SCHEDULE 14

TESTING PROCEDURES

Schedule 14 (*Testing Procedures*)

1 DEFINITIONS

In this Schedule, the following definitions shall apply:

"Component"	any constituent parts of the infrastructure for a Service, hardware or Software;
"Material Test Issue"	a Test Issue of Severity Level 1 or Severity Level 2;
"Severity Level"	the level of severity of a Test Issue, the criteria for which are described in Annex 1;
"Test Certificate"	a certificate materially in the form of the document contained in Annex 2 issued by the Authority when a Deliverable has satisfied its relevant Test Success Criteria;
"Testing Quality Audit"	has the meaning at Paragraph 11.1 of this Schedule 14;
"Test Issue"	any variance or non-conformity of a tested Deliverable from its requirements (such requirements being set out in the relevant Test Success Criteria);
"Test Issue Threshold"	in relation to the Tests applicable to a Milestone, a maximum number of Severity Level 3, Severity Level 4 and Severity Level 5 Test Issues as set out in the relevant Test Plan;
"Test Issue Management Log"	a log for the recording of Test Issues as described further in Paragraph 9.1;
"Test Plan"	a plan: (a) for the Testing of Deliverables; and (b) setting out other agreed criteria related to the achievement of Milestones, as described further in Paragraph 5;

"Test Reports"	the reports to be produced by the Supplier setting out the results of Tests;
"Test Specification"	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;
"Test Strategy"	a strategy for the conduct of Testing as described further in Paragraph 4;
"Test Success Criteria"	in relation to Implementation Services means the test success criteria for that Test as referred to in Paragraph 6 and in relation to a Change shall mean the criteria agreed in relation to such Change;
"Test Witness"	any person appointed by the Authority pursuant to Paragraph 10.1; and
"Testing Procedures"	the applicable testing procedures and Test Success Criteria set out in this Schedule.

2 RISK

2.1 The issue of a Test Certificate, a Milestone Achievement Certificate and/or a conditional Milestone Achievement Certificate shall not:

(a) operate to transfer any risk that the relevant Deliverable or Milestone is complete or will meet and/or satisfy the Authority's requirements for that Deliverable or Milestone; or

(b) affect the Authority's right subsequently to reject:

(i) all or any element of the Deliverables to which a Test Certificate relates; or

(ii) any Milestone to which the Milestone Achievement Certificate relates.

2.2 Notwithstanding the issuing of any Milestone Achievement Certificate (including the Milestone Achievement Certificate in respect of Authority to Proceed), the Supplier shall remain solely responsible for ensuring that:

(a) the Supplier Solution as designed and developed is suitable for the delivery of the Services and meets the Authority Requirements;

(b) the Services are implemented in accordance with this Contract; and

(c) each relevant Target Performance Level is met from the relevant Operational Service Commencement Date.

3 TESTING OVERVIEW

3.1 The provisions of this Schedule 14 shall apply:

(a) to each Milestone during the Implementation Phase;

(b) where agreed between the Parties including as a result of the implementation of a Change.

3.2 All Tests conducted by the Supplier shall be conducted in accordance with the Test Strategy, the Test Plans and the Test Specifications.

3.3 The Supplier shall not submit any Deliverable for Testing:

(a) unless the Supplier is reasonably confident that it will satisfy the relevant Test Success Criteria;

(b) until the Authority has issued a Test Certificate in respect of any prior, dependent Deliverable(s); and

(c) until the Parties have agreed the Test Plan and the Test Specification relating to the relevant Deliverable(s).

3.4 The Supplier shall use reasonable endeavours to submit each Deliverable for Testing or re-Testing by or before the date set out in the Implementation Plan (or as agreed as part of Change (as appropriate)) for the commencement of Testing in respect of the relevant Deliverable.

3.5 Prior to the issue of a Test Certificate, the Authority shall be entitled to review the relevant Test Reports and the Test Issue Management Log.

3.6 Any Disputes between the Authority and the Supplier regarding Testing shall be referred to the Dispute Resolution Procedure using the Expedited Dispute Timetable.

