audit when reasonably required by TfL as stated in **paragraph 7** of this **Schedule 9** and when a Security Incident occurs; and

- (d) supporting policies are implemented (where relevant) and communicated with Supplier Personnel.

3.3 The Supplier shall, and procure that its Sub-Contractors shall, at all times ensure that:

- (a) security threats to the New System, and relevant Services and Further Services (if any) are minimised and mitigated;
- (b) the New System and where relevant, the Services and Further Services (if any) shall fully comply at all times with:
  - (i) any security requirements set out in **Annex 3**;
  - (ii) the agreed Outline Risk Management Processes and approach set out in **Annex 2**; and
  - (iii) Good Industry Practice.

3.4 The Supplier must notify TfL of any instances where software, applications, services or processes are hosted or run from the Cloud that are not part of the Agreement, and that host, process or connect with any of TfL Operational Technology or IT Services, Data and TfL Networks or handle TfL Data. The Supplier is responsible for ensuring that any such Cloud services comply with this Cyber Security Management Schedule.

#### **4. ACCESS CONTROLS AND SECURE CONFIGURATION OF SYSTEMS**

4.1 The Supplier shall comply with all obligations relating to the patching and configuration management of Assets as set out in the policies set out in **Annex 5**, the Supplier shall ensure that:

- (a) security patches are applied to Assets as soon as possible in line with vendor recommendations in accordance with overall risk management;
- (b) account management and configuration control processes are implemented to ensure that access to Assets by Supplier Personnel is limited to the extent required for them to fulfil their roles in supporting the delivery of the New System, Services and Further Services (if any).
- (c) when Supplier Personnel change roles or no longer support the delivery of the New System and where relevant, the Services and Further Services (if any) access rights are revoked or reviewed;
- (d) any New System and where relevant, Services and Further Services (if any) administration functionality is strictly controlled and restricted to those Supplier Personnel who need to have access to such functionality and that the ability of Supplier Personnel to change the configuration of the New System and where relevant, the Services and Further Services (if any) is appropriately limited and fully auditable;
- (e) Supplier Personnel are informed of what constitutes acceptable access of Operational or IT technology, Data and TfL Networks and the consequences of non-compliance;
- (f) any preconfigured passwords delivered with any Assets are changed prior to their implementation for use in the New System and where relevant, the Services and Further Services (if any);

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- (g) the New System and where relevant, the Services and Further Services (if any) have appropriate devices, tools or applications in place to filter traffic or separate connections, such as industry standard firewalls and Malicious Software protection, to all public or private networks which are not controlled by or on behalf of TfL.
  - (h) all wireless functionality on the New System and where relevant, the Services and Further Services (if any) is secure; and
  - (i) software upgrades and patching must be managed appropriately and access to any software shall be granted using the principle of least privilege.

## **5. SUPPLIER PERSONNEL**

- 5.1 The Supplier shall, appoint a member of Supplier Personnel to be the security manager who shall be responsible for the development, monitoring, enforcement, maintenance and enhancement of all security measures set out in this Agreement (the "**Security Manager**"). The Security Manager shall be a member of the Key Personnel as set out in **Schedule 1**.
- 5.2 The Supplier shall ensure that all Supplier Personnel are security screened or vetted appropriate to the Data and shall provide TfL within five (5) Business Days of the Commencement Date, and every twelve (12) months thereafter, written confirmation that this obligation has been complied with.
- 5.3 The Supplier shall immediately notify TfL if it becomes aware of any security clearance issues in relation to the Supplier Personnel and the Supplier shall undertake any action requested by TfL in relation to mitigating the impact of any such security clearance issues.

## **6. TRAINING**

- 6.1 The Supplier shall ensure that all Supplier Personnel have undergone suitable security awareness training prior to their deployment and such security awareness training shall cover, as a minimum; account usage, malicious software, home and mobile working, use of removable media, audit and inspection and Security Incident reporting and data handling. The Supplier shall implement an up-to-date on-going programme of security awareness training for Supplier Personnel throughout the Term.
- 6.2 The Supplier shall provide additional training to its Supplier Personnel, which may be required following a Security Incident, the application of a patch or update, or any relevant operational change undertaken through **Schedule 8** (Contract Change Control Procedures).
- 6.3 The Supplier shall ensure that all Supplier Personnel are familiar with their responsibilities under applicable law and policies including, as a minimum, the Data Protection Legislation, the Security Policies set out in **paragraph 1** of this **Schedule 9** and the Security Principles set out in **paragraph 3** above.

## **7. TESTING & AUDIT**

- 7.1 The Supplier shall conduct regular automated vulnerability scans of the New System and where relevant, the Services and Further Services (if any), as agreed in the Outline Risk Management Process and ensure that any identified vulnerabilities are appropriately mitigated or patched in line with the TfL Security Patching standard (**Annex 5**), taking into consideration the risk posed to TfL and the Services.
- 7.2 The Supplier shall conduct security tests, including ethical hacking and penetration tests, to assure compliance with the Security Policies as set out in **paragraph 1** above, the Security Incident Management Plan, the security provisions in this Agreement, the Security Management Plan and any Security Incident management processes set out there. The Supplier shall conduct security testing in accordance with the Security Management Plan. The Supplier shall conduct such security tests, as a minimum, every twelve (12) months from the Operational Commencement Date and shall include security penetration testing of

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the New System and of any relevant Services and Further Services (if any) as identified in Fig.1 of Annex 2 and the associated technical infrastructure. Wherever the New System, and relevant Services and Further Services (if any) are accessible from the internet or other such public network, the Supplier shall carry out security penetration tests from the internet or the public network.

- 7.3 The Supplier shall, within five (5) business days of completion of the security tests carried out in accordance with **paragraph 7.2**, provide a report to TfL setting out:

- (a) the outcome of such security tests including all identified vulnerabilities;
- (b) the Supplier's plans to remedy each such identified vulnerability as soon as possible, provided that any such remediation must be implemented in accordance with **Schedule 8** (Contract Change Control Procedures) of this Agreement.

- 7.4 The Supplier shall implement its plans to each identified vulnerability in accordance with the report delivered pursuant to **paragraph 7.3** save to the extent directed by TfL in writing.

- 7.5 The Supplier shall, upon request by TfL, following a Security Incident, carry out such additional security testing over and above the obligations set out in **paragraph 7.2** as TfL requires.

- 7.6 Subject to provision of one (1) weeks written notice, TfL shall be entitled to send a member of TfL Personnel at TfL cost and expense to witness the conduct of any audit or security tests carried out by or on behalf of the Supplier. The Supplier shall provide TfL with a minimum of two (2) weeks notice that the audit or security tests have been scheduled so that TfL may provide the written notice of an intention to attend. The Supplier shall provide TfL with the results of such audits (in a form agreed with TfL in advance) as soon as practicable after the completion of each audit or test.

- 7.7 In addition to complying with these requirements, PCI DSS where applicable and other relevant industry standards and Good Industry Practice, the Supplier shall at least once during each twelve (12) month period starting from the Operational Commencement Date, engage an appropriately skilled third party to conduct a formal audit of the New System and relevant Services and Further Services (if any) against the then current versions of the following:

- (a) the security controls, processes and procedures required pursuant to this Agreement;
- (b) the Data Protection Legislation (using BS10012 or another standard as agreed with TfL), where applicable; and
- (c) the Security Management Plan,

and shall, within five (5) Business Days of becoming aware of actual or potential security issues which impact or could impact the New System and relevant Services and Further Services (if any), the Supplier shall inform TfL of each such issue and shall keep TfL up-to-date as the Supplier investigates the nature and impact of such issue. Within five (5) Business Days of the finalisation of the audit findings, the Supplier shall provide to TfL a copy of all such findings which are relevant to the New System and relevant Services and Further Services (if any).

- 7.8 Without prejudice to any other right of audit or access granted to TfL pursuant to this Agreement or at Law, TfL and/or its representatives may carry out such audits in relation to security matters as are reasonably required to assess the Supplier's compliance with the Information Security Management System and the Security Management Plan.

- 7.9 If any test or audit carried out pursuant to this **paragraph 7** reveals any non-compliance with this Agreement or vulnerability of the New System and where relevant, the Services and Further Services (if any) (and, in the case of a TfL audit, TfL has informed the Supplier thereof), the Supplier shall, as soon as reasonably practicable, provide TfL with a written



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plan to remedy each such identified vulnerability as soon as possible, provided that any such remediation must be implemented in accordance with **Schedule 8** (Contract Change Control Procedures) of this Agreement. The Supplier shall implement its plans to remedy each identified vulnerability in accordance with such report save to the extent directed by TfL in writing.

## **8. SECURITY INCIDENT MANAGEMENT PROCESS**

- 8.1 The Supplier shall, and shall procure that its Sub-Contractors shall:
- (a) establish, document and share with TfL a process to identify and respond to Security Incidents and mitigate the impact of such Security Incidents on the New System and relevant Services and Further Services (if any), including in relation to assigning clearly defined roles and responsibilities to specific Supplier Personnel;
  - (b) record each Security Incident and corresponding severity level in the Supplier's ISMS; and
  - (c) without limitation to the other provisions of this Agreement, follow TfL's reasonable instructions in relation to the identification and resolution of any Security Incident.
- 8.2 The Supplier shall notify the TfL Project Manager (as detailed in **Schedule 1**) and ensure TfL is aware as soon as possible and in any event no later than within one (1) hour upon becoming aware of any Security Incident or any potential Security Incident.
- 8.3 In addition to the requirements in **paragraph 8.2** the Supplier will additionally provide written notice with all relevant details reasonably available of any actual or suspected breach of security in relation to TfL Personal Data including unauthorised or unlawful access or processing of, or accidental loss, destruction or damage of any TfL Personal Data
- 8.4 If a Security Incident occurs, the Supplier shall, within the framework of the Security Incident Management Process:
- (a) immediately take steps to assess the scope of the Data, user accounts and/or TfL Personal Data compromised or affected including, but not limited to, the amount of Data and/or TfL Personal Data affected;
  - (b) immediately take the steps necessary to remedy or protect the integrity of the New System and relevant Services and Further Services (if any) against any such Security Incident;
  - (c) securely collect and preserve evidence, including logs, to support the Security Incident management process described in this paragraph and share with TfL such evidence via secure channels as requested by TfL;
  - (d) handle any information pertaining to the Security Incident according to the handling requirements for TfL RESTRICTED information defined in TfL's Information Security Classification Standard (**Annex 5**);
  - (e) promptly escalate the Security Incident to a person or governance forum with a level of seniority within the Supplier's organisation as TfL may reasonably require;
  - (f) as requested by TfL:
    - (i) provide such information in relation to the Security Incident (including, if necessary, by collating such information from its and its Sub-Contractors' systems and the Supplier Personnel);
    - (ii) provide relevant TfL Personnel with supervised access (or, if the Parties agree, direct access) to any relevant areas of the New System and relevant Services and Further Services (if any), Supplier Sites and Supplier Personnel in order to investigate the Security Incident; and

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- (iii) use the Contract Change Control Procedure as set out in **Schedule 8** and follow TfL's directions in relation to the steps necessary or desirable to remedy or protect the integrity of the New System and relevant Services and Further Services (if any); and
  - (g) as soon as reasonably practicable develop and provide TfL with a copy of its remediation plan for the Security Incident which sets out full details of the steps taken and to be taken by the Supplier to:
    - (i) correct, make good, reinstate, replace and remediate all deficiencies and vulnerabilities, loss and/or damage to the Assets, Data, and/or Services in connection with the Security Incident; and
    - (ii) perform or re-perform any security tests or alternative tests relating to the security of the New System Assets and/or relevant Services and Further Services (if any) as appropriate and within the timescales specified by TfL, to assure TfL that the Security Incident has been addressed and its effects mitigated,

provided that any such remediation must be implemented in accordance with **Schedule 8** (Contract Change Control Procedures). The Supplier shall fully implement and comply with such remediation plan save to the extent directed by TfL in writing

8.5 The Supplier shall provide a detailed report to TfL within two (2) Business Days of the resolution of the Security Incident, such report to detail:

- (a) the nature of the Security Incident;
- (b) the causes and consequences of the Security Incident;
- (c) the actions undertaken and length of time taken by the Supplier to resolve the Security Incident; and
- (d) the actions undertaken by the Supplier to prevent recurrence of the Security Incident.

