

Schedule 7.2 – System Integrator

TfL RESTRICTED

Restricted to: TfL Group, Contractor Group and Consultants with NDA

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1 Introduction

1.1 Scope & Purpose

- 1.1.1 As set out in Schedule 7.1 (System Integration Overview), Transport for London (TfL) operates in a dynamic environment seeking to respond to the changing demands of its customers. This drives on-going changes to the System, the IRC System and the Interfacing Systems.
- 1.1.2 To meet these demands, TTL requires the Contractor to be the System Integrator for the IRC System and to take responsibility for operational integration, Changes (in accordance with Schedule 10.1 (Change Management), introducing New Technologies and New Services and ensuring compatibility between the System, the Modules and the Related Systems of the IRC System and Interfacing Systems.
- 1.1.3 This Schedule 7.2 (System Integrator) sets out the role and responsibilities of the Contractor as the System Integrator, both in relation to the IRC System and in relation to Interfacing Systems, including:
- (a) integration testing;
 - (b) controlling the introduction of New Technologies and New Services, including:
 - (i) defining Interface Specifications and Accreditation Plans; and
 - (ii) Accrediting the compliance of New Technologies and/or New Services with the relevant Interface Specification;
 - (c) providing recommendations and information on integration matters;
 - (d) ensuring compatibility between the System, the Modules and the Related Systems of the IRC System and with Interfacing Systems;
 - (e) working with the Related Contractors and the Interfacing Parties to manage the Interfaces;
 - (f) working with the Related Contractors and the Interfacing Parties to integrate the Services with the services provided by the Related Contractors and the Interfacing Parties; and
 - (g) managing Incidents and Faults.
- 1.1.4 The objective of this Schedule is to clearly set out the Contractor's role and responsibilities as the System Integrator for the IRC System and in relation to Interfacing Systems.

2 Role and Responsibilities

2.1 The System Integrator Role Overview

2.1.1 The Contractor shall, unless otherwise specified in writing by TTL, ensure that:

- (a) it takes all necessary steps to ensure compatibility between the IRC System, the System, the Services, the Related Systems and the Interfacing Systems, including conducting all testing of any Interfaces and Data Feeds;
- (b) it takes responsibility for the introduction of Changes, New Technologies and/or New Services, the design, build, integration testing, operation and maintenance of any Interfaces with any member of the TTL Group or any other Interfacing Party, Related Contractor or any of their providers (including all Existing Interfaces) and any other points of actual or possible integration, inter-operability or interface with the IRC System, the System and/or the Services (or any parts thereof);
- (c) it takes responsibility for maintaining the integrity of the IRC System, the Interfaces and the Services in relation to any Change;
- (d) it makes all necessary written recommendations and provides all expertise, records, information, documentation, data and assistance in order for any member of the TTL Group and any other Interfacing Party, Related Contractor and their providers to ensure that the design and implementation of any Change or any New Technologies and/or New Services will successfully interface, integrate and inter-operate with the IRC System, the System and the Services (and each part thereof); and
- (e) it takes all actions to manage and, where possible, resolve, any Incidents, Faults or System Failures in relation to the interfacing, integration or inter-operation of any Changes, New Technologies and/or New Services with the IRC System, the System and the Services (or any part thereof) on a 'fix first and deal with responsibility later' basis, regardless of whether such Incident, Fault or System Failure was or may have been caused by the act or omission of the Contractor, any Related Contractor, any member of the TTL Group or any other Interfacing Party (or any providers to any of the aforementioned). Without prejudice to paragraph 2.9, the Contractor shall promptly devote such additional time and resources to resolve any Incident, Fault or System Failure as soon as possible and to avoid its recurrence and the provisions of paragraphs 2.3.19 and 2.9.4 (as the context requires) shall apply in relation to any contractual relief and ability to recover costs,

(the "**System Integrator**" role).

2.1.2 The Contractor shall comply with the System Design and Operating Principles set out in Schedule 9.2 (System Design & Operating Principles) and shall manage any non-compliance in accordance with paragraph 3.4 of Schedule 9.1 (Technical Authority).