3.7 Without prejudice to the generality of Paragraph 2.7 of Schedule 13 *(Implementation Plan*), the Supplier acknowledges and agrees that the FMS Supplier is acting as a service integrator and as such:

3.7.1 the Supplier shall comply with reasonable instructions of the FMS Supplier in respect of Testing as provided to the Supplier from time to time;

3.7.2 the Supplier shall provide the FMS Supplier with such reasonable assistance as the FMS Supplier may require to enable the Overarching Project Test Strategy and the Overarching Project Test Plan to be developed and implemented;

3.7.3 without prejudice to any other rights or remedies of the Authority, the Authority may appoint the FMS Supplier to perform any of the roles or obligations of the Authority as set out in this Schedule 14; and

3.7.4 the Authority may provide the Test Strategy and Test Plan of the Supplier to the FMS Supplier from time to time.

4 TEST STRATEGY

4.1 The Supplier shall develop the final Test Strategy as soon as practicable after the Effective Date but in any case no later than twenty (20) Working Days (or such other period as the Parties may agree in writing) after the Effective Date.

4.2 The Supplier’s Test Strategy must align with the Authority's Test Strategy and the Overarching Project Test Strategy.

4.3 The Authority's Test Strategy supersedes the Supplier's Test Strategy and the Overarching Project Test Strategy and the Overarching Project Test Strategy supersedes the Supplier’s Test Strategy in the event that there is conflicting content between the documents.

4.4 The final Test Strategy shall include:

(a) an overview of how Testing will be conducted in accordance with the Implementation Plan;

(b) the process to be used to capture and record Test results and the categorisation of Test Issues;

(c) the method for mapping the expected Test results to the Test Success Criteria;

(d) the procedure to be followed if a Deliverable fails to satisfy the Test Success Criteria or produces unexpected results, including a procedure for the resolution of Test Issues;

(e) the procedure to be followed to sign off each Test;

(f) the process for the production and maintenance of Test Reports and reporting, including templates for the Test Reports and the Test Issue Management Log, and a sample plan for the resolution of Test Issues;

(g) the names and contact details of the Authority's and the Supplier's Test representatives;

(h) a high level identification of the resources required for Testing, including facilities, infrastructure, personnel and Authority and/or third party involvement in the conduct of the Tests;

(i) the technical environments required to support the Tests;

(j) an organisation chart of the testing function to include number of resources and roles;

(k) the procedure for managing the configuration of the Test environments; and

(l) identification of, to the extent relevant, how Testing may be carried out differently where it is carried out relating to a Change.

5 TEST PLANS

5.1 The Supplier shall develop Test Plans and submit these for the approval of the Authority as soon as practicable but in any case no later than ten (10) Working Days (or such other period as the Parties may agree in the Test Strategy or otherwise agree in writing) prior to the start date for the relevant Testing (as specified in the Implementation Plan (or as agreed as part of Change (as appropriate))).

5.2 Each Test Plan shall as a minimum:

(a) include 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;

(b) include a detailed procedure for the Tests to be carried out, including:

(i) the timetable for the Tests, including start and end dates;

(ii) the Testing mechanism;

(iii) dates and methods by which the Authority can inspect Test results or witness the Tests in order to establish that the Test Success Criteria have been met;

(iv) the mechanism for ensuring the quality, completeness and relevance of the Tests;

(v) the format and an example of Test progress reports and the process with which the Authority accesses daily Test schedules;

(vi) the process which the Authority will use to review Test Issues and the Supplier's progress in resolving these in a timely basis;

(vii) the Test Schedule;

(viii) the re-Test procedure, the timetable and the resources which would be required for re-Testing; and

(c) include the process for escalating Test Issues from a re-test situation to the taking of specific remedial action to resolve the Test Issue; and

(d) be consistent with the Overarching Project Test Plan(s).

5.3 The Authority shall not unreasonably withhold or delay its approval of the Test Plans provided that the Supplier shall incorporate any reasonable requirements of the Authority in the Test Plans.

6 TEST SUCCESS CRITERIA

The Test Success Criteria for:

(a) each Test that must be Achieved for the Supplier to Achieve either the ATP Milestone or a CPP Milestone are set out in Annex 4; and

(b) all other Tests shall be agreed between the Parties as part of the relevant Test Plan pursuant to Paragraph 5.

