

ACCEPTANCE PROCESS

1. SCOPE of ACCEPTANCE PROCESS

- 1.1 This Annex applies to acceptance of all tasks modifying FC BISA under the contract ARTYSYS/00286 including formal releases of software and any associated changes to deliverable documentation and training. Such formal releases may also include the delivery of previously developed software changes under other contracted changes..

2. DESIGN REVIEWS

- 2.1 The Contractor shall host Design Reviews with the Authority whenever a new formal release of software standard is to be established. The purpose of the Design Reviews is to allow the Authority to validate that the defined technical solution meets their needs.

- 2.2 Design Reviews will consider the set of artefacts forming the core elements for the system. This includes:

- 2.2.1 System Definition Document
- 2.2.2 Technical Specification
- 2.2.3 Interface Control Documents
- 2.2.4 Use Case Scenarios

- 2.3 The Contractor shall invite the Authority to attend Design Reviews. The attendance or consultation of a suitable set of subject matter experts (including, at minimum, representatives of the user community, the Safety Working Group and Security Working Group) to perform an adequate review shall be the responsibility of the Authority.

- 2.4 At the conclusion of the Design Review, the Authority shall confirm the Design Review objectives (as defined below in 2.6.1, 2.6.2 or 2.6.3) have been met or otherwise a list of actions required to meet those objectives shall be agreed with the Contractor, including whether the Design Review or a subset thereof needs to be repeated. The Contractor shall issue minutes recording the outcome, any identified actions and any key decisions. Design Reviews will not be repeated to account for subsequently agreed changes unless the basis for the achievement of the Design Review objectives is agreed to be invalidated.

(Where Authority fails to attend Design Reviews then Contractor shall proceed with the Design Review(s) and the Design Review objectives (as defined below in 2.6.1, 2.6.2 or 2.6.3) shall be deemed to have been met, except where the Authority's lack of attendance is due to Acts of Nature)

- 2.5 Depending on the nature of the change, it may be mutually agreed by the Contractor and the Authority that Design Reviews can be combined, performed via telephone or be accomplished via document review.

- 2.6 The Design Reviews shall be as follows:

2.6.1 System Design Review (SDR)

2.6.1.1 This review will be at system level, addressing the software and / or hardware aspects required in the new software release / hardware production standard and the impact on the overall system. The top-level objectives of this meeting are for the Contractor to summarise and confirm acceptability to the Authority of:

- The scope of the change, including the approach to meeting the associated changes to System Requirements and any resulting limitations
- The architectural-level impact;
- Behavioural clarifications arising from initial design;
- Identified impact and approach to:
 - dependence on services provided by GFE and platform/hosting infrastructure;
 - platform/hosting infrastructure utilisation (e.g. bandwidth, disk space etc.);
 - Safety;
 - Security;
 - Supportability;
 - Training;
- Approach to Verification and Integration including system testing and plans for support to any external integration testing;
- Programme Schedule, GFX, Dependencies and Risks.

2.6.1.2 The pre-requisites for the SDR are that a supporting technical pack has been issued to the Authority at least ten working days (unless otherwise agreed) before the scheduled meeting date including:

- A tailored agenda including specific objectives;
- Supporting material describing the scope of change;
- Programme schedule, including dependencies on the Authority;
- Identified risks.

2.6.2 Critical Design Review (CDR)

2.6.2.1 The objective of this review is to confirm an appropriate level of design maturity has been achieved to approve the transition into implementation of a given change or the aspects of a number of changes within an area of the system. Multiple CDRs may cover discrete elements of the changes to enable parallel streams of work, where mutually agreed. In such circumstances, a final CDR will take place to consolidate, unless otherwise agreed.

2.6.2.2 The CDR addresses the impact on the Functional Baseline arising from the changes. The criterion for determining whether the required level of design maturity has been achieved will be through a demonstration that the Technical Specification meets the stated level of compliance to the relevant System Requirements as agreed in the System Design Review.

2.6.2.3 The pre-requisites for the CDR are that a supporting technical pack has been issued to the Authority at least ten working days (unless otherwise agreed) before the scheduled meeting date including:

- A comprehensive set of Technical Specification updates applicable to the scope of the CDR noting that further minor changes may be identified during the implementation;
- A mapping from Technical Specification updates to applicable System Requirements to allow the approach to compliance to be assessed;
- Supporting screen layouts where necessary to understand the design noting that the HCI specifications themselves are not a pre-requisite to CDR.