2.2 Integration Testing

2.2.1 The Contractor shall perform integration testing in accordance with the testing procedures and test assurance process set out in paragraph 4.6 of Schedule 10.2 (Programme and Project Lifecycle) and shall:

- (a) designate from the Service Commencement Date an Integration Manager to liaise with TTL on all integration issues; and
- (b) accredit New Technologies and New Services that are to Interface with the System in accordance with paragraph 2.3.

2.3 Introduction of New Technologies and New Services

2.3.1 The Contractor shall ensure that New Technologies and New Services are introduced in a controlled manner including by:

- (a) defining Interface Specifications and Accreditation Plans as set out in paragraphs 2.3.2 to 2.3.9 below;
- (b) performing integration testing as set out in paragraph 2.2 above; and
- (c) Accrediting the compliance of New Technologies and/or New Services with the relevant Interface Specification as set out in paragraphs 2.3.10 to 2.3.21 below.

Defining Interface Specifications and Accreditation Plans

2.3.2 The Parties shall use the processes set out in Schedule 12.3 (Contract Variation Procedure) to determine the Interface Specifications and any Accreditation Plans that are to be developed in relation to the introduction or possible introduction of any New Service and/or New Technology.

2.3.3 When requested by TTL in accordance with Schedule 12.3 (Contract Variation Procedure), the Contractor shall prepare, submit and revise in accordance with Schedule 11.1 (Document Management) such that they are fit for purpose:

- (a) Interface Specification(s) in respect of any actual or proposed New Technology and/or New Service; and
- (b) a draft Accreditation Plan for the purposes of accrediting the compliance of any actual or proposed New Technology and/or New Service with the relevant Interface Specification, if required by TTL,

and the Contractor shall Assure each Interface Specification and/or Accreditation Plan in accordance with Schedule 10.5 (Assurance).

2.3.4 The Contractor shall, as part of the process in Schedule 12.3 (Contract Variation Procedure), specify the amount or basis of any additional payment for the Contractor in respect of the preparation and implementation of the Interface Specification and/or Accreditation Plan and such additional payment shall be reasonable and demonstrable. The Contractor shall not be able to recover any such additional payment unless and until it is agreed by the Parties pursuant to a Variation.

2.3.5 The Contractor shall ensure that each Interface Specification:

- (a) complies with the minimum requirements set out in any applicable Variation from time to time, but without limiting the Contractor's obligations in respect of Assurance, to allow the particular New Technology and/or New Service to interface, integrate and inter-operate with the System and the Services (and each part thereof);

- (b) insofar as it is reasonably practicable, identifies for the relevant Interfacing Party or Related Contractor any matters, risks or actions which it should reasonably consider in the operation of the Interface and making any changes to the Interfacing System or Related System, as applicable, to minimise any potential impact on the IRC System, the Services and the end-to-end customer experience;
- (c) takes into account the operation of the IRC System, the System and the Services, on the one hand, and the operation of the New Technologies and/or New Services (of which the Contractor is aware) on the other hand;
- (d) takes into account the Contractor's role as System Integrator as part of the Services in respect of any Interfacing Parties, Related Contractors or other Third Parties and takes into account the principles set out in Schedule 7.1 (System Integration Overview); and
- (e) defines any processes and procedures and other aspects as to how the Contractor, relevant members of the TTL Group and/or any Interfacing Party or Related Contractor interact in order to provide the New Services and/or New Technologies and each Party shall comply, and shall procure compliance by (in the case of the Contractor) any member of the Contractor Group and any Sub-Contractors and (in the case of TTL) any member of the TTL Group and any Interfacing Party or Related Contractor, with those processes and procedures and with the provisions of this Contract.

2.3.6 The Contractor shall ensure that each Accreditation Plan specifies:

- (a) the detailed process, requirements and any agreed milestones for Accrediting the relevant New Technology and/or New Service; and
- (b) the timetable and any programme or relevant agreed milestone dates in relation to Accreditation of the relevant New Technology and/or New Service,

and the Contractor shall ensure that the Accreditation Plan only serves to Accredite the relevant External Interface against the relevant Interface Specification, not the Interfacing Party or Related Contractor itself or any provider of the Interfacing System or Related System, or any part thereof, the identity and suitability of which TTL shall be free to determine in its absolute discretion.