7 TEST SPECIFICATION

7.1 Following approval of a Test Plan, the Supplier shall develop the Test Specification for the relevant Deliverables as soon as reasonably practicable and in any event at least ten (10) Working Days (or such other period as the Parties may agree in the Test Strategy or otherwise agree in writing) prior to the start of the relevant Testing (as specified in the Implementation Plan (or as agreed as part of Change (as appropriate))).

7.2 Each Test Specification shall include as a minimum:

(a) 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 Authority and the extent to which it is equivalent to live operational data;

(b) a plan to make the resources available for Testing;

(c) Test scripts;

(d) Test pre-requisites and the mechanism for measuring them; and

(e) expected Test results, including:

(i) a mechanism to be used to capture and record Test results; and

(ii) a method to process the Test results to establish their content.

8 TESTING

8.1 Before submitting any Deliverables for Testing the Supplier shall subject the relevant Deliverables to its own internal quality control measures.

8.2 The Supplier shall manage the progress of Testing in accordance with the relevant Test Plan and shall carry out the Tests in accordance with the relevant Test Specification. Tests may be witnessed by the Test Witnesses in accordance with Paragraph 10.

8.3 The Supplier shall notify the Authority at least ten (10) Working Days (or such other period as the Parties may agree in writing) in advance of the date, time and location of the relevant Tests and the Authority shall ensure that the Test Witnesses attend the Tests, except where the Authority has specified in writing that such attendance is not necessary.

8.4 The Authority may raise and close Test Issues during the Test witnessing process.

8.5 The Supplier shall provide to the Authority in relation to each Test:

(a) a draft Test Report not less than two (2) Working Days (or such other period as the Parties may agree in writing) prior to the date on which the Test is planned to end; and

(b) the final Test Report within five (5) Working Days (or such other period as the Parties may agree in writing) 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:

(a) an overview of the Testing conducted;

(b) identification of the relevant Test Success Criteria that have been satisfied;

(c) identification of the relevant Test Success Criteria that have not been satisfied together with the Supplier's explanation of why those criteria have not been met;

(d) the Tests that were not completed together with the Supplier's explanation of why those Tests were not completed;

(e) 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

(f) the specification for any hardware and software used throughout Testing and any changes that were applied to that hardware and/or software during Testing.

9 TEST ISSUES

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 Supplier shall log Test Issues reflecting the Severity Level allocated to each Test Issue.

9.2 The Supplier 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 Supplier shall make the Test Issue Management Log available to the Authority upon request.

9.3 The Authority shall confirm the classification, including Severity, of any Test Issue unresolved at the end of a Test in consultation with the Supplier. 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 the Expedited Dispute Timetable.

10 TEST WITNESSING

10.1 The Authority may, in its sole discretion, require the attendance at any Test of one or more Test Witnesses selected by the Authority (which for the avoidance of doubt may include the FMS Supplier), each of whom shall have appropriate skills to fulfil the role of a Test Witness.

10.2 The Supplier 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:

(a) shall actively review the Test documentation;

(b) will attend and engage in the performance of the Tests on behalf of the Authority so as to enable the Authority 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;

(c) shall not be involved in the execution of any Test;

(d) shall be required to verify that the Supplier conducted the Tests in accordance with the Test Success Criteria and the relevant Test Plan and Test Specification;

(e) may produce and deliver their own, independent reports on Testing, which may be used by the Authority to assess whether the Tests have been Achieved;

(f) may raise Test Issues on the Test Issue Management Log in respect of any Testing; and

(g) may require the Supplier to demonstrate the modifications made to any defective Deliverable before a Test Issue is closed.

11 TEST QUALITY AUDIT

11.1 Without prejudice to its rights pursuant to Clause 12.2(b) (*Records, Reports, Audits & Open Book Data*), the Authority may perform on-going quality audits in respect of any part of the Testing (each a "**Testing Quality Audit**") subject to the provisions set out in the agreed Quality Plan.

11.2 The focus of the Testing Quality Audits shall be on:

(a) adherence to an agreed methodology;

(b) adherence to the agreed Testing process;

(c) adherence to the Quality Plan;

(d) review of status and key development issues; and

(e) identification of key risk areas.

11.3 The Supplier shall allow sufficient time in the Test Plan to ensure that adequate responses to a Testing Quality Audit can be provided.