3. SOFTWARE ENGINEERING RELEASE DEMONSTRATION

3.1 For engineering releases of FC BISA v4.0, there will be a requirement for delivery of Software Engineering Releases. Delivery and Acceptance of the individual Software Engineering Releases shall be:

3.2 Unless otherwise agreed, Software Engineering Releases shall be accepted via a demonstration event of no more than one business day's duration to be conducted on the Contractor's Premises. The Contractor shall invite the Authority and supporting user representatives to attend. Terminals and other systems will be operated by Contractor personnel to Contractor-defined scripts. The scope and attendance of the demonstration shall be agreed with the Authority at least ten business days prior to the event, unless otherwise agreed. The attendance of a suitable set of subject matter experts shall be the responsibility of the Authority.

3.3 The acceptance criteria shall be that the demonstration meets the agreed scope and observations recorded do not have a material impact on the demonstration of the new functionality.

3.4 In the event that acceptance criteria stated in paragraph 3.3 have not been met, the Contractor shall be responsible for resolving observations in accordance with a rectification plan agreed with the Authority at the earliest opportunity and which may include a second demonstration event.

3.5 Following a successful demonstration event or agreement to proceed without a further demonstration event, the Contractor shall issue a brief report summarising the scope of the demonstration and the status of observations raised during the event(s), together with a Release Note and an Acceptance Certificate for the Authority to approve.

(Where Authority fails to attend Design Reviews then Contractor shall proceed with the Design Review(s) and the Design Review objectives (as defined below in 2.6.1, 2.6.2 or 2.6.3) shall be deemed to have been met, except where the Authority's lack of attendance is due to Acts of Nature)

4. SYSTEM ACCEPTANCE TESTING

4.1 The acceptance activities described in this section are required for the formal releases R1, R2 and R3 of FC BISA v4.0. For Release 1 only, SAT (System Acceptance Testing) will consist of a single test event consisting of two streams of testing lasting up to ten working days. The subset of message exchange scenarios to be demonstrated during SAT will be subject to agreement by the Authority.

4.2 Prior to the commencement of formal System Acceptance Testing, the Contractor shall carry out a programme of incremental development and verification to a plan agreed with the Authority. This testing does not form part of System Acceptance Testing but establishes the maturity of the system prior to commencing System Acceptance Testing.

4.3 Dates for Test Readiness Reviews or witnessed testing shall be agreed mutually between the Contractor and the Authority and the Authority shall be provided with at least ten working days' notice prior to the required attendance.

4.4 User Exploratory Testing

4.4.1 The start of the acceptance test process is User Exploratory Testing (UET). This process aims to de-risk the formal acceptance and provide user community representatives with an opportunity to familiarise themselves with a mature build of the system on its target environment and raise any observations. Part of the purpose of UET is to allow user representatives to develop an informed view of the impact of outstanding defects on realistic usage prior to Factory Acceptance Testing (FAT) Test Readiness Review (TRR).

4.4.2 UET will normally be carried out during final defect clearance activities when a build is available that is functionally complete and has undergone dry runs of all new or modified system tests. The Contractor shall hold a briefing meeting at the start of UET where known defects that are not residual from previous releases are identified.

4.4.3 The Contractor shall host UET which is planned to last for no more than five working days and utilise up to 5 terminals. The scope, scripting and execution of the tests shall be the responsibility of the Authority but the Contractor shall provide support for configuration and reset of terminals, capture of log files and analysis of observations raised. The Contractor shall host a wash-up meeting each day to capture any observations and provide feedback. The final such meeting shall include agreement of any actions required prior to FAT TRR.

4.5 Factory Acceptance Testing

4.5.1 Test Readiness Review

4.5.1.1 Following UET the Contractor shall host a Test Readiness Review with the Authority to confirm that the build of the System is suitable for entry into the Factory Acceptance Test (FAT).