8.6 If there is a suspected security event up to and including a Security Incident, the Supplier shall to the extent requested by the TfL Chief Information Security Officer CISO (or any duly authorised delegate):

- (a) Provide relevant information in relation to the New System and relevant Services and Further Services (if any) collating if necessary, relevant information from Sub-Contractors' systems and the Supplier Personnel;
- (b) provide relevant TfL Personnel with supervised access (or, if the Parties agree, direct access) to any relevant areas of the New System and relevant Services and Further Services (if any) Supplier Sites and Supplier Personnel in order to investigate the security incident; and
- (c) follow TfL's directions in relation to the steps necessary or desirable to remedy or protect the integrity of the New System and relevant Services and Further Services (if any); and
- (d) work with TfL to identify any lessons learnt which could mitigate any gaps in process, policy or controls.

and TfL shall reimburse the Supplier's reasonable, demonstrable costs and expenses in relation to the Supplier's compliance with such request.

## 9. **SECURITY LOGGING AND MONITORING**

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- 9.1 The Supplier shall ensure that the Security Management Plan sets out its monitoring strategy to monitor its own performance of its obligations under this Schedule. The Supplier shall update its monitoring strategy as necessary throughout the term of this Agreement in response to:
- (a) changes to applicable laws, regulations and standards;
  - (b) changes to Good Industry Practice;
  - (c) any relevant Contract Change Control Procedures undertaken under **Schedule 8**;
  - (d) any Security Incident; and
  - (e) any reasonable request by TfL.
- 9.2 The monitoring strategy should include, as a minimum, processes for monitoring and logging (as appropriate):
- (a) networks and host systems to detect attacks originating both on an internal private network or from public networks (e.g. internet);
  - (b) instances of misuse of the New System, Services and Further Services (if any), Supplier systems used in the delivery of the New System, Services and Further Services (if any) and access to TfL RESTRICTED Data by TfL Personnel and Supplier Personnel, including attempts at such misuse;
  - (c) Malicious Software on: (i) the Supplier systems used in the delivery of the New System, Services and Further Services (if any) and, (ii) the New System, Services and Further Services (if any);
  - (d) access to and movement of TfL RESTRICTED Data, including internal access to such Data; and
  - (e) traffic for unusual or malicious incoming and outgoing activity that could be indicative of an attempt or actual attack.
- 9.3 The Supplier shall ensure that access to system logs and monitoring information is strictly restricted to those Supplier Personnel who need to access these items to ensure the delivery and integrity of the New System, Services and Further Service (if any).
- 9.4 The Supplier shall ensure that any monitoring process complies with the monitoring strategy developed in accordance with **paragraphs 9.1 and 9.2** and all of its legal and regulatory obligations pursuant to Applicable Law.
- 9.5 The Supplier shall maintain a log of:
- (a) all Service Users, TfL Personnel and Supplier Personnel logon attempts, successful and failed, to the New System, Services and Further Services (if any) or any elements of the Supplier Solution requiring authentication;
  - (b) all actions taken by Service Users, TfL Personnel or Supplier Personnel with administrative privileges;
  - (c) all instances of accounts being created for Service Users, TfL Personnel or Supplier Personnel and their relevant privileges;
  - (d) all records of formal staff induction or certification required by Supplier Personnel to operate systems and handle TfL RESTRICTED Data (where required);
  - (e) all instances of accounts for Service Users, TfL Personnel, or Supplier Personnel being deleted;

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- (f) Supplier Personnel system access group memberships in relation to relevant Assets;
  - (g) Service User and group privilege changes against each of the system resources;
  - (h) unauthorised use of input and output devices and removable media; and
  - (i) all access to log files and audit systems.

- 9.6 The logs required in **paragraph 9.5** above must be raw logs, which are provided in a structured text format and the schema for such logs will need to be provided.
- 9.7 The Supplier shall implement recording mechanisms to identify TfL Personnel and Supplier Personnel and their actions when cases of misuse are being investigated and shall ensure that any such recording mechanisms are protected against manipulation and disruption.
- 9.8 The Supplier shall regularly review logs to identify: (i) anomalies; (ii) suspicious activity; and (iii) suspected Security Incidents. The Supplier shall notify TfL of such findings in accordance with **paragraph 8.2**.
- 9.9 The Supplier shall provide copies of any log data collected by the Supplier during its delivery of the Services (system audit log data) at TfL's request in a human readable electronic format such as comma-separated value or Microsoft Excel.

#### **10. MALICIOUS SOFTWARE**

- 10.1 The Supplier shall throughout the Term, use the latest versions of anti-malware solutions and software available from an industry accepted vendor (unless otherwise agreed in writing between the Parties) to check for, contain the spread of, and minimise the impact of Malicious Software in the New System, and where relevant, Services and Further Services (if any) (or as otherwise agreed by the parties).
- 10.2 Notwithstanding **paragraph 10.1**, if Malicious Software is detected within the New System, Services and Further Services (if any) provided by the Supplier, the Supplier shall ensure the effect of the Malicious Software is mitigated and, particularly if Malicious Software causes loss of operational efficiency or loss or corruption of Data, restore the New System, Services and Further Services (if any) to their desired operating efficiency.
- 10.3 Any cost arising out of the actions of the Parties taken in compliance with the provisions of **paragraph 10.2** shall be borne by the Parties as follows:
  - (a) by the Supplier if the Malicious Software originates from the Supplier Software, the Third Party Software supplied by the Supplier (except where TfL has waived the obligation set out in **paragraph 10.1**) or TfL Data (whilst TfL Data was under the control of the Supplier) unless the Supplier can demonstrate that such Malicious Software was present and not quarantined or otherwise identified by TfL when provided to the Supplier; and
  - (b) otherwise by TfL.

#### **11. REMOVABLE MEDIA**

- 11.1 The Supplier may only use Removable Media to support its delivery of the New System, Services and Further Services (if any) if it has obtained prior written consent of TfL and has implemented appropriate controls to ensure that the use of any input or output devices and removable media is restricted strictly to that needed to supply and support delivery of the New System, Services and Further Services (if any). -
- 11.2 If removable media is approved for use by TfL, the Supplier shall ensure that it deploys suitable anti-virus and anti-malware checking solutions to actively scan for the introduction of Malware onto systems and networks through all Data imports and exports from removable media and that the removable media is encrypted to a suitable standard agreed in advance with TfL in writing.

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- 11.3 The Supplier shall report any loss or interception of Data as a result of the use of removable media to TFL in accordance with **paragraph 8** and TFL reserves the right in such instances to rescind its approval in relation to the Supplier's continued use of removable media.

**12. MOBILE AND HOME WORKING**

- 12.1 The Supplier may only use or offer mobile and home working to support its delivery of the New System, Services and Further Services (if any) if it has obtained prior written consent of TFL and has implemented appropriate security controls.
- 12.2 If such consent is granted but the Supplier does not have a home and mobile policy for Supplier Personnel, TFL's Home and Mobile Working Cyber Security Policy shall apply to the Supplier and its Supplier Personnel.
- 12.3 If the Supplier has a home and mobile working policy in relation to the Supplier Personnel, the Supplier shall:
- (a) ensure through this policy that:
    - (i) Data is protected and suitably encrypted in line with the Cyber Security Policy (see **Annex 5**), when stored outside of the Supplier Premises;
    - (ii) Data is protected when accessed, imported or exported through a connection other than one which is accessed at the Supplier Premises; and
    - (iii) Security Incident Management plans acknowledge the increased risk posed by home and mobile working such as theft or loss of Data and TFL Data and/or devices; and
- 12.4 The Supplier shall report any loss or interception of Data or TFL Data as a result of home or mobile working to TFL in accordance with paragraph 8.

**13. DISPOSALS**

- 13.1 The Supplier shall not reuse any Asset or Removable Media used in the delivery of the New System and relevant Services and Further Services (if any) unless such Items have been wiped securely in accordance with a TFL agreed standard.
- 13.2 The Supplier shall securely dispose of and delete Data from Assets and Supplier Equipment used for the delivery of the New System and relevant Services and Further Services (if any) in accordance with a mutually agreed policy and guidelines. Upon the termination or expiry of this Agreement or when such Assets or Supplier Equipment are no longer required for the delivery of the New System, relevant Services and Further Services (if any), whichever is sooner, the Supplier shall confirm what data (if any) is held on the Assets or Supplier Equipment (as applicable) and that such data is controlled in accordance with the mutually agreed policy.
- 13.3 The Supplier shall ensure that the disposal of any Asset is accurately reflected in the Information Asset Register.

**14. SECURITY MANAGEMENT PLAN**

- 14.1 The Outline Security Management Plan as at the Effective Date is set out at Annex 1 (*Outline Security Management Plan*).
- 14.2 The Supplier shall within fifteen (15) Business Days of the Commencement Date submit to TFL for approval, a draft Security Management Plan which a minimum will:
- (a) set out the security measures to be implemented and maintained by the Supplier in relation to all aspects of the New System and relevant Services and Further Services (if any) and all processes associated with the delivery of the New System and relevant Services and Further Services (if any) and shall at all times comply with

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and specify security measures and procedures which are sufficient to ensure the New System and relevant Services and Further Services (if any) comply with this Schedule;

- (b) reference and comply with the security requirements set out in Annex 3;
- (c) state any other cyber security industry standards over and above those set out in this Schedule which are applicable to the New System and relevant Services and Further Services (if any);
- (d) state all applicable law which relates to the security of the New System and relevant Services and Further Services (if any); and
- (e) how the Supplier will comply with any other security requirements TfL may reasonably request from time to time.

When the Security Management Plan is approved by TfL the approved plan will replace the Outline Security Management Plan in **Annex 1**.

- 14.3 The Supplier shall review and update the Security Management Plan at least annually and as required in response to:

- (a) changes to the Cyber Security Standards;
- (b) emerging changes in Good Industry Practice;
- (c) any relevant Operational Change or Variation and/or associated processes;
- (d) any new perceived or changed security threats; and
- (e) any reasonable request by TfL.