11.4 The Authority will give the Supplier at least five (5) Working Days' written notice of the Authority's intention to undertake a Testing Quality Audit and the Supplier
may request, following receipt of that notice, that any Testing Quality Audit be delayed by a reasonable time period if in the Supplier's reasonable opinion, the carrying out of a Testing Quality Audit at the time specified by the Authority will materially and adversely impact the Implementation Plan.

11.5 A Testing Quality Audit may involve document reviews, interviews with the Supplier Personnel involved in or monitoring the activities being undertaken pursuant to this Schedule, the Authority witnessing Tests and demonstrations of the Deliverables to the Authority. Any Testing Quality Audit shall be limited in duration to a maximum time to be agreed between the Supplier and the Authority on a case by case basis (such agreement not to be unreasonably withheld or delayed). The Supplier shall provide all reasonable necessary assistance and access to all relevant documentation required by the Authority to enable it to carry out the Testing Quality Audit.

11.6 If the Testing Quality Audit gives the Authority concern in respect of the Testing Procedures or any Test, the Authority shall:

(a) discuss the outcome of the Testing Quality Audit with the Supplier, giving the Supplier the opportunity to provide feedback in relation to specific activities; and

(b) subsequently prepare a written report for the Supplier detailing its concerns,

and the Supplier shall, within a reasonable timeframe, respond in writing to the Authority's report.

11.7 In the event of an inadequate response to the Authority's report from the Supplier, the Authority (acting reasonably) may withhold a Test Certificate (and consequently delay the grant of a Milestone Achievement Certificate) until the issues in the report have been addressed to the reasonable satisfaction of the Authority.

12 OUTCOME OF TESTING

12.1 The Authority shall issue a Test Certificate as soon as reasonably practicable 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 Authority shall notify the Supplier and:

(a) the Authority may issue a Test Certificate conditional upon the remediation of the Test Issues;

(b) where the Parties agree that there is sufficient time prior to the relevant Milestone Date, the Authority may extend the Test Plan by such reasonable period or periods as the Parties may reasonably agree and require the Supplier to rectify the cause of the Test Issue and re-submit the Deliverables (or the relevant part) to Testing; or

(c) 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 Authority's other rights and remedies, such failure shall constitute a Notifiable Default for the purposes of Clause 27.1 (*Rectification Plan Process*).

12.3 The Authority 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 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.

13 ISSUE OF MILESTONE ACHIEVEMENT CERTIFICATE

13.1 The Authority shall issue a Milestone Achievement Certificate in respect of a given Milestone as soon as is reasonably practicable following:

(a) the issuing by the Authority of Test Certificates and/or conditional Test Certificates in respect of all Deliverables related to that Milestone which are due to be Tested; and

(b) performance by the Supplier to the reasonable satisfaction of the Authority of any other tasks identified in the Implementation Plan as associated with that Milestone (which may include the submission of a Deliverable that is not due to be Tested, such as the production of Documentation) or as agreed as part of Change (as appropriate).

13.2 The grant of a Milestone Achievement Certificate shall entitle the Supplier to the receipt of a payment in respect of that Milestone in accordance with the provisions of Schedule 15 (*Charges and Invoicing*).

13.3 If a Milestone is not Achieved, the Authority shall promptly issue a report to the Supplier setting out:

(a) the applicable Test Issues; and

(b) any other reasons for the relevant Milestone not being Achieved.

13.4 If there are Test Issues but these do not exceed the Test Issues Threshold, then provided there are no Material Test Issues, the Authority shall issue a Milestone Achievement Certificate.

13.5 Without prejudice to the Authority's other remedies the following shall constitute a Notifiable Default for the purposes of Clause 27.1 (*Rectification Plan Process*) and the Authority shall refuse to issue a Milestone Achievement Certificate where:

(a) there is one or more Material Test Issue(s); or

(b) the information required under Schedule 24 (*Reports and Records*) (*Annex 3: Records To Upload To Virtual Library*) has not been uploaded to the Virtual Library in accordance with Paragraph 3 of that Schedule.

