

## Call-Off Schedule 13: (Implementation Plan and Testing)

Call-Off Ref: C30669

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### **"Test Specification"**

means the specification that sets out how Tests will demonstrate that the Test Success Criteria have been satisfied, as described in more detail in Paragraph 7.2 of this Schedule;

### **"Test Strategy"**

means a strategy for the conduct of Testing as described further in Paragraph 4.2 of this Schedule;

### **"Test Success Criteria"**

in relation to a Test, the test success criteria for that Test as referred to in Paragraph 6 of this Schedule;

### **"Test Witness"**

means any person appointed by the Buyer pursuant to Paragraph 10 of this Schedule;

### **"Tester"**

means the organisation responsible for testing. Within the context of Sole Responsibility accountability this shall mean the Supplier. Within the context of Rainbow Teams or Self Directed Teams accountability for testing shall be clearly defined within the Test Strategy (since it may involve both Buyer and Supplier). Accountability may vary from Statement of Work to Statement of Work; and

### **"Testing Procedures"**

means the applicable testing procedures and Test Success Criteria set out in this Schedule.

## **2. AGILE TESTING**

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- 2.1 Testing under this Schedule shall apply to software as well as other Deliverables (for example migration of data sets).
- 2.2 When requested by the Buyer, the Supplier shall, with appropriate input from the Buyer, undertake Release planning and shall produce a Test Plan.
- 2.3 With each Agile development iteration development teams are required to incorporate the underlying ethos of Agile testing and the Supplier shall:
  - (i) write the test script;
  - (ii) write the code / perform the digital activity; and
  - (iii) test the code / activity against the test script.
- 2.4 Wherever possible Testers are required to automate testing (e.g. relevant functional test cases) and automate and execute any regression tests. This shall form part of acceptance testing.
- 2.5 Prior to release additional tests such as, but not limited to:
  - (i) load tests;
  - (ii) complete regression tests;
  - (iii) penetration tests;
  - (iv) user acceptance tests;
  - (v) integration tests;
  - (vi) deployment tests; and
  - (vii) Release readiness testsas agreed within the Test Plan, shall be executed by the Tester.
- 2.6 The Supplier shall develop reusable test scripts in a modular manner which can be incorporated within a larger library of routinely run test scripts.
- 2.7 The Test Strategy will define how testing within the context of iterative agile development interacts with the broader testing at Deliverable, Statement of Work and Call-Off Contract levels.

### **3. HOW TESTING SHOULD WORK**

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- 3.1 All Tests conducted by the Tester shall be conducted in accordance with the Test Strategy, Test Specification and, as appropriate within an agile context, the Test Plan.
- 3.2 The Tester shall not submit any Deliverable for Testing:
  - 3.2.1 unless the Tester is reasonably confident that it will satisfy the relevant Test Success Criteria;
  - 3.2.2 until the Buyer has issued a Satisfaction Certificate in respect of any prior, dependant Deliverable(s); and
  - 3.2.3 until the Parties have agreed the Test Plan and the Test Specification relating to the relevant Deliverable(s).
- 3.3 Where agreed within the Test Plan, the Tester shall use reasonable endeavours to submit each Deliverable for Testing or re-Testing by or before the date set out in the Implementation Plan for the commencement of Testing in respect of the relevant Deliverable.
- 3.4 Agile iterative tests, as agreed within the Test Strategy, shall align with the iterative development cycle and shall contribute to, but not necessarily be reflected in, the Deliverable level testing regime described within this Schedule.
- 3.5 Prior to the issue of a Satisfaction Certificate, the Buyer shall be entitled to review the relevant Test Reports and the Test Issue Management Log.

## **4. PLANNING FOR TESTING**

- 4.1 As part of the first relevant Statement of Work under the Call-Off Contract, the Supplier shall develop a relevant Test Strategy as soon as practicable after the SOW Start Date but in any case no later than twenty (20) Working Days after the SOW Start Date.
- 4.2 The initial Test Strategy shall include:
  - 4.2.1 an overview of how Testing will be conducted in relation to the Implementation Plan relevant to the Statement of Work;
  - 4.2.2 the process to be used to capture and record Test results and the categorisation of Test Issues;
  - 4.2.3 the procedure to be followed should a Deliverable fail a Test, fail to satisfy the Test Success Criteria or where the Testing of a

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Deliverable produces unexpected results, including a procedure for the resolution of Test Issues;