- 14.4 The Supplier shall submit any amendments to the Security Management Plan for approval by TfL in accordance with **Schedule 8** (Contract Change Control Procedures) of this Agreement

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**ANNEX 1 – OUTLINE SECURITY MANAGEMENT PLAN/SECURITY MANAGEMENT PLAN**

Redacted





## **SCHEDULE 10**

### **Exit Management**

#### **1. Definitions**

In this Schedule, the following expressions shall have the following meanings unless inconsistent with the context:

<b>"Emergency Exit"</b>	any termination of this Agreement which is a (i) termination of the whole or part of this Agreement in accordance with <b>clause 31</b> (Termination), except where the period of notice given by the party serving notice to terminate pursuant to such clause is greater than or equal to six (6) months; or (ii) wrongful termination or repudiation of this Agreement by either party;
<b>"Exit Manager"</b>	the person appointed by each party pursuant to <b>paragraph 3.1</b> of this <b>Schedule 10</b> for managing the parties' respective obligations under this <b>Schedule 10</b> ;
<b>"Net Book Value"</b>	the net book value of the relevant Asset(s), being its purchase price less an amount equal to the amortisation of such item in a straight line and depreciation (over the relevant depreciation period(s) for the specific Asset(s)) at the time such value is to be calculated;
<b>"Ordinary Exit"</b>	any termination of this Agreement which occurs: (i) pursuant to <b>clause 31</b> (Termination) where the period of notice given by the party serving notice to terminate pursuant to such clause is greater than or equal to six (6) months; or (ii) as a result of the expiry of the Term;
<b>"Termination Assistance Notice"</b>	has the meaning set out in <b>paragraph 6.10</b> of this <b>Schedule 10</b> ;
<b>"Termination Assistance Period"</b>	the period specified in the Termination Assistance Notice in which the Supplier shall provide the Termination Services as may be extended pursuant to <b>paragraph 6.11</b> of this <b>Schedule 10</b> ;
<b>"Termination Services"</b>	the services and activities to be performed by the Supplier pursuant to the Exit Plan, including those activities listed in <b>paragraph 6.15</b> of this <b>Schedule 10</b> and any other services required pursuant to the Termination Assistance Notice; and
<b>"Transferring Contracts"</b>	shall have the meaning set out in <b>paragraph 8.2.2</b> of this <b>Schedule 10</b> .

#### **2. Overview**

The Supplier is required to ensure the orderly transition of the New System, Services and Further Services (if any) from the Supplier to TfL and/or any Replacement Supplier in the event of termination (including partial termination), or expiry of this Agreement. This

**Schedule 10** sets out the principles of the exit and service transfer arrangements that are intended to achieve such orderly transition and which shall form the basis of the Exit Plan. For the avoidance of doubt and unless TfL requires otherwise in writing, the Supplier shall be responsible for the overall management of the exit and service transfer arrangements in accordance with this Schedule and the Exit Plan.

3. **Appointment of Exit Managers**

- 3.1 Each party shall appoint an Exit Manager and provide written notification of such appointment to the other party within sixty (60) days of the Commencement Date. The Supplier's Exit Manager will be responsible for ensuring that the Supplier and its employees, agents and Sub-Contractors comply with this Schedule and the Exit Plan. The Supplier shall ensure that its Exit Manager has the requisite authority to arrange and procure any resources of the Supplier as are reasonably necessary to enable the Supplier to comply with the requirements set out in this Schedule. The parties' Exit Managers will liaise with one another in relation to all issues relevant to the termination/expiry of this Agreement and all matters connected with this Schedule, the Exit Plan and each party's compliance with them.

4. **Obligations to Assist on Re-Tendering of Services**

- 4.1 Subject to **paragraph 5.2** of this **Schedule 10**, on reasonable notice but in any event within fourteen (14) days of a written request from TfL, the Supplier shall provide to TfL and/or (subject to potential Replacement Suppliers entering into reasonable written confidentiality undertakings) to potential Replacement Suppliers, the following material and information in order to facilitate the preparation by TfL of any invitation to tender and/or to facilitate any potential Replacement Suppliers undertaking due diligence:
- 4.1.1 details of the New System and the Services and Further Services (if any);
  - 4.1.2 details of the Assets (including, as applicable, make, model and Asset number or version and release number) and of the Net Book Value of such Assets and details of their condition and physical location;
  - 4.1.3 details of and information relating to the use of the Assets (including technical specifications);
  - 4.1.4 an inventory of TfL's data in the Supplier's possession or control;
  - 4.1.5 a copy of the Registers, updated by the Supplier up to the date of delivery of such Registers; and
  - 4.1.6 all information relating to any employees that may transfer to TfL or a Replacement Supplier, which shall be in accordance with **clause 12.2**, if applicable and in such case to the extent set out.

5. **Exit Plan**

- 5.1 The Supplier will produce and provide TfL with a draft Exit Plan within twenty (20) Business Days following the Commencement Date, such draft Exit Plan to be inserted and set out at **Annex A** of this **Schedule 10**. The draft Exit Plan shall set out the Supplier's proposed methodology for achieving an orderly transition of the New System and Services and Further Services (if any) from the Supplier to TfL and/or its Replacement Supplier on the expiry or termination of this Agreement. The Supplier shall update the Exit Plan every six (6) months up to the Pilot Scheme Acceptance Milestone, when the parties shall (each time) use their respective reasonable endeavours to agree the contents of the Exit Plan. The Supplier shall take into account TfL's required changes, if any, and shall at all times ensure that the Exit Plan is compliant with the requirements set out in **paragraphs 5.2** and **5.3** below. If the parties are unable to agree the contents of the Exit Plan within twenty (20) Business Days of a draft Exit Plan or updated Exit Plan being provided to TfL, then such dispute shall be resolved in accordance with **clause 47**.

5.2 The Exit Plan will contain, as a minimum:

- 5.2.1 separate mechanisms for dealing with Ordinary Exit and Emergency Exit. The provisions relating to Emergency Exit shall be prepared on the assumption that TfL may require that the Supplier ceases to provide all or some of the New System, Services and Further Services (if any) and that the Supplier instead provides the full level of assistance as TfL shall require to enable TfL and/or its nominee or a Replacement Supplier to provide all or part of the New System and Services and Further Services (if any), including the completion of the delivery of the New System and any related software if not yet completed and particularly taking into account TfL's rights under **clauses 32.7, 32.8 and 32.9**;
- 5.2.2 the management structure to be employed during both transfer and cessation of the New System, Services and Further Services (if any) in an Ordinary Exit and an Emergency Exit; and
- 5.2.3 a detailed description of both the transfer and cessation processes, including a timetable, applicable in the case of an Ordinary Exit and an Emergency Exit.

5.3 In addition, the Exit Plan shall:

- 5.3.1 document how the New System is made up and works (if completed) or document how to complete the New System and how the New System is and will be made up and work (if not yet completed);
- 5.3.2 document how any related Software is made up and works (if completed) or document how to complete this Software and how the Software is and will be made up and work (if not yet completed);
- 5.3.3 document which of and how the Services and Further Services (if any) will transfer to the Replacement Supplier and/or TfL, including details of the processes, documentation, data transfer, systems migration, security and the segregation of TfL's technology components from any technology components operated by the Supplier or its Sub-Contractors (where applicable);
- 5.3.4 specify the scope of the Termination Services that may be required (for the benefit of TfL) and any charges that would be payable for the provision of such Termination Services, if any, and detail how such Termination Services would be provided (if required by TfL), during the Termination Assistance Period. Any and all applicable charges shall be calculated at all times in accordance with **paragraph 10 of this Schedule 10**;
- 5.3.5 set out procedures to deal with the provision of information and access to personnel to TfL, its agents or the Replacement Supplier as referred to in **clause 12.2**;
- 5.3.6 address each of the issues set out in this **Schedule 10** to facilitate the transition of the New System, Services and Further Services (if any) from the Supplier to the Replacement Supplier and/or TfL with the aim of ensuring that there is no disruption to or degradation of the New System, Services and Further Services (if any) during the Termination Assistance Period;
- 5.3.7 provide a timetable and identify critical issues for providing the Termination Services;
- 5.3.8 set out the management structure to be put in place and employed during the Termination Assistance Period; and
- 5.3.9 include the information required by **paragraphs 4.1.1 to 4.1.6 of this Schedule 10** (within this information being up to date as at the date each update is made to the Exit Plan).

- 5.4 Following the Operational Commencement Date, the Supplier will review and (if appropriate) update the Exit Plan every twelve (12) months within twenty (20) Business Days following the anniversary of the Operational Commencement Date to reflect any and all changes in the New System, Services and Further Services (if any). Following such update the Supplier will submit the revised Exit Plan to TfL for review. Within twenty (20) Business Days following submission of the revised Exit Plan, the parties shall meet and use reasonable endeavours to agree the contents of the revised Exit Plan, based on the principles set out in this Schedule and the changes that have occurred in the New System, Services and Further Services (if any) since the Exit Plan was last agreed. The Supplier shall draft the final version of the updated agreed Exit Plan taking into account TfL and/or any Relevant TfL Group Member's required changes, if any. If the parties are unable to agree the contents of the revised Exit Plan within that twenty (20) Business Day period, such dispute shall be resolved in accordance with **clause 47** (Law and Dispute Resolution).

## 6. Termination Services

### General

- 6.1 During the Termination Assistance Period or such shorter period as TfL may require, the Supplier will continue to provide the New System, Services and Further Services (if any) (as applicable) and will, at the request of TfL pursuant to **paragraph 6.10**, provide the Termination Services.
- 6.2 The costs of providing these Termination Services, if any, shall be as stated at **paragraph 10** below.
- 6.3 During the Termination Assistance Period, the Supplier will, in addition to providing the Services and Further Services (if any) and the Termination Services, provide to TfL any reasonable assistance requested by TfL to allow the New System, Services and Further Services (if any) to continue without interruption following the termination or expiry of this Agreement and to facilitate the orderly transfer of responsibility for and conduct of the New System, Services and Further Services (if any) to TfL and/or its Replacement Supplier. The Supplier will use all reasonable endeavours to reallocate resources to provide these services without additional costs. However, if this is not possible any additional costs incurred by the Supplier in providing such reasonable assistance which is not already in the scope of the Termination Services or the Exit Plan or are not without charge as a result of being incurred due to TfL terminating under **clause 31.1** or **31.2**, will be subject to the Change Control Procedure.
- 6.4 During the Termination Assistance Period, the New System, Services and Further Services (if any) and the Termination Services will be provided at no detriment to the Service Levels, save to the extent that the parties agree otherwise in accordance with **paragraph 6.5**.
- 6.5 Where the Supplier demonstrates to TfL and/or any Relevant TfL Group Member's reasonable satisfaction that transition of the New System, Services and Further Services (if any) and provision of the Termination Services during the Termination Assistance Period will have a material, unavoidable adverse effect on the Supplier's ability to meet a particular Service Level(s), the parties shall vary the relevant Service Level(s) and/or the applicable Service Credits to take account of such adverse effect.
- 6.6 At TfL's and/or any Relevant TfL Group Member's request and on reasonable notice, the Supplier will deliver up-to-date Registers to TfL.
- 6.7 The parties acknowledge that the migration of the New System, Services and Further Services (if any) from the Supplier to TfL and/or its Replacement Supplier may be phased, as required by TfL, such that certain of the Services and Further Services (if any) are handed over before others.
- 6.8 Within fourteen (14) days after service of notice of termination by either party or not more than seven (7) months and no less than six (6) months prior to the expiry of this Agreement (as applicable), the Supplier will submit for TfL and/or any Relevant TfL

Group Member's written approval an Exit Plan in a final form that could be implemented immediately.

- 6.9 The parties will meet and use their respective reasonable endeavours to agree the contents of the final form Exit Plan (as described in **paragraph 6.8**) as soon as reasonably possible. The Supplier shall draft the final version of such updated agreed Exit Plan taking into account TfL's required changes, if any. If the parties are unable to agree the contents of the Exit Plan within twenty (20) Business Days following its delivery to TfL then such dispute shall be resolved in accordance with the Dispute Resolution Procedure and the Supplier shall provide the Termination Services in accordance with the principles set out in this Schedule and the last approved version of the Exit Plan (insofar as this still applies) until the contents of the Exit Plan have been agreed.