2.3.7 Where required by TTL from time to time, the Contractor shall promptly, and in any event within five (5) Business Days (or such other period agreed in writing by TfL acting reasonably) following a request by TTL, update the Interface Specification and/or Accreditation Plan and Assure those updates in accordance with the procedure set out in Schedule 10.5 (Assurance).

2.3.8 The Contractor shall, in accordance with the process set out in Schedule 12.3 (Contract Variation Procedure):

- (a) specify any Variations to the Interfaces, the System and/or the Services to accommodate the introduction of the relevant New Technology and/or New Service, including the building of capabilities for the efficient monitoring of the Interface in accordance with paragraph 2.3 of Schedule 4.1 (Service Delivery) and the building of relevant parts of the Interface, in a manner in which compatibility will be achieved between the IRC System, the System and the Services (and each part thereof) and the New Technologies and/or New Services;
- (b) specify an appropriate performance measuring and monitoring, reporting, investigation and rectification procedure for the New Technology and/or New Service to facilitate the Contractor remedying any System Failure as soon as reasonably possible (in advance of responsibility for such System Failure being identified, agreed or determined by TTL);
- (c) specify appropriate watchdog software and diagnostics to detect and report System Incidents, Incidents, System Faults and Faults and any other issues relating to the provision of the Services or any part thereof, related Service Failures where such watchdog software and diagnostics is in addition to that provided by the Contractor pursuant to Schedule 4.1 (Service Delivery); and
- (d) provide within five (5) days, or such longer period as may be agreed with TTL acting reasonably, of a request by TTL all other records, information, documentation, data and assistance as TTL may reasonably request in order for TTL to establish any business case for, or otherwise develop or assess, any New Technology and/or New Service.

2.3.9 The Contractor acknowledges and agrees that any member of the TTL Group may:

- (a) undertake any discussions at any time with any Third Party or request any Third Party to provide a proposal or otherwise conduct any tender, at the absolute discretion of TTL, in respect of any New Technologies and/or New Services;
- (b) provide to any Third Party any Accreditation Plan, Interface Specification and/or Contractor Proposed Variation in respect of Variations to the IRC System, the System and/or the Services to accommodate the introduction of the relevant New Technology and/or New Service;
- (c) invite the Contractor to participate in any such discussions or to submit any proposal or tender for the supply of any relevant New Technology and/or New Service at the absolute discretion of any member of the TTL Group; and/or
- (d) otherwise invite the Contractor to participate in the process of developing or assessing any New Technology and/or New Service as part of the System Integrator role to be performed by the Contractor.

Accrediting the compliance of New Technologies and New Services

2.3.10 If TTL determines, in its absolute discretion, that any member of the TTL Group, any Interfacing Party or any Related Contractor is to provide the New Technology and/or New Service the Contractor shall:

- (a) promptly carry out the Accreditation of the compliance of the proposed New Technology and/or New Service against the relevant Interface Specification, in accordance with paragraph 2.3.11;
- (b) carry out the Variations to the System and/or the Services to accommodate the introduction of the relevant New Technologies and/or New Services, including the building of the relevant parts of the Interface, in accordance with the relevant Variation; and
- (c) perform its System Integrator role in respect of any Accreditation process and in respect of achieving compatibility between the New Technologies and/or New Services and the System and the Services (and each part thereof), including conducting all Assurance activities pursuant to Schedule 10.5 (Assurance).

2.3.11 The Contractor shall carry out all Accreditations in an objective and transparent manner in accordance with the procedure set out in paragraphs 2.3.12 to 2.3.18 below and in accordance with the Accreditation Plan which has been Assured (or, in the absence of the necessary Assurance then in the manner required in writing by TTL), including to meet the programme or any milestones and milestone dates set out in the Accreditation Plan or any relevant Variation.

2.3.12 The Contractor shall comply with the System Design and Operating Principles specified in Schedule 9.2 (System Design & Operating Principles) and shall manage any occurrences of non-compliance in accordance with paragraph 3.4 of Schedule 9.1 (Technical Authority).

2.3.13 The Contractor shall promptly carry out the Accreditation of the compliance of the New Technology and/or New Service against the relevant Interface Specification in accordance with the Accreditation Plan and shall promptly notify TTL and any other relevant Interfacing Party or Related Contractor of the result of the Accreditation.