4.5.1.2 The pre-requisites for holding the TRR are that:

- The Technical Specification has been agreed with the Authority;

- The set of tests and test scripts to run during FAT have been agreed with the Authority;
- A dry-run of the test scripts to be run during FAT has been completed and resulting observations sentenced by the Contractor Design Authority team;
- Any defect observations not previously declared at the start of UET shall be declared to the Authority five working days prior to the TRR.

4.5.1.3 At the Test Readiness Review the Contractor shall present:

- A summary of the extent of Contractor test activities and their results including regression testing and where applicable, hardware environmental qualification testing;
- Open defect observation reports excluding those that are observable on the previous formal release of the system;
- Open observation reports sentenced to Critical or prioritised by the OR Prioritisation Meetings as "DO", regardless of whether those are system defects.
- All observation reports raised from UET.

4.5.1.4 The TRR shall be deemed to pass unless the identified observations are not deemed acceptable against the Observation Acceptance Criteria (see Section 4.8).

4.5.2 Factory Acceptance Test (FAT)

4.5.2.1 The purpose of FAT is to demonstrate that new or changed functional requirements are met. The Authority (including suitable representation from the user community) will be invited to witness FAT and the Contractor will record all observations raised.

4.5.2.2 The pre-requisite for holding the FAT is that TRR has been passed.

4.5.2.3 The Contractor shall execute the detailed step-by-step test scripts agreed with the Authority. A small number of tests (up to 25% of the scheduled period) may also be selected to demonstrate that no undue regression has occurred.

4.5.2.4 The Authority may choose to witness only a portion of the tests corresponding to new/changed functional requirements; for example where verification of a single requirement requires many hours to demonstrate. In such a case, a test run witnessed by the Contractor's Quality Manager shall be carried out and results reported prior to the final FAT wash-up meeting.

4.5.2.5 If a test accidentally deviates from a script it may be necessary to restart the test in order to ensure that the driving requirement is demonstrated. Where practical, FAT tests should be conducted on a representative target environment. However, not all requirements can readily be demonstrated on the target environment and the Contractor will determine the most suitable environment for a given test.

4.5.2.6 A wash-up meeting will be held on each day of FAT to discuss observations raised and sentence them against the Observation Acceptance Criteria (Section 4.8). FAT shall be deemed to have been successfully completed once the Observation Acceptance Criteria have been met. Where an observation is not related to the purpose of the test (to verify specific requirements) but has been observed incidentally, the associated test will be considered to pass.

4.6 User Acceptance Testing

4.6.1 Test Readiness Review

4.6.1.1 Following FAT, the Contractor shall host a Test Readiness Review with the Authority to confirm that the build of the System is suitable for entry into the User Acceptance Test (UAT). The pre-requisites for holding the TRR are that:

- The scenarios and supporting data and test scripts to run during UAT have been agreed via a user workshop;
- Any agreed actions raised from FAT have been addressed;
- A dry-run of the test scripts to be run during UAT has been completed and resulting observations sentenced by the Contractor Design Authority team.

4.6.1.2 At the Test Readiness Review the Contractor shall present:

- A summary of the dry run and regression testing performed (in the event of changes since the FAT build);
- Open observation reports not considered at FAT TRR.

4.6.1.3 The TRR shall be deemed to pass unless the identified observations are not deemed acceptable against the Observation Acceptance Criteria (see Section 4.8).

4.6.2 User Acceptance Test (UAT)

4.6.2.1 The purpose of User Acceptance Test (UAT) is to demonstrate functional changes in the context of militarily relevant scenarios.

4.6.2.2 Agreed UAT scenarios shall be executed by Authority appointed user community representatives using pre-defined data under the direction of the Contractor. The attendance of a suitable set of subject matter experts shall be the responsibility of the Authority. Tests shall be executed at the Contractor's Premises on a representative target environment, although simulators may be used where external systems are necessary to support the scenario.

4.6.2.3 A wash-up meeting will be held on each day of UAT to discuss observations raised and sentence them against the Observation Acceptance Criteria (Section 4.8). UAT shall be deemed to have been successfully completed once the Observation Acceptance Criteria have been met.

4.7 Completion Of System Acceptance Testing

4.7.1 Following completion of UAT, the results shall be analysed and presented to the Authority in a Test Closeout Report together with a System Acceptance Test Completion Certificate. This Test Closeout Report shall summarise (or refer to other documents summarising):

- 4.7.1.1 The test strategy;
- 4.7.1.2 The scope and results of Contractor testing;
- 4.7.1.3 Observations raised from UET;
- 4.7.1.4 The scope and observations raised from FAT;
- 4.7.1.5 The scenarios and observations raised from UAT.