- 4.2.4 the procedure to be followed to sign off each Test;
  - 4.2.5 the process for the production and maintenance of Test Reports and a sample plan for the resolution of Test Issues;
  - 4.2.6 the names and contact details of the Buyer and the Supplier's Test representatives;
  - 4.2.7 a high level identification of the resources required for Testing including Buyer and/or third party involvement in the conduct of the Tests;
  - 4.2.8 the technical environments required to support the Tests; and
  - 4.2.9 the procedure for managing the configuration of the Test environments.
- 4.3 The Test Strategy shall be approved by the Buyer.
- 4.4 As new Statements of Work are initiated, the Test Strategy is required to be refined to reflect the specific needs of each Statement of Work and shall reflect the Test Strategy required under the Call-Off Contract as a whole.

## **5. PREPARING FOR TESTING**

- 5.1 As defined within the Test Strategy, the Tester shall develop Test Plans and submit these for Approval as soon as practicable but in any case no later than twenty (20) Working Days prior to the start date for the relevant Testing as specified in the relevant Implementation Plan.
- 5.2 Each Test Plan shall include as a minimum:
- 5.2.1 the relevant Test definition and the purpose of the Test, the Milestone to which it relates, the requirements being Tested and, for each Test, the specific Test Success Criteria to be satisfied; and
  - 5.2.2 a detailed procedure for the Tests to be carried out.
- 5.3 The Buyer shall not unreasonably withhold or delay its approval of the Test Plan provided that the Tester shall implement any reasonable requirements of the Buyer in the Test Plan.

## **6. PASSING TESTING**

- 6.1 The Test Success Criteria for all Tests shall be agreed between the Parties as part of the relevant Test Plan pursuant to Paragraph 5.

## **7. HOW DELIVERABLES WILL BE TESTED**

- 7.1 Following approval of a Test Plan, the Tester shall develop the Test Specification for the relevant Deliverables as soon as reasonably practicable



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and in any event at least 10 Working Days prior to the start of the relevant Testing (as specified in the Implementation Plan).

#### **7.2 Each Test Specification shall include as a minimum:**

- 7.2.1 the specification of the Test data, including its source, scope, volume and management, a request (if applicable) for relevant Test data to be provided by the Buyer and the extent to which it is equivalent to live operational data;
- 7.2.2 a plan to make the resources available for Testing;
- 7.2.3 Test scripts;
- 7.2.4 Test pre-requisites and the mechanism for measuring them; and
- 7.2.5 expected Test results, including:
  - (a) a mechanism to be used to capture and record Test results; and
  - (b) a method to process the Test results to establish their content.

### **8. PERFORMING THE TESTS**

- 8.1 Before submitting any Deliverables for Testing the Tester shall subject the relevant Deliverables to its own internal quality control measures.
- 8.2 The Tester shall manage the progress of Testing in accordance with the relevant Test Plan and shall carry out the Tests in accordance with the relevant

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- Test Specification. Tests may be witnessed by the Test Witnesses in accordance with Paragraph 10.3.
- 8.3 The Tester shall notify the Buyer at least 10 Working Days in advance of the date, time and location of the relevant Tests and the Buyer shall ensure that the Test Witnesses attend the Tests.
- 8.4 The Buyer may raise and close Test Issues during the Test witnessing process.
- 8.5 The Tester shall provide to the Buyer in relation to each Test:
- 8.5.1 a draft Test Report not less than 2 Working Days prior to the date on which the Test is planned to end; and
  - 8.5.2 the final Test Report within 5 Working Days of completion of Testing.
- 8.6 Each Test Report shall provide a full report on the Testing conducted in respect of the relevant Deliverables, including:
- 8.6.1 an overview of the Testing conducted;
  - 8.6.2 identification of the relevant Test Success Criteria that have/have not been satisfied together with the Tester's explanation of why any criteria have not been met;
  - 8.6.3 the Tests that were not completed together with the Tester's explanation of why those Tests were not completed;
  - 8.6.4 the Test Success Criteria that were satisfied, not satisfied or which were not tested, and any other relevant categories, in each case grouped by Severity Level in accordance with Paragraph 9.1; and
  - 8.6.5 the specification for any hardware and software used throughout Testing and any changes that were applied to that hardware and/or software during Testing.
- 8.7 When a Milestone has been completed the Tester shall submit any Deliverables relating to that Milestone for Testing.
- 8.8 Each party shall bear its own costs in respect of the Testing. However, if a Milestone is not Achieved the Buyer shall be entitled to recover from the Supplier any reasonable additional costs it may incur as a direct result of further review or re-Testing of a Milestone.
- 8.9 If the Tester successfully completes the requisite Tests, the Buyer shall issue a Satisfaction Certificate as soon as reasonably practical following such successful completion.
- 8.10 Notwithstanding the issuing of any Satisfaction Certificate, the Supplier shall remain responsible for ensuring that the Testing of Deliverables are implemented in accordance with this Contract as defined within the Test Strategy.