2.3.14 If the proposed New Technology and/or New Service does not achieve Accreditation in accordance with the Accreditation Plan, the Contractor shall:

- (a) notify TTL and any other relevant Interfacing Party or Related Contractor in writing and without delay of the reasons why the necessary Accreditation could not be established; and
- (b) promptly and proactively provide to TTL in writing a proposed mitigation and remediation plan for achieving or re-establishing the necessary Accreditation, such plan to specify the details of the failure to establish or maintain Accreditation, suggested steps that the Contractor and/or the relevant Interfacing Party, Related Contractor or provider to the Interfacing Party or Related Contractor might take to achieve or re-establish the necessary Accreditation, the additional cost to the Contractor of undertaking any such steps and a date by which the necessary Accreditation is scheduled to be achieved or re-established (a "**Remediation Plan**"), such plan to be Assured by the Contractor in accordance with Schedule 10.5 (Assurance).

- 2.3.15 As soon as possible after, but in any event within two (2) days, or such longer period as may be agreed with TTL acting reasonably, of, each occurrence of the Contractor receiving, or becoming aware of, any supplemental information with respect to any failure to establish or maintain Accreditation, the Contractor shall submit further written particulars and/or a proposed updated Remediation Plan based on such information to TTL.
- 2.3.16 Following receipt of written details and/or a proposed updated Remediation Plan in accordance with paragraph 2.3.15, and upon reasonable written notice to the Contractor, TTL may require the Contractor to provide such further supporting particulars as TTL reasonably considers necessary for Assurance in relation to the Remediation Plan.
- 2.3.17 The Contractor shall perform its System Integrator role and the obligations and requirements ascribed to it in any Remediation Plan, in accordance with the timescales set out in that Remediation Plan or, in the absence of any such timescales in that Remediation Plan, as envisaged under this Contract. The Contractor shall co-operate with the relevant Interfacing Party or Related Contractor and any provider to the Interfacing Party or Related Contractor to produce and comply with a Remediation Plan to enable the necessary Accreditation to be established or re-established as soon as possible.
- 2.3.18 Where the Contractor has complied with its obligations under this Schedule and the failure to establish or maintain the Accreditation is not primarily caused by the Contractor, its Sub-Contractors, the System and/or the Services, the Contractor shall be entitled to additional reasonable payment in respect of re-performing any Accreditation based on the amounts initially specified by the Contractor pursuant to paragraph 2.3.4 and any further additional activities in relation to the preparation and implementation of the Remediation Plan. In all cases, the Contractor shall provide sufficient documentary evidence in relation to any such additional reasonable payment.
- 2.3.19 The Contractor shall be under no obligation to integrate, inter-operate or connect any New Technologies and/or New Services in live operation unless or until such New Technologies and/or New Services have been Accredited. Notwithstanding the foregoing, TTL may in its absolute discretion instruct the Contractor to Accredite any New Technology and/or New Service and/or to carry out Variations to the System and/or the Services to accommodate the introduction of the relevant New Technology and/or New Service, even in the event that the Contractor, acting in good faith, recommends otherwise or identifies any concerns or reservations about TTL doing so. To the extent that TTL has disregarded the good faith advice of the Contractor and an act or omission of TTL, a member of the TTL Group, the Interfacing Party or Related Contractor in respect of the Interfacing System or Related System respectively, has directly caused a System Failure:
- (a) the Contractor shall be relieved from compliance with its obligations relating to:

- (i) the Services affected by such System Failure to the extent that the Contractor is unable to perform such obligations as a result of the System Failure;
 - (ii) the Interfacing System or Related System, other than its obligations as System Integrator as set out in Clause 11.2 (Systems Integrator Role) and in this Schedule; and
- (b) TTL shall indemnify the Contractor against all Losses suffered or incurred by the Contractor by reason of that System Failure,

provided that the Contractor demonstrates to TTL's reasonable satisfaction that:
 - (1) TTL has disregarded the good faith advice of the Contractor and an act or omission of TTL, a member of the TTL Group, the Interfacing Party or the Related Contractor (other than TTL's instruction to the Contractor) has directly caused the relevant System Failure; and
 - (2) the System Failure did not otherwise arise as a result of (i) any defect or inadequacy in the design of the Services, the performance of the System Integrator role, the Interface Specifications or the Accreditation process; or (ii) any failure by the Contractor to comply with its obligations under the Contract or mitigate the effects of such Accreditation or Variation against the Contractor's recommendations and resulting System Failure.