13.6 If there are Test Issues which exceed the Test Issues Threshold but there are no Material Test Issues, the Authority may at its discretion (without waiving any rights in relation to the other options) choose to issue a Milestone Achievement Certificate conditional on the remediation of the Test Issues in accordance with an agreed Rectification Plan provided that:

(a) any Rectification Plan shall be agreed before the issue of a conditional Milestone Achievement Certificate unless the Authority agrees otherwise (in which case the Supplier shall submit a Rectification Plan for approval by the Authority within ten (10) Working Days of receipt of the Authority's report pursuant to Paragraph
13.3); and

(b) where the Authority issues a conditional Milestone Achievement Certificate, it may (but shall not be obliged to) revise the failed Milestone Date and any subsequent Milestone Date.

ANNEX 1: TEST ISSUES – SEVERITY LEVELS

1. **Severity Level 1 Test Issue:** a Test Issue that causes non-recoverable conditions, e.g. it is not possible to continue using a Component, a Component crashes, there is database or file corruption, or data loss;

2. **Severity Level 2 Test Issue:** a Test Issue for which, as reasonably determined by the Authority, there is no practicable workaround available, and which:

   2.1 causes a Component to become unusable;

   2.2 causes a lack of functionality, or unexpected functionality, that has an impact on the current Test; or

   2.3 has an adverse impact on any other Component(s) or any other area of the Services;

3. **Severity Level 3 Test Issue:** a Test Issue which:

   3.1 causes a Component to become unusable;

   3.2 causes a lack of functionality, or unexpected functionality, but which does not impact on the current Test; or

   3.3 has an impact on any other Component(s) or any other area of the Services;

   but for which, as reasonably determined by the Authority, there is a practicable workaround available;

4. **Severity Level 4 Test Issue:** a Test Issue 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 Services; and

5. **Severity Level 5 Test Issue:** a Test Issue 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 Services.

ANNEX 2: TEST CERTIFICATE

To: [***NAME OF SUPPLIER***]

FROM: [***NAME OF AUTHORITY***]

[***Date***]

Dear Sirs,

TEST CERTIFICATE

Deliverables: [***insert description of Deliverables***]

We refer to the agreement (the "**Contract**") relating to the provision of the Services between the [***name of Authority***] (the "**Authority**") and [***name of Supplier***] (the "**Supplier**") dated [***date***].

Capitalised terms used in this certificate have the meanings given to them in Schedule 1 (*Definitions*) or Schedule 14 (*Testing Procedures*) of the Contract.

[We confirm that the Deliverables listed above have been tested successfully in accordance with the Test Plan relevant to those Deliverables.]

OR

[This Test Certificate is issued pursuant to Paragraph 12.1 of Schedule 14 (*Testing Procedures*) of the Contract on the condition that any Test Issues are remedied in accordance with the Rectification Plan attached to this certificate.]*

**delete as appropriate*

Yours faithfully

[***Name***]

[Position]

acting on behalf of [***name of Authority***]

ANNEX 3: MILESTONE ACHIEVEMENT CERTIFICATE

To: [***NAME OF SUPPLIER***]

FROM: [***NAME OF AUTHORITY***]

[***Date***]

Dear Sirs,

MILESTONE ACHIEVEMENT CERTIFICATE

Milestone: [***insert description of Milestone***]

We refer to the agreement (the "**Contract**") relating to the provision of the Services between the [***name of Authority***] (the "**Authority**") and [***name of Supplier***] (the "**Supplier**") dated [***date***].

Capitalised terms used in this certificate have the meanings given to them in Schedule 1 (*Definitions*) or Schedule 14 (*Testing Procedures*) of the Contract.

[We confirm that all the Deliverables relating to Milestone [***number***] have been tested successfully in accordance with the Test Plan relevant to this Milestone [or that a conditional Test Certificate has been issued in respect of those Deliverables that have not satisfied the relevant Test Success Criteria.]]*

OR

[This Milestone Achievement Certificate is granted pursuant to Paragraph 13.1 of Schedule 14 (*Testing Procedures*) of the Contract on the condition that any Test Issues are remedied in accordance with the Rectification Plan attached to this certificate.]*

[You may now issue an invoice in respect of the Milestone Payment associated with this Milestone in accordance with the provisions of Schedule 15 (*Charges and Invoicing*)]*

**delete as appropriate*

Yours faithfully

[***Name***]

[Position]

acting on behalf of [***Authority***]

ANNEX 4: TEST SUCCESS CRITERIA/ACCEPTANCE CRITERIA

REDACTED