## **9. DISCOVERING PROBLEMS**

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- 9.1 Where a Test Report identifies a Test Issue, the Parties shall agree the classification of the Test Issue using the criteria specified in Annex 1; and the Test Issue Management Log maintained by the Tester shall log Test Issues reflecting the Severity Level allocated to each Test Issue.
- 9.2 The Tester shall be responsible for maintaining the Test Issue Management Log and for ensuring that its contents accurately represent the current status of each Test Issue at all relevant times. The Tester shall make the Test Issue Management Log available to the Buyer upon request.
- 9.3 The Buyer shall confirm the classification of any Test Issue unresolved at the end of a Test in consultation with the Tester. If the Parties are unable to agree the classification of any unresolved Test Issue, the Dispute shall be dealt with in accordance with the Dispute Resolution Procedure using an expedited dispute timetable.

## **10. TEST WITNESSING**

- 10.1 The Buyer may, in its sole discretion, require the attendance at any Test of one or more Test Witnesses selected by the Buyer, each of whom shall have appropriate skills to fulfil the role of a Test Witness.
- 10.2 The Tester shall give the Test Witnesses access to any documentation and Testing environments reasonably necessary and requested by the Test Witnesses to perform their role as a Test Witness in respect of the relevant Tests.
- 10.3 The Test Witnesses:
  - 10.3.1 shall actively review the Test documentation;
  - 10.3.2 will attend and engage in the performance of the Tests on behalf of the Buyer so as to enable the Buyer to gain an informed view of whether a Test Issue may be closed or whether the relevant element of the Test should be re-Tested;
  - 10.3.3 shall not be involved in the execution of any Test;
  - 10.3.4 shall be required to verify that the Tester conducted the Tests in accordance with the Test Success Criteria and the relevant Test Plan and Test Specification;
  - 10.3.5 may produce and deliver their own, independent reports on Testing, which may be used by the Buyer to assess whether the Tests have been Achieved;
  - 10.3.6 may raise Test Issues on the Test Issue Management Log in respect of any Testing; and
- 10.4 may require the Tester to demonstrate the modifications made to any defective Deliverable before a Test Issue is closed.

## **11. AUDITING THE QUALITY OF THE TEST**

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- 11.1 The Buyer or an agent or contractor appointed by the Buyer may perform on-going quality audits in respect of any part of the Testing (each a **"Testing Quality Audit"**).
- 11.2 The Tester shall allow sufficient time in the Test Plan to ensure that adequate responses to a Testing Quality Audit can be provided.
- 11.3 The Buyer will give the Tester at least 5 Working Days' written notice of the Buyer's intention to undertake a Testing Quality Audit.
- 11.4 The Tester shall provide all reasonable necessary assistance and access to all relevant documentation required by the Buyer to enable it to carry out the Testing Quality Audit.
- 11.5 If the Testing Quality Audit gives the Buyer concern in respect of the Testing Procedures or any Test, the Buyer shall prepare a written report for the Tester detailing its concerns and the Tester shall, within a reasonable timeframe, respond in writing to the Buyer's report.
- 11.6 In the event of an inadequate response to the written report from the Tester, the Buyer (acting reasonably) may withhold a Satisfaction Certificate until the issues in the report have been addressed to the reasonable satisfaction of the Buyer.

## 12. OUTCOME OF THE TESTING

- 12.1 The Buyer will issue a Satisfaction Certificate when the Deliverables satisfy the Test Success Criteria in respect of that Test without any Test Issues.
- 12.2 If the Deliverables (or any relevant part) do not satisfy the Test Success Criteria then the Buyer shall notify the Tester and:
  - 12.2.1 the Buyer may issue a Satisfaction Certificate conditional upon the remediation of the Test Issues;
  - 12.2.2 the Buyer may extend the Test Plan by such reasonable period or periods as the Parties may reasonably agree and require the Tester to rectify the cause of the Test Issue and re-submit the Deliverables (or the relevant part) to Testing; or
  - 12.2.3 where the Supplier has Sole Responsibility and where the failure to satisfy the Test Success Criteria results, or is likely to result, in the failure (in whole or in part) by the Supplier to meet a Milestone, then without prejudice to the Buyer's other rights and remedies, such failure shall constitute a material Default.
- 12.3 Where the Supplier has Sole Responsibility, the Buyer shall be entitled, without prejudice to any other rights and remedies that it has under this Contract, to recover from the Supplier any reasonable additional costs it may