#### **Notification of Requirements for Termination Services**

- 6.10 TfL shall be entitled to require the provision of Termination Services by notifying the Supplier in writing ("**Termination Assistance Notice**"). The Termination Assistance Notice shall specify the:
- 6.10.1 date from which Termination Services are required which shall be no earlier than six (6) months prior to expiry of this Agreement or from the service by either party of any notice to terminate, as the case may be;
  - 6.10.2 nature of the Termination Services required; and
  - 6.10.3 period during which it is anticipated that Termination Services will be required, which shall continue no longer than eighteen (18) months after the date that the Supplier ceases to provide the New System, Services and Further Services (if any).
- 6.11 TfL shall have an option to extend the period of assistance beyond the period specified in the Termination Assistance Notice provided that such extension to the period of assistance shall not either: (i) begin more than six (6) months prior to the date the Supplier ceases to provide the New System, Services and Further Services (if any); or, if applicable, (ii) continue for more than the maximum Termination Assistance Period of eighteen (18) months as specified in clause 6.10.3, provided that TfL shall notify the Supplier to such effect no later than three (3) months prior to the date on which the provision of Termination Services is otherwise due to expire. TfL shall have the right to terminate its requirement for Termination Services by serving not less than three (3) months' written notice upon the Supplier to such effect.

#### **Termination Obligations**

- 6.12 The Supplier shall comply with all of its obligations contained in the Exit Plan and this Schedule.
- 6.13 Unless otherwise requested by TfL in writing, at the end of the Termination Assistance Period (or earlier if this does not adversely affect the Supplier's provision of the New System or performance of the Services and Further Services (if any) and the Termination Services and its compliance with the other provisions of this **Schedule 10**):
- 6.13.1 the Supplier will return to TfL and then erase from any computers, storage devices and storage media that are to be retained by the Supplier after the end of the Termination Assistance Period any and all TfL Software and TfL and/or any Relevant TfL Group Members data;
  - 6.13.2 the Supplier will return to TfL such of the following as is in the Supplier's possession or control:
    - 6.13.2.1 all copies of TfL Software and any other software licensed by TfL to the Supplier under this Agreement where such licences are to extend beyond termination;

- 6.13.2.2 all materials created by the Supplier under this Agreement, the Intellectual Property Rights in which are owned by TfL;
  - 6.13.2.3 any other equipment which belongs to TfL; and
  - 6.13.2.4 any items that have been on-charged to TfL, such as consumables;
- 6.13.3 the Supplier will transfer all TfL and/or any Relevant TfL Group Members' data (in complete, uncorrupted form) in its possession or control to TfL save to the extent (and for the limited period) that such data is required for the purposes of providing any services to TfL under this Schedule or the Exit Plan;
- 6.13.4 the Supplier shall vacate any TfL Premises and Third Party Premises;
- 6.13.5 each party will return to the other party all Confidential Information of the other party and will certify that it does not retain the other party's Confidential Information save to the extent (and for the limited period) that such information needs to be retained by the party in question for the purposes of providing or receiving the New System, any Services and/or Further Services (if any) or Termination Services.
- 6.14 Except where this Agreement provides otherwise, all licences, leases and authorisations granted by TfL to the Supplier in relation to the Services and Further Services (if any) shall be terminated with effect from the end of the Termination Assistance Period.

#### **Scope of the Termination Services**

- 6.15 The Termination Services to be provided by the Supplier shall include such of the following services as TfL may specify in writing:
  - 6.15.1 ceasing all non-critical Software changes (by agreement with TfL);
  - 6.15.2 notifying its subcontractors of procedures to be followed during the Termination Assistance Period and providing management to ensure these procedures are followed;
  - 6.15.3 providing assistance and expertise as necessary to examine all operational and business processes (including all supporting documentation) in place and re-writing and implementing processes and procedures such that they are appropriate for use by TfL and/or Replacement Supplier after the end of the Termination Assistance Period;
  - 6.15.4 delivering to TfL the existing systems support profiles, monitoring or system logs, problem tracking/resolution documentation and status reports all relating to the thirteen (13) TfL Periods immediately prior to the commencement of the Termination Services);
  - 6.15.5 with respect to work in progress as at the end of the Termination Assistance Period, documenting the current status and stabilising for continuity during transition;
  - 6.15.6 in relation to the Maintenance Services, providing TfL with any problem and incident logs which have not previously been provided to TfL;
  - 6.15.7 providing assistance and expertise as necessary to examine all governance and reports in place for the provision of the New System, Services and Further Services (if any) and re writing and implementing these during and for a period of thirteen (13) TfL Periods after the Termination Assistance Period;

- 6.15.8 providing assistance and expertise as necessary to examine all relevant roles and responsibilities in place for the provision of the New System, Services and Further Services (if any) and re-writing and implementing these such that they are appropriate for the continuation of the New System, Services and Further Services (if any) after the Termination Assistance Period;
- 6.15.9 reviewing all Software libraries used in connection with the New System, Services and Further Services (if any) and providing details of these to TfL and/or its Replacement Supplier;
- 6.15.10 making available to TfL and/or the Replacement Supplier expertise to analyse training requirements and provide all necessary training for the use of tools by such staff as are nominated by TfL (acting reasonably) at the time of termination or expiry. A documented plan is to be separately provided for this activity and agreed with TfL at the time of termination or expiry;
- 6.15.11 analysing and providing information about capacity and performance requirements, processor requirements and bandwidth requirements, and known planned requirements for capacity growth across these areas;
- 6.15.12 generating a computer listing of the Source Code of any Software to which TfL shall be entitled to access, in a form and on media reasonably requested by TfL and providing details of where any is held (this obligation shall apply equally to any Open Source Software);
- 6.15.13 agreeing with TfL a handover plan for all of the Supplier's responsibilities. The Supplier will co-operate fully in the execution of the agreed plan, providing skills and expertise to a suitable standard;
- 6.15.14 delivering copies of the production databases (with content listings) to TfL's and/or the Replacement Supplier's operations staff (on appropriate media) as reasonably requested by TfL;
- 6.15.15 assisting with the loading, testing and implementation of the production databases;
- 6.15.16 in respect of the New System and where Maintenance Services are being provided, providing historical performance data for the previous thirteen (13) TfL Periods;
- 6.15.17 assisting in the execution of a parallel operation of the Maintenance Services until the end of the Termination Assistance Period or as otherwise specified by TfL (provided that these Services and Further Services (if any) end on a date no later than the end of the Termination Assistance Period);
- 6.15.18 the provision of an information pack listing and describing the New System, Services and Further Services (if any) for use by TfL in the procurement of the Replacement Services;
- 6.15.19 answering all reasonable questions from TfL and/or its Replacement Supplier, if any, regarding the New System, Services and Further Services (if any);
- 6.15.20 agreeing with TfL and/or the Replacement Supplier a plan for the migration of the Asset Register and where provided, the configuration management database to TfL and/or the Replacement Supplier. The Supplier will fully co-operate in the execution of the agreed plan, providing skills and expertise in a reasonably acceptable standard;
- 6.15.21 the provision of access to TfL and/or the Replacement Supplier during the Termination Assistance Period and for a period not exceeding six (6) months afterwards for the purpose of the smooth transfer of the New System, Services and Further Services (if any) to TfL and/or the Replacement Supplier;

- 6.15.21.1 subject to the provision of **clause 27 (IPR)** to information and documentation relating to the New System, Services and Further Services (if any) that is in the possession or control of the Supplier or its subcontractors (and the Supplier agrees and shall procure that its subcontractors do not destroy or dispose of that information within this period) including the right to take reasonable copies of that material; and
- 6.15.21.2 following reasonable notice and during the Supplier's normal business hours, to members of the Supplier Personnel who have been involved in the provision or management of the New System, Services and Further Services (if any) and who are still employed or engaged by the Supplier or its subcontractors.

#### **Disputes Relating to Termination Services**

- 6.16 Where there is any dispute between the parties regarding the manner in which the Termination Services are to be performed, such dispute shall be resolved in accordance **clause 47**.

#### **7. Knowledge Transfer**

- 7.1 During the Termination Assistance Period, the Supplier will:

- 7.1.1 transfer all training material and provide appropriate training to those TfL and/or Replacement Supplier staff responsible for internal training in connection with the provision of the New System, Services and Further Services (if any);
- 7.1.2 provide for transfer to TfL and/or the Replacement Supplier of all knowledge reasonably required for the provision of the New System, Services and Further Services (if any) which may, as appropriate, include information, records and documents; and
- 7.1.3 provide the Supplier and/or Replacement Supplier with reasonable access to such members of the Supplier's or its Sub-Contractors' personnel as have been involved in the design, development, provision or management of the New System, Services and Further Services (if any) and who are still employed or engaged by the Supplier or its Sub-Contractors and, in certain circumstances, the Supplier may charge pursuant to paragraph 10.1.2.

- 7.2 To facilitate the transfer of knowledge from the Supplier to TfL and/or its Replacement Supplier, the Supplier shall provide a detailed explanation of the procedures and operations used to provide the New System, Services and Further Services (if any), the change management process and other standards and procedures to the operations personnel of TfL and/or the Replacement Supplier.

- 7.3 The information which the Supplier shall provide to TfL and/or its Replacement Supplier pursuant to **paragraph 7.1** above will include:

- 7.3.1 copies of up-to-date procedures and operations manuals;
- 7.3.2 product information;
- 7.3.3 agreements with Third Party suppliers of goods and services which are to be transferred to TfL;
- 7.3.4 key support contact details for third party supplier personnel under contracts which are to be assigned or novated to TfL pursuant to this Schedule, if any;



- 7.3.5 information regarding any unresolved faults in progress at the commencement of the Termination Assistance Period as well as those expected to be in progress at the end of the Termination Assistance Period;
  - 7.3.6 details of physical and logical security processes and tools; and
  - 7.3.7 all relevant interface information.
- 7.4 During the Termination Assistance Period the Supplier shall grant any agent or personnel (including employees, consultants and contractors) of the Replacement Supplier and/or TfL or its sub-contractors access, during the Supplier's normal business hours and upon reasonable prior written notice (which can be as little as five (5) Business Days), to any Supplier sites for the purpose of effecting a prompt knowledge transfer provided that any such agent or personnel (including employees, consultants and contractors) having access to any such sites under this paragraph shall sign a confidentiality undertaking in favour of the Supplier (in such form as the Supplier shall reasonably require).
8. **Assets, Sub-Contracts and Software**
- 8.1 Following notice of termination of this Agreement or during the final six (6) months of the Term (whichever occurs last) and during the Termination Assistance Period, the Supplier will not, without TfL's prior written consent:
- 8.1.1 terminate, enter into or vary any sub-contract;
  - 8.1.2 (subject to normal maintenance requirements) make material modifications to, or dispose of, any existing Assets or acquire any new Assets; or
  - 8.1.3 terminate, enter into or vary any licence for software in connection with the New System, Services and Further Services (if any).
- 8.2 Within twenty (20) Business Days of receipt of the up-to-date Registers provided by the Supplier pursuant to **paragraph 6.6** above, TfL will provide written notice to the Supplier setting out:
- 8.2.1 which of the Exclusive Assets TfL requires and which of the Proprietary Tools and Non-Exclusive Assets TfL would like to be transferred to TfL and/or its Replacement Supplier; and
  - 8.2.2 which sub-contracts and other agreements specified in **clause 3.17** of the Agreement TfL requires to be assigned or novated to TfL and/or its Replacement Supplier (the "**Transferring Contracts**"),
- in order for TfL and/or its Replacement Supplier to use the New System and/or provide the Services and Further Services (if any) at the expiry of the Termination Assistance Period. Where requested by TfL and/or its Replacement Supplier, the Supplier will provide all reasonable assistance to TfL and/or its Replacement Supplier to enable it to determine which Assets and Transferring Contracts TfL and/or its Replacement Supplier requires in order to use the New System and/or provide the Services and Further Services (if any).
- 8.3 With effect from the expiry of the Termination Assistance Period, the Supplier shall assign to TfL (and/or its nominated Replacement Supplier), free from all liens, charges, options, encumbrances and third party rights, title to and all rights and interests in those Exclusive Assets identified by TfL pursuant to **paragraph 8.2** above. Such Exclusive Assets will be acquired by TfL for a consideration equal to their Net Book Value.
- 8.4 In respect of those Non-Exclusive Assets or Proprietary Tools that TfL has identified pursuant to **paragraph 8.2**, the Supplier will either:
- 8.4.1 sell such Assets to TfL and/or its Replacement Supplier at an agreed price; or