2.3.20 The Contractor shall notify TTL and any other relevant Interfacing Party or Related Contractor immediately in writing upon the Contractor becoming aware that any Accreditation previously established by the Contractor whether in relation to New Technologies or New Services or any Existing Interface ceases to be complied with for any reason and shall provide all assistance and co-operate with the relevant Interfacing Party or Related Contractor, their relevant providers and TTL in order to re-establish Accreditation as soon as possible.

2.3.21 The Contractor acknowledges and agrees that all Existing Interfaces and Interface Specifications in existence as at the Service Commencement Date shall be deemed Accredited for the purposes of this Schedule. The Contractor shall adopt such Interface Specifications and shall, immediately prior to the Service Commencement Date, and at any other time promptly upon request from TTL, provide to TTL a copy of all such Interface Specifications.

2.4 Providing Integration Recommendations and Information

2.4.1 Without prejudice to Clause 13 (Contractor Cooperation), the Contractor shall at all times co-operate fully and promptly with TTL and Operator Personnel and representatives of TTL and, where requested by TTL, any other Interfacing Party, any Related Contractor, Benefiting Party, any provider to any of the aforementioned and/or other Third Parties in relation to the IRC System, the System, the Services and any Interfaces (or any parts thereof).

2.4.2 TTL shall, where reasonably practicable, procure that Operator Personnel, Interfacing Parties and Related Contractors co-operate fully and promptly with the Contractor in relation to integration matters.

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- 2.4.3 The co-operation referred to in paragraph 2.4.1 shall include promptly providing TTL and its Personnel and representatives and, where applicable, any other Interfacing Parties, Related Contractors, Benefiting Parties, any provider to any of the aforementioned and other applicable Third Parties with:
- (a) the development of any relevant documentation;
 - (b) any other information reasonably requested by them;
 - (c) reasonable access to operational and technical staff on prior notice to answer questions;
 - (d) participation in any joint testing initiatives; and
 - (e) input in relation to any Interface.
- 2.4.4 Where the Contractor reasonably considers that the co-operation requested in connection with paragraph 2.4.3 is significantly greater than that which a competent contractor would have expected to provide in the circumstances and will incur material additional costs for the Contractor it may request that such further co-operation should be requested in accordance with Schedule 12.3 (Variation Procedure).
- 2.4.5 The Contractor shall at all times maintain a register of all Accreditation Plans, ensure such register is comprehensive, accurate and up-to-date and make the register and Accreditation Plans available to TTL and, if directed by TTL, to Interfacing Parties, Related Contractors or other Third Parties, from time to time and in any event within five (5) Business Days following a request by TTL.
- 2.4.6 The Contractor shall review, maintain and update an Interface Register, an Interface Specification Catalogue and the Interface Specifications in accordance with Schedule 7.3 (System Interfaces) and Schedule 9.1 (Technical Authority) and ensure that they are comprehensive, accurate and up-to-date. The Contractor shall make the Interface Register, Interface Specification Catalogue and Interface Specifications available to TTL and, if directed by TTL, to Interfacing Parties, Related Contractors or other Third Parties, from time to time and in any event within five (5) Business Days following a request by TTL. The Contractor shall provide to TTL such Assurance as TTL considers necessary in relation to the comprehensiveness and accuracy of the Interface Register, Interface Specification Catalogue and Interface Specifications.
- 2.4.7 In performing the Services, the Contractor shall take all necessary steps to avoid prejudicing TTL's relationship with any other Interfacing Party, any Related Contractor, any Benefiting Party, any provider to any of the aforementioned or other Third Party and not put any member of the TTL Group in breach of any contract with any other Interfacing Party, any Related Contractor, any Benefiting Party, any provider to any of the aforementioned or other Third Party (the relevant terms of which are known or provided to the Contractor or any Sub-Contractor).