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- incur as a direct result of further review or re-Testing which is required for the Test Success Criteria for that Deliverable to be satisfied.
- 12.4 The Buyer shall issue a Satisfaction Certificate in respect of a given Milestone as soon as is reasonably practicable following:
- 12.4.1 the issuing by the Buyer of Satisfaction Certificates and/or conditional Satisfaction Certificates in respect of all Deliverables related to that Milestone which are due to be Tested; and
  - 12.4.2 performance by the Supplier to the reasonable satisfaction of the Buyer of any other tasks identified in the Implementation Plan as associated with that Milestone.
- 12.5 The grant of a Satisfaction Certificate shall entitle the Supplier to the receipt of a payment in respect of that Milestone in accordance with the provisions of any Implementation Plan and Clause 4 (Pricing and payments).
- 12.6 If a Milestone is not Achieved, the Buyer shall promptly issue a report to the Supplier setting out the applicable Test Issues and any other reasons for the relevant Milestone not being Achieved.
- 12.7 If there are Test Issues, but these do not exceed the Test Issues Threshold, then provided there are no Material Test Issues, the Buyer shall issue a Satisfaction Certificate.
- 12.8 If there is one or more Material Test Issue(s), the Buyer shall refuse to issue a Satisfaction Certificate and, without prejudice to the Buyer's other rights and remedies, such failure shall constitute a material Default should the Supplier hold Sole Responsibility
- 12.9 If there are Test Issues which exceed the Test Issues Threshold but there are no Material Test Issues, the Buyer may at its discretion (without waiving any rights in relation to the other options) choose to issue a Satisfaction Certificate conditional on the remediation of the Test Issues in accordance with an agreed Rectification Plan provided that:
- 12.9.1 any Rectification Plan shall be agreed before the issue of a conditional Satisfaction Certificate unless the Buyer agrees otherwise (in which case the Tester shall submit a Rectification Plan for approval by the Buyer within 10 Working Days of receipt of the Buyer's report pursuant to Paragraph 11.5); and
  - 12.9.2 where the Buyer issues a conditional Satisfaction Certificate, it may (but shall not be obliged to) revise the failed Milestone Date and any subsequent Milestone Date.

## **13. RISK**

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- 13.1 The issue of a Satisfaction Certificate and/or a conditional Satisfaction Certificate shall not:
- 13.1.1 operate to transfer any risk that the relevant Deliverable or Milestone is complete or will meet and/or satisfy the Buyer's requirements for that Deliverable or Milestone; or
  - 13.1.2 affect the Buyer's right subsequently to reject all or any element of the Deliverables and/or any Milestone to which a Satisfaction Certificate relates.

## **Annex 1:**

### **Test Issues – Severity Levels**

#### **1. SEVERITY 1 ERROR**

- 1.1 This is an error that causes non-recoverable conditions, e.g. it is not possible to continue using a Component.

#### **2. SEVERITY 2 ERROR**

- 2.1 This is an error for which, as reasonably determined by the Buyer, there is no practicable workaround available, and which:
- 2.1.1 causes a Component to become unusable;
  - 2.1.2 causes a lack of functionality, or unexpected functionality, that has an impact on the current Test; or
  - 2.1.3 has an adverse impact on any other Component(s) or any other area of the Deliverables;

#### **3. SEVERITY 3 ERROR**

- 3.1 This is an error which:
- 3.1.1 causes a Component to become unusable;
  - 3.1.2 causes a lack of functionality, or unexpected functionality, but which does not impact on the current Test; or
  - 3.1.3 has an impact on any other Component(s) or any other area of the Deliverables;
- but for which, as reasonably determined by the Buyer, there is a practicable workaround available;

#### **4. SEVERITY 4 ERROR**

- 4.1 This is an error which causes incorrect functionality of a Component or process, but for which there is a simple, Component based, workaround, and which has no impact on the current Test, or other areas of the Deliverables.

#### **5. SEVERITY 5 ERROR**

- 5.1 This is an error that causes a minor problem, for which no workaround is required, and which has no impact on the current Test, or other areas of the Deliverables.