- 8.4.2 offer or procure for TfL and/or its Replacement Supplier the use, rental or licensing of such Assets and/or Proprietary Tools (as appropriate) in each case for such period of time and on such commercial and other terms as may be agreed between the parties, acting reasonably.
- 8.5 The Supplier shall assign or procure the novation to TfL of the Transferring Contracts (as described at **paragraph 8.2.2**). The Supplier shall execute such documents and provide such other assistance as TfL reasonably requires to effect the novation or assignment of such Transferring Contracts.
- 8.6 TfL shall:
- 8.6.1 accept assignments from the Supplier or join with the Supplier in procuring a novation of each Transferring Contract;
- 8.6.2 once a Transferring Contract is novated or assigned to TfL and/or the Replacement Supplier, carry out, perform and discharge all the obligations and liabilities created by or arising under that Transferring Contract and exercise its rights arising under that Transferring Contract, or as applicable, procure that a Replacement Supplier does the same.
- 8.7 The Supplier shall hold any Transferring Contracts on trust for TfL until such time as the transfer of the contract to TfL and/or the Replacement Supplier has been effected.
- 8.8 The Supplier shall indemnify, keep indemnified and hold TfL (and/or any Relevant TfL Group Member's nominee and/or the Replacement Supplier, as applicable) harmless from and against each loss, liability and cost arising out of any claims made by a counterparty to an agreement which is assigned or novated to TfL (and/or Replacement Supplier) pursuant to **paragraph 8.5** above in relation to any matters arising prior to the date of assignment or novation of such agreement.
9. **Supplier Personnel**
- 9.1 TfL and Supplier agree and acknowledge that, in relation to the Supplier's employees and personnel **clause 12.2** shall apply.
10. **Charges**
- 10.1 In relation to all assistance and services (whether Termination Services or otherwise) provided by the Supplier pursuant to this Schedule and the Exit Plan:
- 10.1.1 such assistance and services shall be free of charge in the event of termination by TfL in accordance with **clauses 6.13, 6.16, 6.19, 31.1 or 31.2**; and
- 10.1.2 in all other circumstances than those set out in **paragraph 10.1.1** above (including Ordinary Exit upon natural expiry of the Agreement), the Supplier shall be entitled to charge for such assistance and services (other than those that should have been completed prior to the date the Termination Services commence but were not completed for any reason (other than TfL default)), such charges to be calculated at the agreed hourly rates set out in **Schedule 3** (Charges) or, in the absence of agreed hourly rates, at no more than the Supplier's current standard hourly rates used with its customers at the relevant time.
- 10.2 Where Charges apply in accordance with **paragraph 10.1.2** above, during the Termination Assistance Period (or for such shorter period as TfL may require the Supplier to provide the Termination Services), TfL shall pay such Charges to the Supplier in respect of the Termination Services each TfL Period in arrears upon production of an invoice properly prepared in accordance with **clause 5** and the relevant invoice template set out in Schedule 3 (Charges)).

## **ANNEX A**

### **DRAFT EXIT PLAN**



## **ANNEX B**

### **TUPE INFORMATION ON EXIT**

- Amount of time spent on provision of the New System, the Services (or any part of the Services) and/or Further Services (if any)
- Date of birth
- Role Title/Designation and Role Profile
- Annual Salary £
- Bonus and Commission Amount and Frequency
- Pay Frequency and Date
- Overtime - Contractual or Non Contractual and Rates
- Contractual Working Hours
- Contract Type - Perm/Temp
- Geographical Area Of Work/Location
- Commencement of Employment Date
- Continuous Service Date
- Car Allowance
- Pension Contributions
  - 1) Employer
  - 2) Employee
  - Including additional info on:
    - who were members of (or eligible to become members of) the TfL Pension Fund / The Local Government Pension Scheme for England and Wales/The Principal Civil Service Pension Scheme,
    - whose employment transferred from TfL and/or any Relevant TfL Group Members to the Supplier under TUPE; and
    - who were entitled to broadly comparable benefits under the Current Contractor's Scheme
- Details of any Contracting Out Certificate
- Details of the relevant employee representative body or bodies and relevant collective agreements
- Date of Annual Pay Award
- Annual Leave Entitlement
- Contractual Notice Period
- Public Holiday /Concessionary Days Entitlement
- Sickness Entitlement (in 12 month rolling period)
- Salary/wage increases pending
- Eligibility for enhanced redundancy pay and any other contractual or non-contractual termination of severance arrangements (including methods of calculation)
- Details of any other benefits provided, whether contractual or non-contractual
- Copy of employment contract or applicable standard terms and employee handbook
- Any loans or educational grants
- For those employees who are foreign nationals the country of citizenship, immigrant status and all documentation required by law to demonstrate a right to work in the United Kingdom
- Information on any disciplinary or grievance procedure taken against or by an employee in the two years immediately preceding the information being provided
- Information about any tribunal claims in the immediately preceding two years or whether there are reasonable grounds to believe a claim may be brought
- Department and place on organisation chart
- Average absence due to sickness
- Training and competency records



## **SCHEDULE 11**

### **Governance, Contract Management and Reporting**

#### **1. Background and Scope**

This **Schedule 11** describes the TfL project governance required to manage the end to end roll out of the Agreement for the supply and installation of a digital radio system and associated services for TfL, including the New System and the Services and Further Services (if any) (the "**Project**").

#### **2. Governance**

2.1 The Governance for the Project will be the responsibility of the following bodies at various stages in the life cycle:

2.1.1 the Joint Project Board;

2.1.2 the Project Execution Group ("**PEG**"); and

2.1.3 the Service Delivery Group ("**SDG**").

2.2 The PEG will report to the Joint Project Board.

2.3 The SDG will report to the PEG whilst the PEG remains active and otherwise report to the Joint Project Board in accordance with this **Schedule 11**.

#### **3. Composition and Responsibilities of the Joint Project Board**

3.1 The Joint Project Board handles the executive governance and direction of the Project. It involves the most senior representatives of TfL, the Supplier, any agreed Permitted Sub-Contractors (as listed in **Schedule 14**) and any other third party suppliers and is primarily focused on the strategic aspects of the relationship for TfL to ensure effective delivery of the Project between the Supplier and TfL.

3.2 The TfL and Supplier personnel that shall form part of the Joint Project Board will consist of:

3.2.1 TfL Project Manager;

3.2.2 TfL Operations Manager;

3.2.3 TfL Senior Sponsor;

3.2.4 TfL Technology and Data (Surface) Senior Management Team representatives;

3.2.5 Supplier's Project Manager;

3.2.6 Supplier's Service and Operations Director

- 3.2.7 other members of the Supplier's team as from time to time may be deemed necessary; and
  - 3.2.8 Sub-Contractor representation as may be required.
- 3.3 The Joint Project Board will be chaired by a member of TfL's personnel.
- 3.4 The Joint Project Board shall meet at the beginning and end of each Milestone phase as identified in **Schedule 6** and otherwise as a minimum quarterly or by exception only (unless otherwise agreed in writing by the parties). The decision on changes to the frequency of the meetings of the Joint Project Board will be the responsibility of the Joint Project Board.
- 3.5 The key responsibilities and decision-making capabilities of the Joint Project Board shall be, but not necessarily limited to the following:
  - 3.5.1 defining its specific terms of reference and approving the terms of reference of all the other governance bodies or groups which are the subject of this **Schedule 11**;
  - 3.5.2 approving strategy and reviewing strategic progress and realisation of programme level benefit;
  - 3.5.3 approving significant variations in service scope (to be implemented through **clause 24** and **Schedule 8** (Change Control Procedures) of this Agreement;
  - 3.5.4 reviewing issues facing project delivery and change that require executive attention;
  - 3.5.5 considering and deciding upon all escalation issues which cannot be resolved by other bodies; and
  - 3.5.6 reviewing joint risk register and identifying ways and actions of mitigating risks if necessary.
- 3.6 Notwithstanding **paragraph 3.5** it is agreed that if, in the reasonable judgement of the Supplier, matters of a commercially sensitive nature have arisen that should not be aired with Sub-Contractors or other third parties then, subject to the prior agreement of TfL, such agreement not to be unreasonably withheld or delayed, then such matters shall be addressed outside the Joint Project Board. This will be done by the Project's commercial function which is an appropriate subset of the PEG. Meetings will be held as and when required and can be initiated by either TfL or the Supplier, with agreement from the PEG.
- 4. **Composition and Responsibilities of the PEG**
  - 4.1 The Project shall be managed and delivered through meetings with senior TfL managers and the Project Managers and other Supplier project manager representatives as appropriate.



- 4.2 The PEG shall meet every TfL Period initially but will change to a frequency to be determined as the Project progresses as agreed in writing by the parties. The decision on when to change the frequency of the meetings will be by mutual agreement via the PEG.
- 4.3 The key responsibilities and decision-making capabilities of the PEG shall be, but not be limited to the following:
- 4.3.1 reviewing programme progress and impediments to future progress against Milestones;
  - 4.3.2 resolving programme delivery issues and dependencies;
  - 4.3.3 detailed reviewing of the forecast workload for at least the following three months, up to the Final Acceptance Target Acceptance Date;
  - 4.3.4 managing of any risks and issues that have been identified and entered into the Risk Register and issue register(s);
  - 4.3.5 within their level of authority, receiving and approving matters under the Change Control Procedure (as set out in **Schedule 8** and **clause 24**);
  - 4.3.6 confirming the signing-off of programme and Deliverables; and
  - 4.3.7 resolving or escalating programme or project issues to the Joint Project Board;
- 4.4 Notwithstanding **paragraph 4.3** it is agreed that if, in the reasonable judgement of the Supplier, matters of a commercially sensitive nature have arisen that should not be aired with the Permitted Sub-Contractors or other third parties then, subject to the agreement of TfL, such agreement not to be unreasonably withheld or delayed, such matters shall be addressed outside the PEG excluding personnel of the permitted sub-contractors or other third parties. This will be done by the Project's commercial function, which is an appropriate subset of the PEG. Meetings will be held as and when required and can be initiated by either TfL or the Supplier, with agreement from the PEG.
- 4.5 The PEG will cease to exist following Final Acceptance.
- 4.6 The key TfL and Supplier personnel that shall form the PEG are:
- 4.6.1 the Supplier's Project Manager;
  - 4.6.2 the Supplier's Engineering Manager;
  - 4.6.3 other relevant Supplier staff, to be determined;
  - 4.6.4 the TfL Technology and Data (Surface) Senior Management Team representatives;
  - 4.6.5 the TfL Project Manager;
  - 4.6.6 the TfL Contract Performance or Commercial Manager;
  - 4.6.7 the TfL Technology and Data (Projects and Programmes) representative; and

4.6.8 other TfL and Supplier project and technical managers as appropriate.