2.5 Ensuring Compatibility

- 2.5.1 The Contractor shall ensure that no changes to the System, the Interfaces, and/or the Services (or any parts thereof) are, and shall use reasonable endeavours to ensure that no changes to the Related Systems of which it was or ought reasonably to have been aware are, made at any time which will or may in any way adversely affect or impact upon:

- (a) any Interfacing System of which the Contractor was or ought reasonably to have been aware;
 - (b) any External Interface or Interface Specifications, including any External Interface or Interface Specifications in existence or being developed as at the Service Commencement Date or proposed thereafter, without the prior written consent of TTL in each instance. The Contractor shall ensure that all details regarding the effect or impact upon the New Technology, the New Service, TTL, any other Interfacing Party, any provider to an Interfacing Party, the Interfacing System and/or the Contractor are promptly provided in writing to TTL;
 - (c) the Related Systems; or
 - (d) the delivery of the Services, the System and the Modules in accordance with the Service Levels.
- 2.5.2 In the event that any changes to the System, the IRC System and/or the Services, and/or any Interfaces or Interface Specifications (including any in existence or being developed as at the Service Commencement Date), are proposed by the Contractor or made in contravention of paragraph 2.5.1, the Contractor shall pay to TTL or, if directed by TTL, any other relevant Interfacing Party, Related Contractor or any provider to an Interfacing Party or Related Contractor, all costs and expenses incurred by TTL and/or any Interfacing Party or Related Contractor in achieving ongoing compatibility between the System and Services and the Interfacing System or Related Systems (as applicable), including in respect of changes required to the hardware, software or systems of the Interfacing Party, Related Contractor or TTL, to the Interface or to the System and/or the Services (or any parts thereof) themselves. The Contractor shall not be entitled to require an increase in Charges or payment of other sums under any Variation or otherwise to finance those changes.
- 2.5.3 In the event that any relevant changes are proposed in circumstances other than those set out in paragraph 2.5.2, the Contractor shall be entitled to recover its direct demonstrable costs for those changes which shall be agreed by the Parties in advance pursuant to Schedule 12.3 (Contract Variation Process).
- 2.5.4 The Contractor acknowledges and agrees that Changes affecting any Interfacing System or Related System may need to be made from time to time and the provisions of paragraphs 2.3, 2.4 and 2.5.1 to 2.5.3 above shall apply amended accordingly (*mutatis mutandis*) in respect of any Changes referred to in this paragraph 2.5.4 as if those Interfacing Systems or Related Systems were New Technologies and/or New Services.

2.6 Working with Interfacing Parties and Related Contractors

- 2.6.1 The Contractor shall prepare an **Interfacing Parties Plan** that shall cover as a minimum for all Interfacing Parties and Related Contractors with whom the Contractor interfaces throughout the Term:
- (a) a comprehensive list of all the relevant Interfacing Parties and Related Contractors;

- (b) the organisational arrangements for managing each of the Interfacing Parties and Related Contractors including the principal contacts in the Contractor's organisation and the corresponding principal contact in the Interfacing Party and Related Contractor's organisation;
- (c) the communication arrangements with the Interfacing Parties and Related Contractors that shall include for each Interfacing Party and Related Contractor:
 - (i) the Contractor's processes for communicating with the Interfacing Party and Related Contractor;
 - (ii) details of all regular meetings with the Interfacing Party and Related Contractors;
 - (iii) the means of dealing with comments on any aspects of the works and services with reference to any other relevant plans; and
 - (iv) processes agreed for access to the Interfacing Party and Related Contractor's premises; and
- (d) the contracts and commercial arrangements that are relevant to each Interfacing Party and Related Contractor with respect to performance of the Services.

2.6.2 Without prejudice to the other provisions of this Contract, where issues arise in relation to Interfacing Parties and Related Contractors, TTL may, if it considers appropriate, arrange a meeting between TTL, the Contractor and the relevant Related Contractor and/or Interfacing Party to discuss and seek to resolve the issue and the Contractor shall make available appropriate and suitably qualified Contractor Personnel to attend such meeting.

Reviewing and Updating the Interfacing Parties Plan

2.6.3 The Contractor shall review, update and re-issue the Interfacing Parties Plan to TTL at least every six (6) months following the Service Commencement Date in accordance with the Submissions Procedure and always when new Interfaces, Related Contractors and/or Interfacing Parties are identified.

