# SCHEDULE 8.6

# BUSINESS CONTINUITY AND DISASTER RECOVERY

**VERSION CONTROL**

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APPENDIX 1 – OUTLINE BCDR PLAN

# SCHEDULE 8.6 – BUSINESS CONTINUITY AND DISASTER RECOVERY

## 1. PURPOSE

1.1 This Schedule sets out the Supplier's obligations in relation to maintaining adequate business continuity and disaster recovery arrangements in order to minimise the adverse impact of Disaster Events.

## 2. BCDR PLAN

2.1 The Outline BCDR Plan as at the Effective Date is set out in Appendix 1.

2.2 The Supplier shall, in accordance with the timescales identified within Schedule 6.1 (Transition), submit to TTL for Approval a BCDR Plan which as a minimum shall:

2.2.1 be based on the Outline BCDR Plan;

2.2.2 detail the processes and arrangements that the Supplier shall follow to ensure the continued performance of this Agreement following a Disaster Event; and

2.2.3 reflect the principles and content described in paragraphs 3, 4 and 5.

2.3 The Supplier shall submit any changes to, or updated versions of, the BCDR Plan to TTL for Approval.

2.4 Without prejudice to the testing obligations set out in paragraph 7, the BCDR Plan shall be invoked only upon the occurrence of a Disaster Event.

## 3. GENERAL PRINCIPLES AND REQUIREMENTS

3.1 The BCDR Plan shall:

3.1.1 set out how the business continuity and disaster recovery elements of the BCDR Plan connect with and relate to each other;

3.1.2 provide details of how the invocation of any element of the BCDR Plan may impact the RTO System and the performance of this Agreement and/or (to the extent known) the services delivered to the TTL by the Other SITS Suppliers;

3.1.3 contain a risk analysis, including:

(a) failure or disruption scenarios, with assessment and estimate of frequency and likelihood of occurrence; and

(b) identification of any single points of failure within the Supplier's business processes or operations, and processes for managing the risks arising from them;

3.1.4 identify key operational and business processes and procedures;

3.1.5 set out key contact details (including roles and responsibilities) for the Supplier and any relevant Sub-contractors;

3.1.6 set out a Supplier emergency management team which shall act as a point of contact for TTL and be available 24x365 in the event of a Disaster Event;

3.1.7 identify the procedures for reverting to Normal Operation;

3.1.8 set out recovery point objectives and method(s) of recovering or updating data (including TTL Data) collected (or which ought to have been collected) during a Disaster Event, to ensure that there is no more than the accepted amount of data loss and to preserve configuration and data integrity;

3.1.9 be designed so as to ensure that the adverse impact of any Disaster Event is minimised as far as reasonably possible;

3.1.10 comply with the relevant provisions of ISO/IEC 27001 (including ISO/IEC 27031), ISO/IEC 22301 and other industry standards from time to time in force; and

3.1.11 include a process for the management of disaster recovery testing.

## 4. BUSINESS CONTINUITY ASPECTS OF THE BCDR PLAN

4.1 The BCDR Plan shall set out the arrangements that are to be invoked to ensure that the Supplier's business processes and operations that underpin the performance of this Agreement remain effective, and shall include:

4.1.1 the alternative processes, options and responsibilities that may be adopted in the event of a Disaster Event; and

4.1.2 the steps to be taken by the Supplier upon resumption of Normal Operation in order to address any prevailing effect of such failure or disruption, including a root cause analysis of the failure or disruption.

4.2 The BCDR Plan shall:

4.2.1 address the various possible impacts of failure of, or disruptions to, the RTO System and the performance of this Agreement due to a Disaster Event;

4.2.2 set out the services to be provided and the steps to be taken to remedy the different levels of such failures and disruptions to the RTO System and this Agreement; and

4.2.3 set out without ambiguity the conditions and/or circumstances under which the BCDR Plan is invoked, including the procedure for invocation, details of the Supplier Personnel responsible for invocation and any input to the decision to invoke that may be required from TTL.

## 5. DISASTER RECOVERY ASPECTS OF THE BCDR PLAN

5.1 The BCDR Plan shall be designed so as to minimise the impact on TTL, TfL, the RTO System and/or this Agreement following any Disaster Event.

5.2 The BCDR Plan shall include sufficient detail of the following:

5.2.1 the technical design and build specification of the disaster recovery system;

5.2.2 details of the procedures and processes to be put in place by the Supplier in relation to the disaster recovery system and the provision of disaster recovery services and any testing of the same including but not limited to the following:

(a) data centre and disaster recovery site audits;

(b) backup methodology and details of the Supplier's approach to data back-up and data verification (including in respect of TTL Data);

(c) identification of potential Disaster scenarios;

(d) risk assessment and risk management approach;

(e) documentation of processes and procedures;

(f) hardware configuration details;

(g) network planning including details of all relevant data networks and communication links, and identification of all single points of failure;

(h) invocation rules;

(i) service recovery procedures; and

(j) the steps to be taken upon resumption of Normal Operation to address any prevailing effect or impact of the Disaster Event;

5.2.3 details of how the Supplier shall maintain the security of the RTO System and the Support Services in accordance with Good Industry Practice security management, including how any increase in vulnerability and/or risk of threats is mitigated during any period in which the BCDR Plan is invoked;

5.2.4 access controls to any disaster recovery sites used by the Supplier in relation to its obligations pursuant to this Schedule or the BCDR Plan; and

5.2.5 testing and rehearsal arrangements for the BCDR Plan.

## 6. REVIEW AND AMENDMENT OF THE BCDR PLAN

6.1 The Supplier shall review the BCDR Plan (and the risk analyses on which it is based):

6.1.1 where agreed necessary by the Parties following any change to the RTO System;

6.1.2 on a regular basis and as a minimum once every twelve (12) months; and

6.1.3 within three (3) months of the BCDR Plan (or any part) having been invoked pursuant to paragraph 8,

and if any updates to the BCDR Plan are required the Supplier shall promptly submit these to TTL in accordance with paragraph 2.3.

## 7. TESTING OF THE BCDR PLAN

7.1 The Supplier shall test the BCDR Plan on a regular basis (and in any event not less than once every twelve (12) months) and shall ensure that such testing does not cause any disruption to TTL and/or TfL's business operations.

7.2 For the avoidance of doubt, the carrying out of a test of the BCDR Plan (including a test of the BCDR Plan's procedures) shall not relieve the Supplier of any of its obligations under this Agreement.

## 8. INVOCATION OF THE BCDR PLAN

8.1 In the event of a Disaster Event, the Supplier shall immediately invoke the BCDR Plan (and shall inform TTL promptly of such invocation). In all other instances the Supplier shall invoke or test the BCDR Plan in circumstances where it considers it to be reasonably necessary to do so and in consultation with TTL whenever reasonably practicable.

8.2 The Supplier shall, in any event, use all reasonable endeavours to restore Normal Operation of the RTO System and the performance of this Agreement and to otherwise minimise the

adverse impact of any disruption to TTL, TfL, the RTO System and/or this Agreement on an urgent basis in the event of any Disaster Event.

## APPENDIX 1 – OUTLINE BCDR PLAN

# **REDACTED**