4.7 Operating under the responsibility of the PEG there shall be formal project reporting meetings (the "**Project Review Meetings**"). The requirements for the Project Review Meetings are set out below.

4.8 Project Review Meetings shall have an overall view of the project delivery against the output requirements of the contract. The Supplier shall provide as a minimum and update as required or on a periodic basis, the following documents for review at the periodic Project Review Meetings in order to assess the progress and delivery of the project outputs:

4.8.1 Project Plan – to be updated by the Supplier as required but as a minimum on a periodic basis, to be delivered to TfL not later than one (1) Business Day prior to each Project Review Meeting.

4.8.2 Dependencies Register - to be updated by the Supplier as required but as a minimum on a periodic basis, in accordance with **Schedule 6**.

4.8.3 Document Tree – as set out in **paragraph 10** , to be updated by the Supplier as required but as a minimum on a periodic basis, to be delivered to TfL not later than one (1) Business Day prior to each Project Review Meeting.  
This Document Tree should be reviewed as part of any Change Request; in order to identify any documents which should require updating as part of that proposed Change. It should be reviewed along with any such document changes as part of any Change activity.

4.8.4 Project Delivery Report – this progress report to be produced by the Supplier and available for review by TfL not later than one (1) Business Day before each Project Review Meeting. A template shall be agreed between TfL and the Supplier. Such a report should provide as a minimum:

- an executive summary, highlighting any subjects for discussion at the Project Review Meeting;
- any Safety Quality Environment issues encountered and associated actions taken;
- progress against the Project Plan and Milestones in both qualitative and quantitative formats;
- risks, highlighting any new risks or risks where the score has increased which may affect the Project or Milestone delivery and any mitigating actions undertaken or required;
- highlight any major concerns or additional information required.
- a financial summary reflecting progress to date, earned value to date and forecast to complete; and
- a summary of agreed changes from start of the project, to date.

4.8.5 Pilot Scheme Plan – which should include but not be limited to providing details of how Pilot Scheme Acceptance will be achieved, stages of deployment and any training requirements required as specified in **paragraph 15** of **Schedule 2**. To

be updated by the Supplier as required but as a minimum on a periodic basis, to be delivered to TfL no later than one (1) Business Day prior to each Project Review Meeting. The Pilot Scheme Plan shall cease after Pilot Scheme Acceptance.

- 4.8.6 Rollout Plan – which should include but not be limited to providing details of how the Critical Mass Acceptance and the Rollout will be achieved, stages of deployment and any training requirements along with an appropriate Training Plan. To be updated by the Supplier as required but as a minimum on a periodic basis, to be delivered to TfL no later than one (1) Business Day prior to each Project Review Meeting.
- 4.8.7 Risk Register – to be updated by the Supplier as required but as a minimum on a periodic basis, to be delivered to TfL no later than one (1) Business Day prior to each Project Review Meeting.
- 4.8.8 Issues Register – to be updated by the Supplier as required but as a minimum on a periodic basis, to be delivered to TfL no later than one (1) Business Day prior to each Project Review Meeting.
- 4.8.9 Disaster Recovery Plan – As set out in **Clause 45.1** and to be updated by the Supplier as required but as a minimum on a periodic basis, a copy of which to be provided to TfL following TfL's request in accordance with **clause 45.2**.
- 4.8.10 Exit Plan – As set out in **Schedule 10**, to be reviewed and (if necessary) updated by the Supplier every 12 months within thirty (30) days following the anniversary of the Operational Commencement Date, as set out in more detail at **paragraph 5.4 of Schedule 10**.
- 4.8.11 Asset Register – all Assets and listing ownership of each Asset, status - exclusive or non-exclusive; licences and agreements, contracts and sub-contracts, leases and all relevant renewal or extension details and dates that are required to run the Services or sub-set of the Services.
- 4.8.12 CMDB – A database containing Configuration Records of Configuration Items along with their Attributes and relationship to other CI's. This will provide a Parameters list when required.
- 4.8.13 Copies of Permitted Sub-Contractor Contracts – redacted as necessary.
- 4.8.14 List of Key Personnel – The Suppliers' organisational structure in relation to the Services plus details of roles and responsibilities along with the CV's of Key Personnel – to be provided by the Supplier within 20 Business Days of the Commencement Date and to be updated when any changes to Key Personnel are made. (**Annex B of Schedule 1**).

## 5. **Composition and Responsibilities of the Service Delivery Group (SDG)**

- 5.1 The operational and service support of the project shall be managed and delivered through meetings with TfL Service Managers and the Supplier's Service Manager and other Supplier service manager representatives as appropriate.
- 5.2 The Service Delivery Group (SDG) shall report to the PEG whilst the PEG remains active and shall then report to the Joint Project Board when required.
- 5.3 Operating under the responsibility of the SDG there shall be formal project reporting meetings (the "**Service Review Meetings**"). The requirements for the Service Review Meetings are set out below:
  - 5.3.1 quality of service report: Review of statistics with discussion of the previous period (s) performance;
  - 5.3.2 the KPIs and the Service Levels;
  - 5.3.3 quality;
  - 5.3.4 security;
  - 5.3.5 service improvement;
  - 5.3.6 commercial and financial;
  - 5.3.7 planned changes & notifications; and
  - 5.3.8 health and safety.
- 5.4 The key TfL and Supplier personnel that shall form the SDG are:
  - 5.4.1 Supplier's Service Manager;
  - 5.4.2 other relevant Supplier staff, to be determined;
  - 5.4.3 TfL Service Manager; and
  - 5.4.4 TfL Contract Performance or Commercial Manager.
6. Other TfL and Supplier project and technical managers as from time to time may be deemed necessary.
7. **Escalation Process**
  - 7.1 The formal escalation process for Disputes is set out at **clause 47** of the Agreement and in this **paragraph 7**.
  - 7.2 All parties shall ensure appropriately authorised personnel are engaged at all appropriate levels such as to minimise the need for escalation of Disputes.
  - 7.3 Disputes which have not been resolved by the Project Managers of each party and which are then escalated in writing in accordance with **clause 47.3** of the Agreement will be referred to the PEG (if in existence) or the SDG (whichever is appropriate) for resolution.

- 7.4 Any Disputes that are not resolved by the PEG or the SDG (as applicable) within seven (7) Business Days of referral will be escalated in writing to the Joint Project Board.
- 7.5 Any Disputes that are not resolved by the Joint Project Board within fourteen (14) Business Days of referral from the PEG or the SDG (as applicable) will be addressed in accordance with **clauses 47.4 to 47.10** of the Agreement.
- 7.6 For the avoidance of doubt, **clause 47.9** applies to the escalation process set out in this **paragraph 7** and the parties shall continue to comply with their obligations under the Agreement and without delay or disruption while the Dispute is being resolved.
8. **Executive Role**
- 8.1 The Service and Operations Director of the Supplier as identified in **Annex B** of **Schedule 1** will be the executive owner of the Project with regard to the New System, the TfL Equipment and Services.
- 8.2 The Supplier's Service and Operations Director will monitor the performance of the project through four weekly reports from the Supplier's Project Manager.
- 8.3 The Supplier's Service and Operations Director will be responsible for the internal escalation of issues affecting the capability of the Supplier to deliver the New System, fulfil the Project Plan, and/or provide the Services and Additional Services (if any).
- 8.4 The Supplier's Service and Operations Director will ultimately be responsible for the management of the Permitted Sub-Contractors, as listed in **Schedule 14** and any other third parties involved in the delivery of the System.
- 8.5 The Supplier's Service and Operations Director will monitor the performance of the New System and the Equipment (and Alternative Equipment, if any) through four weekly reports from the Supplier's Project Manager and Service Manager.
- 8.6 The Supplier's Service and Operations Director will be responsible for appointing and managing such personnel as may be required to perform the actions contained within the scope of the executive role (as described in this **paragraph 8**) and the Agreement in general.
9. **Notification of Decisions**
- 9.1 The TfL Project Manager shall notify the Supplier in writing of any actions formally recorded (including changes to be implemented through the Change Control Procedure as set out in **Schedule 8** and **clause 24**) promptly and within five (5) Business Days of the relevant meeting.
10. **Document Tree**
- 10.1 The Supplier shall develop and keep updated on an ongoing basis during the Services Term a record of Documentation produced in accordance with its project management approach.

- 10.2 The Supplier shall indicate which Documentation it intends to deliver to TfL or any third parties during the Implementation Phase and Rollout, as well as throughout the operational duration of the Agreement after the Operational Commencement Date, along with a schedule for delivery (the "**Document Tree**").
- 10.3 The Supplier shall clearly indicate to which Milestone or Deliverable each item of documentation set out in the Documentation Tree relates.
- 10.4 The Supplier shall submit the Documentation Tree and any updates from time to time to TfL for acceptance.
- 10.5 During the Implementation Phase of this Agreement the Document Tree shall be made available to all relevant parties via a web based interface, utilising appropriate (and as approved by TfL), user access controls and version controls.

11. **Security Plan and Security Policy**

- 11.1 A security management plan shall be prepared by the Supplier pursuant to **Schedule 9** (Cyber Security Management). The Supplier shall ensure that the Security Management Plan complies with the Security Policy.
- 11.2 The Supplier shall ensure that the Security Management Plan at all times includes:
  - 11.2.1 all security measures to be implemented and maintained by the Supplier (and its sub-contractors) in relation to all aspects of the Assets, the New System and the Services; and
  - 11.2.2 without limitation to any other provision of this Agreement, the date or periods for reviews of, and updates to, the Security Management Plan for the Assets, the New System and Services.

## **SCHEDULE 12**

### **TfL's Obligations**

#### **1. Documentation:**

- 1.1 Unless otherwise stated in the Agreement, the Project Plan or as otherwise agreed by the parties, to the extent that TfL's review is required TfL shall review any documentation submitted to it by the Supplier in a timely manner and shall respond within five (5) Business Days of receiving such documentation.

#### **2. OfCom**

- 2.1 TfL shall maintain a record of all Radio Licences and shall supply details of such Radio Licences to the Supplier promptly upon request from the Supplier.

#### **3. Access Requirement for New System Build and Rollout:**

- 3.1 Garage Access – subject to the Supplier's compliance with **clause 18.4** (Access to TfL and Third Party Premises) TfL shall provide and/or procure the provision (as applicable) of access to any Garage at the times specified in the Project Plan for installation of Equipment on Buses, update of Remote Console Terminals (RCT), and, as necessary, Acceptance Test preparations and Acceptance Test execution.

TFL-2.8.1.3 Agreement Agreement on the Rollout Garage Access calendar

- 3.2 Site access - subject to the Supplier's compliance with **clause 18.4** (Access to TfL and Third Party Premises) TfL shall provide and/or procure the provision (as applicable) of Installation Locations (excluding Garages, which are subject to **paragraph 3.1**) at the times specified in the Project Plan.