Reports and Meetings with Interfacing Parties and Related Contractors

- 2.6.4 The Contractor shall keep TTL informed of all issues relating to the External Interfaces that could affect TTL's obligations with respect to the Contract, the Related Contractors, the Interfacing Parties, TTL's Personnel and/or TTL's Customers.
- 2.6.5 The Contractor shall report significant interface issues to TTL in either the Programme Portfolio Report pursuant to Schedule 10.2 (Programme and Project Lifecycle) or the Service Performance Report pursuant to Schedule 4.1 (Service Delivery) as appropriate and these issues shall then be discussed at the corresponding review meeting.
- 2.6.6 The Contractor shall maintain a record of all the Contractor's meetings with Interfacing Parties and Related Contractors and shall make copies of such available to TTL promptly upon TTL's request.

2.6.7 The Contractor shall advise TTL of the frequency of regular interface meetings with the Interfacing Parties and Related Contractors when requested by TTL. TTL shall be entitled to attend these interface meetings.

2.6.8 TTL shall be entitled to call meetings with the Interfacing Parties and Related Contractors as appropriate to meet TTL's needs and the Contractor shall ensure that suitably qualified Contractor Personnel are available to attend these meetings.

2.7 TTL Modules

2.7.1 TTL is responsible for updating the application source code relating to the TTL Modules and providing such updated source code to the Contractor for integration testing and release into the System in accordance with this Schedule and Schedule 10.1 (Change Management).

2.7.2 The Contractor shall ensure that any TTL Release under paragraph 2.7.1 does not adversely affect the performance of the System or the IRC System or the Services.

2.7.3 TTL shall, as a Dependency, ensure that any update to the application source code relating to the TTL Modules made by TTL and provided to the Contractor does not adversely affect the functionality of the relevant Module.

2.8 Service Integration

2.8.1 The Contractor's Level 1 Help Desk shall work with Related Contractors and Interfacing Parties in accordance with paragraph 3 of Schedule 4.1 (Service Delivery).

2.8.2 The Contractor shall monitor the Services at the point of handover to a Related Contractor or Interfacing Party in accordance with paragraph 4.2 of Schedule 4.1 (Service Delivery).

2.8.3 The Contractor shall monitor the IRC System using Dashboards and/or the OSS.

2.8.4 The Contractor shall manage Incidents and Faults in accordance with paragraph 3 of Schedule 4.1 (Service Delivery).

2.8.5 The Contractor shall report capacity management issues relating to the IRC System to TTL and make capacity management recommendations to TTL in accordance with paragraph 4 of Schedule 8.2 (Asset Management & Maintenance).

2.8.6 The Contractor's Early Life Support shall ensure that changes do not impact the IRC System in accordance with paragraph 4.8 of Schedule 10.2 (Programme and Project Lifecycle).

2.8.7 The Contractor shall manage Major Incidents involving Related Contractors and Interfacing Parties in accordance with Schedule 8.3 (Major Incident Management).

2.8.8 The Contractor shall manage Risks relating to the IRC System in accordance with Schedule 11.2 (Risk Management).

2.9 Resolving Incidents, Faults and System Failures

2.9.1 The Contractor shall notify TTL immediately in writing upon the Contractor becoming aware of any event of, or the likely event of, a System Failure, whether or not it constitutes a failure to meet the Service Levels.

2.9.2 In the event of any System Failure, the Contractor shall:

- (a) immediately comply with the provisions of the Service Recovery Plan where applicable;
- (b) if such System Failure causes, or is likely to cause, the Contractor to fail to meet the Service Levels, invoke the Service Recovery Plan to minimise disruption to the Services, any member of the TTL Group, any other Interfacing Parties or Related Contractors, providers to Interfacing Parties or Related Contractors, Benefiting Parties and/or Customers;
- (c) immediately conduct a comprehensive examination of the System or applicable part of the System for the purposes of locating the cause of the System Failure;
- (d) carry out any required System Integrator responsibilities as set out in this Contract, regardless of whether such System Failure was or may have been caused by the act or omission of any Third Party contractor and/or as a result of any New Technology or New Service;
- (e) provide to TTL promptly on TTL's request:
 - (i) all relevant information in connection with the Services, the System, the IRC System (insofar as it has, or has access to, such information) and any Interfaces, including reports, test data, System Hardware and Software performance reports and such other information as may be required by TTL; and
 - (ii) all volumetric information and operational reports (both historical and current) as may be required by TTL,to facilitate its understanding of the best way to resolve such System Failure or prevent such System Failure recurring;
- (f) where the relevant System Failure was attributable to any Interfacing System and/or Related System, the Contractor shall give TTL all necessary co-operation in resolving the relevant System Failure by co-operating fully and expeditiously with TTL and any other relevant Interfacing Party and/or Related Contractor and their providers, as appropriate, to resolve the System Failure; and
- (g) comply with the change management procedures set out in Schedule 10.1 (Change Management) with respect to any Changes required.