TFL-2.6.11.4	Access	FFAT & Pilot Test Site available for installation
TFL-2.7.17.7	Access	FFAT & Pilot Site #1 available for installation
TFL-2.7.17.15	Access	FFAT & Pilot Site #2 available for installation
TFL-2.7.20.13.11	Access	Remaining Base Sites available for installation

- 3.3 TfL shall provide addresses/locations and points of contact for Garages for the Supplier to use for the purposes of managing Bus and RCT installations.

TFL-2.6.2.1	Information	Documentation received of the Selected Garages for Pilot stage
TFL-2.6.2.2	Information	Documentation received of buses details for Pilot stage
TFL – 2.6.2.3	Information	Documentation received for all sites

- 3.4 Where required TfL shall co-ordinate the provision of Site and Third Party Premises escorts during the execution of the New System rollout at the times specified in the Project Plan.

TFL-2.6.13.27	Access	Coordinate access to test site
TFL-2.7.17.29	Access	Coordinate access to Site #1
TFL-2.7.17.19	Access	Coordinate access to Site #2
TFL-2.7.20.13.13	Access	Coordinate access to ALL sites

- 3.5 When it becomes aware of any events or industrial actions which may impact the Project Plan, TfL shall provide notification to the Supplier as soon as reasonably practicable.
- 3.6 TfL shall grant or procure free of charge access to the TfL Premises, TfL Mast Locations and/or Garages to the Supplier, including procuring any necessary ancillary consents required in relation to such access (with such access being in accordance with the provisions of **clause 18** of the Agreement) and in accordance with the Project Plan or as otherwise agreed between the parties.
- 3.7 Upon reasonable written notice from the Supplier, TfL shall provide the Supplier with information relating to planned works and access restrictions for TfL Premises, TfL Mast Locations and/or Garages to assist the Supplier in planning its access requirements.
- 3.8 TfL shall, by the end of Mobilisation provide to the Supplier a copy of rules and procedures relating to access for TfL Premises, TfL Mast Locations and/or Garages. TfL shall thereafter provide the Supplier with copies of any amendments or changes to such rules and procedures thereto promptly upon implementation or with such prior notice of such amendment or change as TfL is reasonably able to give.
- 3.9 To the extent that any Installation Locations (including Garages and Sites) have personal protective equipment ("PPE") requirements over and above the standard PPE requirements as listed below TfL shall make such additional PPE available to the Supplier's Personnel upon their arrival at such Installation Location.

Standard PPE that will be the responsibility of the Supplier for use within Installation Locations shall be as follows:

- Hi visibility jackets (yellow)
- Safety (hard) helmet
- Ear defenders
- Safety Glasses
- Safety boots or shoes (steel toe-capped)
- Torches one small and one large – preferably waterproof
- Protective gloves
- Personal alarms
- Hand-wipes



4. **Access Requirement for Operation, Maintenance and Inspection**

- 4.1 TfL shall grant or procure free of charge access to all Installation Locations to enable the Supplier to perform its obligations in the timescales contemplated in this Agreement during the execution of the New System rollout at the times specified in the Project Plan.

5. **Buses**

- 5.1 Where a new model of Bus enters service (being a model that was not previously in service and in which the Existing System has not been installed and used) TfL shall Type Test a single example of such new model of Bus before the Supplier is required to install Equipment in any such new model of Bus. For the purposes of this **paragraph 5.1**, Type Testing shall mean the testing of a specific make, model and configuration of Bus to which all other electrical on-bus equipment (such as signs, CCTV and Bus computer as specified by TfL) have been installed to determine whether the installation of such on-bus equipment is compatible and performs with the New System.
- 5.2 TfL shall ensure that the antenna and cabling, audio accessories and the audio configuration of the bus computer for all Buses in service and upon which the Supplier shall be required to install Equipment are sufficient and appropriate for the operation of the Bus radio in place on each such Bus at the Commencement Date and which forms part of the Existing System.
- 5.3 TfL shall procure that any new Buses (being such Buses which do not have the relevant Existing System equipment installed and where the Supplier will not be required to remove Existing System equipment prior to installing New System Equipment in its place) have space equivalent to that which would otherwise have been required for the installation of the Existing System equipment.

6. **TfL Mast Locations and RF Conditions**

- 6.1 From and after installation of the Equipment, TfL shall be responsible for providing a primary power source, telephony connections or lines, and the provision of suitable inter-site links, suitable antennae and multiplexing equipment at the TfL Mast Locations as specified at Section 3 Schedule 5 unless agreed otherwise with Supplier.

7. **Pilot:**

- 7.1 TfL shall provide the Supplier with details (location, address and contact names) of the selected Garages on or before the end of Mobilisation.

TFL-2.6.11.3	Agreement	Agree location of Test Site for FFAT
TFL-2.7.17.31	Agreement	Debate of site #1 usage for pilot A and B
TFL-2.7.17.14	Agreement	Debate of site #2 usage for Pilot A and B

- 7.2 TfL shall provide the Supplier with relevant technical details of Buses including but not limited to TfL's Bus Build Specifications on or before the end of Mobilisation.
- 7.3 Base Site equipment for re-use – such equipment that has been identified by TfL for re-use as an ongoing part of the New System shall be in accordance with the standards set out in the annual maintenance checks template. If issues or deficiencies are

identified through an equipment / system health check conducted by the Supplier, TFL shall make good any such deficiencies so that the equipment meets the specified standards required to satisfy the annual maintenance checks template, whether hardware or software related, including non RF Systems, ancillary systems and reasonable safety concerns.

7.4 TFL shall maintain and retain any of the following types of TFL equipment that are identified for reuse as part of the New System;

- MPT Nodes,
- DAS,
- DIP Gateway,
- VMUXs,
- NMT and LDTs.

7.5 For Pilot 0 - TFL shall co-ordinate access to any required networks necessary for the delivery of the Supplier's obligations under the Agreement, including any necessary access to Installation Locations, including but not limited to, radio sites, CentreComm, the backup dispatch location and garages, MPLS Network, such access to be as specified in the Project Plan.

TFL-2.6.13.32	Access	Co-ordinate access to any required network necessary for the delivery of pilot 0
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## 8. Rollout / Testing

8.1 **Order and location of Buses. Bus Scheduling:** TFL is responsible for the scheduling of Buses and ensuring their availability in accordance with the Project Plan or as otherwise agreed between the parties.

8.2 **Use of the TFL test van.** TFL will provide to the Supplier TFL's test van (including a driver) for use during FFAT testing during the periods specified in the Project Plan.

TFL-2.6.13.3	Access	Test Van available
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8.3 **Installation Location readiness.** TFL shall ensure that the Installation Location(s) (and in particular the area within the relevant Installation Locations where the Equipment is to be installed) are available (in accordance with the Project Plan or as otherwise agreed, including under this **Schedule 12**) and in a suitable condition (in the reasonable opinion of TFL) for the installation and commissioning of the Equipment and/or New System by Tait in accordance with the Project Plan. All Installation Locations and the specific areas in which the Equipment is to be installed which are provided by TFL shall meet all minimum safety standards required from time to time by law.

8.4 TFL shall provide Buses for Pilot A and Pilot B to the Supplier at no charge to the Supplier and in accordance with the Test Strategy & Project Plan.

8.5 TFL shall provide Contracted Bus Fleet data to the Supplier at the end of every TFL Period.

## 9. Systems / I.T. System access / VPN / Security

9.1 TfL shall provide the co-operation and assistance specified in the Project Plan or elsewhere in the Agreement in relation to the Supplier's obligations for the New System to interface with any other system or services to be provided by or on behalf of TfL under the Agreement. Nothing in this **paragraph 9.1** shall require TfL to develop new interfaces or acquire new equipment or software or make amendments to TfL's existing interfaces, hardware or software.

9.2 TfL shall provide IP Ethernet interfaces at the relevant Installation Locations and the hosting centre with the availability and performance specified at Section 5.1 and 5.2 of **Schedule 5**, Functional Specification.

TFL-2.6.11.12	Connectivity	IP Backhaul ready at Temporary TEST Site
TFL-2.7.1.5.3	Connectivity	MPLS available at Data Centre for Tail to link into
TFL-2.7.17.8	Connectivity	IP Backhaul ready at Site #1
TFL-2.7.17.17	Connectivity	IP Backhaul ready at Site #2
TFL-2.7.20.13.10	Connectivity	IP Backhaul ready at for Remaining Base Sites

9.3 TfL shall provide accurate asset data for the following components of the Existing System for the Supplier to generate baseline asset and configuration KPIS:

- Garage RCTs
- VMUX
- Re-used base site infrastructure: Antenna; Cavity; DAS Bin; Duplexer; Isolator; Radio Cabinets; Radio Sub Racks; Receiver Splitter Amp; Rectifier and Universal Power Supply Units.

This shall be provided in accordance with the start date for installation at each garage as identified in the Project Plan.

9.4 TfL must have and make available ingress and egress points required for firewall and intrusion detection systems at the Data Centre.

9.5 TfL shall provide, without charge to the Supplier, access and interfaces as specified in **Schedule 5** to IT services required to support TfL's cyber security policies including, but not limited to: NTP, DNS, Anti-virus services, Log server.

9.6 TfL and the Supplier will agree a mutually acceptable file sharing mechanism to allow collaboration with the Supplier on common file sharing repository.

## 10. Training

10.1 TfL shall provide a training venue for up to six (6) people on each course as outlined in **paragraph 15** of **Schedule 2**.

TFL-2.6.10.4	Workshop	TfL Technical Maintenance training
TFL-2.7.21.6	Workshop	Network Monitoring and Management Tools Training

## 11. Health and safety

TfL shall comply with the TfL Health and Safety policy in **Schedule 16** (TfL Policies).



## **SCHEDULE 13**

**Form of Parent Company Guarantee and Legal Opinion**

## Appendix A

### Form of Parent Company Guarantee

#### Form of Parent Company Guarantee

(Letterhead of Parent Company)

To: *[insert name and address of the Authority]*

Date:

Dear Sir/Madam

We, *[insert name of Guarantor]* ("**the Guarantor**"), understand that you have agreed to enter into Contract No *[insert contract number]* ("**the Contract**") with *[insert name of Service Provider]* ("**the Service Provider**") in respect of *[briefly describe nature of contract]* on the condition that the obligations of the Service Provider under the Contract be guaranteed by a Guarantor.

We are *[recite the relationship of the Guarantor to the Service Provider]*, and we warrant to you that this description of our relationship with/to the Service Provider is true and accurate in all material respects.

WE HEREBY AGREE AND UNDERTAKE with you as follows:-

(a) We unconditionally guarantee on demand:

- (i) the proper, complete and punctual performance by the Service Provider of any and all its obligations, undertakings and responsibilities under the Contract and we shall forthwith make good any default thereunder on the part of the Service Provider; and
- (ii) the due and punctual payment by the Service Provider of all sums, liabilities, awards, losses, damages, costs, charges and expenses that may be or become due and payable to you under or arising out of the Contract in accordance with its terms or otherwise by reason or in consequence of any such default on the part of the Service Provider,

when and as the same shall become due for performance or payment (as the case may be).

(b) As a separate and primary obligation we unconditionally guarantee to you that in the case of default by the Service Provider in making any of the payments or in performing any of the obligations, undertakings and responsibilities set out in paragraph (a) above, we shall on demand pay all sums and observe and perform any or all of such obligations, undertakings and responsibilities as if we instead of the Service Provider were the primary obligor. Any payment under this Guarantee shall be made by us in pounds sterling or in any currency which may from time to time replace pounds sterling.