2.9.3 If the Contractor reasonably considers that any Interfacing System, Interfacing Party, Related System or Related Contractor is causing damage or harm to the System and/or the Services:

- (a) the Contractor shall take such action as it reasonably considers to be proportional to the damage or harm to the System and/or the Services resulting from the continued connection of the applicable New Technology and/or any New Services (if applicable);

- (b) where reasonable in the most serious instances of such damage or harm and where connection of the Interfacing System or Related System to the System is causing damage to the System, the Contractor may disconnect the applicable Interfacing System or Related System or block the relevant Interface and such a Change shall be managed in accordance with the change management procedure set out in Schedule 10.1 (Change Management);
- (c) the Contractor shall take all reasonable steps to mitigate all effects of the damage or harm to the System and/or the Services and any relevant Interfaces as well as damage or harm to TTL, any other Interfacing Parties, Related Contractors, providers to Interfacing Parties and Related Contractors, Benefiting Parties and Customers;
- (d) the Contractor shall use all reasonable endeavours to notify TTL in advance of taking any action referred to in this paragraph 2.9.3, or otherwise within one (1) hour of taking any such action, providing full written details of the nature and extent of the damage or harm caused to the System and/or the Services;
- (e) the Contractor shall, as soon as possible but subject to written confirmation from TTL, reconnect the applicable Interfacing System or Related System, re-instate the relevant Interface and/or take any such other action in connection with the applicable Interfacing System or Related System to achieve compatibility; and
- (f) the Contractor shall comply with the change management procedures set out in Schedule 10.1 (Change Management) with respect to any Changes required.

2.9.4 It is recognised that Related Systems and Interfacing Systems are not under the Contractor's direct control (without limiting the Contractor's role as System Integrator). To the extent that an act or omission of TTL, a member of the TTL Group, an Interfacing Party or Related Contractor, or in respect of the Interfacing System or Related System, has directly caused a System Failure, except in the circumstances set out in paragraph 2.3.19 above, then:

- (a) the Contractor will be granted the relief from its obligations in relation to the Interfacing Systems or Related Systems, other than its obligations as System Integrator as set out in Clause 11.2 (Systems Integrator Role) and in this Schedule, and the Contractor will not be liable to TTL in respect of the loss of revenue or any costs arising from any part of the System and/or Services directly affected by that System Failure;
- (b) TTL shall not be entitled to reduce Service Bonuses, apply Service Credits or issue any Corrective Action Notices or terminate for breach in respect of a failure by the Contractor to provide Services to the extent such failure is the direct result of that System Failure and shall not be entitled to regard this as a breach or default for the purposes of termination or otherwise; and
- (c) TTL shall indemnify the Contractor against all Losses suffered or incurred by the Contractor as a direct result of such System Failure,

in each case, provided that the Contractor can demonstrate to TTL's reasonable satisfaction that:

- (1) TTL, the member of the TTL Group, the Interfacing Party or Related Contractor (as applicable) has breached the relevant Interface Specification and/or Accreditation Plan;
- (2) the Contractor demonstrates to TTL's reasonable satisfaction that an act or omission of TTL, the member of the TTL Group, the Interfacing Party or Related Contractor (as applicable) has directly caused the System Failure;
- (3) the System Failure did not otherwise arise as a result of (i) any defect or inadequacy in the design of the Services, the performance of the System Integrator role, the Interface Specifications or the Accreditation process or (ii) any failure by the Contractor to comply with its obligations under the Contract or mitigate the effects of such System Failure; and
- (4) the Contractor has used and is using all reasonable endeavours to work with TTL, the member of the TTL Group, the Interfacing Party or Related Contractor (as applicable) to avoid such System Failure and remedy such System Failure as soon as possible and otherwise perform its role as System Integrator.