- (c) This Guarantee shall be a continuing security and shall remain in full force and effect until all obligations to be performed or observed by the Service Provider under or arising out of the Contract have been duly and completely performed and observed and the Service Provider shall have ceased to be under any actual or contingent liability to you thereunder.
- (d) Any demand or other notice made by you under this Guarantee shall be duly made if sent by first class recorded delivery post to us.
- (e) You shall be entitled to enforce this Guarantee without first notifying the Service Provider of any default or taking any proceedings or demanding upon, enforcing or exhausting any right or remedy against the Service Provider or any other person or taking any action to enforce any other security, bond or guarantee held by you or making or filing any claim in a bankruptcy, liquidation, administration or insolvency of the Service Provider or any person.
- (f) If any sum due or purportedly due under this Guarantee is not or would not be recoverable under a guarantee for any reason whatsoever, whether or not known to you, such sum shall still be recoverable from us as a sole principal debtor upon the terms of this Guarantee.

PROVIDED THAT:

- 1. We shall be under no greater obligation or greater liability under this Guarantee than we would have been under the Contract if we had been named as the Service Provider in the Contract.
- 2. Our obligations hereunder are those of primary obligor and shall remain in full force and effect and shall not be terminated, reduced, discharged or otherwise affected by:
  - (a) any alteration or variation to the terms of the Contract made by agreement between you and the Service Provider (including, without limitation, any increase in the Service Provider's obligations under the Contract or any alteration in the extent or nature or sequence or method or timing of the Services to be carried out under the Contract) or any novation of the Contract (in whole or in part); or
  - (b) any time being given to the Service Provider or any other indulgence, waiver, concession, forbearance or forgiveness to the Service Provider (whether express or by conduct) or any other thing done, omitted or neglected to be done under the Contract; or
  - (c) any other bond, security or guarantee now or hereafter held by you for all or any part of the obligations of the Service Provider under the Contract; or
  - (d) the release or waiver of any such bond, security or guarantee referred to in paragraph 2(c) above; or

- (e) any amalgamation, reconstruction or dissolution including, without limitation, winding-up of the Service Provider; or
  - (f) the winding-up, bankruptcy, administration, receivership or insolvency of the Service Provider; or
  - (g) any legal limitation, disability or incapacity relating to the Service Provider or discharge by operation of law or any change in the constitution, name or style of the Service Provider or any other person (whether or not known to you); or
  - (h) any total or partial invalidity in, irregularity affecting or unenforceability of any of the obligations of the Service Provider under the Contract; or
  - (i) the termination or partial termination of the Contract or the cessation of any Services for any reason or the making of any variation to the Services in accordance with the Contract; or
  - (j) any claim or enforcement of payment from the Service Provider or any other person;
  - (k) any act or omission which would not have discharged or affected the liability of a sole principal debtor instead of a guarantor or any act or omission, matter or thing which, but for this provision, might operate to exonerate, discharge, reduce or extinguish our liability under this Guarantee.
3. So long as we remain under any actual or contingent liability under this Guarantee, we shall not exercise any right of subrogation or any other right or remedy which we may have against the Service Provider in respect of any payment made by or sum recovered from us pursuant to or in connection with this Guarantee or prove in any liquidation of the Service Provider in competition with you for any sums or liabilities owing or incurred to us by the Service Provider in respect of any such payment by or recovery from us or take or hold any security from the Service Provider in respect of any liability of ours hereunder. We shall hold any monies recovered or security taken or held in breach of this provision in trust for you.
4. Except where prevented from doing so by law, we waive and agree not to enforce or claim the benefit of any and all rights we have or may from time to time have as guarantor under any applicable law which is or may be inconsistent with any of the provision of this Guarantee.
5. This Guarantee is irrevocable.
6. This Guarantee, executed and delivered as a deed, is governed by and shall be construed in accordance with the law of England and Wales. The courts of England shall have exclusive jurisdiction to settle any dispute which may arise out of or in connection with this Guarantee except that you have the right in your absolute discretion to enforce a judgment and/or to take



proceedings in any other jurisdiction in which we are incorporated or in which any of our assets may be situated. You and we agree to submit to that jurisdiction.

[For non-UK resident Guarantors only:

7. For the purposes of this Guarantee we hereby appoint ..... of ..... [to be a London address] to accept service of process on our behalf, and service on the said ..... at the said address shall be deemed to be good service on us; and we hereby irrevocably agree not to revoke or terminate such appointment.]
8. You will be entitled to assign the benefit of this Guarantee in whole or in part but we may not assign the benefit and/or delegate the burden of this Guarantee in whole or in part or enter into any transaction which would result in any of those benefits and/or burdens passing to another person without first obtaining your prior written consent.
9. If any provision (in whole or in part) of this Guarantee is found by any court, tribunal, administrative body or authority of competent jurisdiction to be wholly or partly illegal, invalid or unenforceable then that provision shall, to the extent required, be severed from this Guarantee and shall be ineffective, without, so far as is possible, modifying any other provision of this Guarantee and this shall not affect any other provisions of this Guarantee which shall remain in full force and effect.

Executed as a Deed and delivered the day and year written above.

Executed as a Deed by	)	_____
[Parent Company]	)	Director
acting by a Director and the	)	
Secretary or by two Directors	)	_____
		Director/Secretary

OR

The common seal of	)	_____
[Parent Company]	)	Director
was affixed in the presence of:	)	
	)	_____
		Director/Secretary

## Appendix B

### Form of Legal Opinion

To: [insert name and address of the Authority]

Date:

Dear Sir/Madam

I am counsel to ..... and I am giving this legal opinion in connection with the making by ..... of the Guarantee (as defined below) in your favour.

1. I have examined the Deed of Guarantee (the "**Guarantee**") dated ..... made between..... (the "**Guarantor**") and [insert name of Authority] (the "**Authority**"). Terms defined in or for the purpose of the Guarantee have the same meanings in this opinion.
2. Having considered the Guarantee and examined any other document, resolution or certificate I deemed necessary to enable me to give the opinion contained herein and having regard to all applicable laws of..... I am pleased to advise that in my opinion:
  - (a) the Guarantor was incorporated in ..... on ..... as a [company with limited liability] and validly exists under the laws of ..... as a separate legal entity possessing the capacity to sue or be sued in its own name. To the best of my knowledge having carried out [DESCRIBE APPLICABLE SEARCHES] today, no steps have been, or are being, taken to appoint a receiver or liquidator (or similar encumbrancer or officer) over, or to wind up, the Guarantor;
  - (b) the Guarantor has the necessary power and authority, and all necessary corporate and other action (including, without limitation, approvals and consents of members, stockholders, debenture holders or governmental or other regulatory authorities) has been taken to enable the Guarantor to enter into the Guarantee and to perform the obligations of the Guarantor and the transactions contemplated thereby; and
  - (c) The entry into and performance of the Guarantee and the transactions contemplated thereby will not cause:
    - (i) any limit on the Guarantor or its directors (whether imposed by the documents constituting the Guarantor, statute, regulation, agreement or otherwise) to be exceeded;
    - (ii) any law or order or constitutional document in respect of the Guarantor to be contravened;
    - (iii) any default under, or give rise to an obligation to create or impose any security interest of any nature whatsoever pursuant to, any agreement or other instrument or any

judgment or other requirement known to us after due enquiry to which the Guarantor is a party or by which it or any of its assets is bound. Further, no event has occurred that, with the giving of notice, lapse of time, determination of materiality or other conditions might constitute a default under or in respect of such agreement, instrument or judgment;

- (d) the Guarantee has been properly signed and delivered on behalf of the Guarantor and the obligations on the part of the Guarantor contained in the Guarantee, assuming them to be valid and binding according to English law by which they are expressed to be governed, are valid, legally binding on and enforceable against the Guarantor under the laws of ..... and in the courts of .....
- (e) the signature, delivery and performance of the Guarantee by the Guarantor constitute private and commercial acts by it rather than public or governmental acts;
- (f) all authorisations, approvals, consents, licences, exemptions, filings, registrations, notarisations and other requirements of governmental, judicial and public bodies and authorities of or in [COUNTRY] required or advisable in connection with the entry into, performance, validity and enforceability of the Guarantee and the transactions contemplated thereby have been obtained or effected and are in full force and effect;
- (g) the obligations of the Guarantor under the Guarantee rank at least equally and rateably (*pari passu*) in point of priority and security with any and all other unsecured obligations of the Guarantor;
- (h) all amounts payable by the Guarantor under the Guarantee may be made free and clear of, and without deduction for, or on account of, any taxes imposed, assessed or levied by [COUNTRY] or any authority of or in [COUNTRY];
- (i) there are no registration, stamp or other taxes or duties of any kind payable in ..... in connection with the Guarantor including its signature, performance or enforcement by legal proceedings;
- (j) The Authority will not violate any law or regulation in ..... nor become liable to tax in ..... by reason of entering into the Guarantee or performing its obligations thereunder. It is not necessary to establish a place of business in ..... in order to enforce any provisions of the Guarantee;
- (k) the choice of English law to govern the Guarantee will be upheld as a valid choice of law in any action in respect of the Guarantee in the ..... Courts;

- (l) the consent to the jurisdiction by the Guarantor contained in the Guarantee is valid and binding on the Guarantor and not subject to revocation;
  - (m) any judgment obtained in the courts of England against the Guarantor would be recognised and accepted by the ..... courts without re-trial or re-examination of the merits of the case;
  - (n) neither the Guarantor nor any of its assets enjoys any right or immunity from set-off, suit or execution in respect of its obligations under the Guarantee;
  - (o) so far as I am aware after due enquiry, no litigation, arbitration or administrative proceedings are at present current, pending or threatened that might, if adversely determined, have a material effect on the business, assets or financial condition of the Guarantor.
3. I do not purport to be expert on and do not purport to be generally familiar with or qualified to express legal opinions based on any law other than the laws of ..... and accordingly express no legal opinion herein based upon any law other than the laws of .....

Signed

## SCHEDULE 14

### Permitted Sub-Contractors

#### Supplier's Permitted Sub-Contractors:

<u>Name and position</u>	<u>Contact details</u>	<u>Area of responsibility</u>
<b>REDACTED</b>	<u>Contractual:</u> Trapeze Switzerland GmbH Industrieplatz 3 8212 Neuhausen Rheinfall Switzerland Email: <a href="mailto:info.ch@trapezegroup.com">info.ch@trapezegroup.com</a> Telephone: +41 58 911 11 11 <u>Day to day operations:</u> Unit 3 Loughton Business Centre Langston Road Loughton IG10 3FL Email: <a href="mailto:kumar.kona@trapezegroup.com">kumar.kona@trapezegroup.com</a> Telephone: <b>REDACTED</b> Mobile: <b>REDACTED</b>	<b>REDACTED</b>
<b>REDACTED</b>	<u>Contractual:</u> Magdalene Limited Abel Smith House Gunnels Wood Road Stevenage Hertfordshire England SG1 2ST <u>Day to day operations:</u>	<b>REDACTED</b>

	<p>Magdalene House</p> <p>Compass Point Business Park</p> <p>Stocks Bridge Way</p> <p>Saint Ives</p> <p>Cambridgeshire</p> <p>PE27 5JL</p> <p>Email: <b>REDACTED</b></p> <p>Telephone: <b>REDACTED</b></p>	
<b>REDACTED</b>	<p>Whiteflare Limited</p> <p>The Chestnuts</p> <p>Kington Langley</p> <p>Chippenham</p> <p>SN15 5NB</p> <p>Email: <b>REDACTED</b></p> <p>Telephone: <b>REDACTED</b></p>	<b>REDACTED</b>