4.7.2 The Authority will provide its agreement, comments or amendments for incorporation or its rejection of the Test Closeout Report and System Acceptance Certificate within 5 (five) business days. The Contractor shall either action comments or amendments for incorporation in the document or shall discuss with the Authority to reach mutual agreement on the appropriate changes necessary to enable a resubmission of the final document. Should the Authority provide no comments within this review period, this shall constitute agreement.

4.8 Observation Acceptance Criteria

4.8.1 The default observation acceptance criteria shall be:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

4.8.2 Where observations are outstanding or identified during the acceptance test process, they shall be excluded from the observation acceptance criteria if any of the following apply:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

5. DOCUMENTATION ACCEPTANCE

5.1 The process for acceptance of Deliverable documentation shall be as:

5.1.1 The Contractor shall provide drafts of documents where specified at least 30 (thirty) business days in advance of its required delivery date. The Contractor shall notify the Authority at least ten business days prior to the delivery of the draft.

5.1.2 The Authority will provide its agreement, comments or amendments for incorporation or its rejection of the document within 15 (fifteen) business days of issue of the draft document, using an agreed format. Rejection of an initial draft shall only be in circumstances where an initial draft is deemed unsuitable to be considered a draft due to a lack of appropriate content, for example if a document breakdown structure contains only headings or outline descriptions of what is to be included in a document. Unless otherwise agreed, should the Authority provide no comments within this review period, the Contractor shall proceed on the basis of the document as drafted or advise accordingly.

5.1.3 The Contractor shall either action comments or amendments for incorporation in the document or shall discuss with the Authority to reach mutual agreement on the appropriate changes necessary to enable a resubmission 10 (ten) business days after receipt of the Authority's comments. Where discussions are deemed necessary to agree changes or incorporation of comments, the Contractor shall arrange and host a meeting with the Authority to discuss the comments. If the Contractor offers at least two available dates with a minimum of 5 (five) business days notice but the Authority cannot support either date then the Contractor shall proceed on the basis of the Contractor's interpretation of the Authority's comment or advise accordingly.

5.1.4 The Authority may provide its agreement, further comments or amendments for incorporation or its rejection if the document is still significantly lacking in appropriate content within 10 (ten) business days. Such rejection will be provided in writing and contain specific reasons for such rejection. Any further comments or amendments proposed by the Authority from review of a resubmission will be limited to material introduced since the original review, unless otherwise agreed. Unless otherwise agreed, should the Authority not provide its acceptance within this further review period, the Contractor shall proceed on the basis of the document as drafted or advise accordingly and identify any impacts. In the absence of Authority acceptance or should further Authority comments be provided later with additional impacts, such impacts are the responsibility of the Authority.

5.1.5 Where a document requires Authority signatures, the Contractor shall submit the final version containing such signatures within 10 business days of signature.

5.1.6 The Authority and the Contractor may agree alternative periods and methods of review by written agreement. Where individual Technical Specification changes have been formally agreed under the observation reporting process, further review is limited to material introduced after the original review.

5.1.7 Document delivery may be via email if appropriate according to size and classification and the required format stated in the Schedule of Requirements.

6. TRAINING COURSES ACCEPTANCE

6.1 The process for acceptance of Training Courses shall be:

6.1.1 The Contractor and the Authority shall agree: the scope of the course; the location(s); date(s); and any facilities to be provided by the Authority; at least ten (10) business days in advance. Acceptance shall be achieved upon completion of the delivery of the training course and associated documentation provided each item in the agreed scope has been addressed.

7. ACCEPTANCE CRITERIA

7.1. The criteria for acceptance of the System shall be:

7.1.1. Successful completion of the System Acceptance Testing described in paragraph 4.7 above, taking account of any agreements reached iaw paragraph 4.8.4.

7.1.2. Acceptance of Certificate of Design, identifying and incorporating the accepted documentation, as follows:

7.1.2.1. Functional Baseline;

7.1.2.2. Safety Case Pt 2 Report

7.1.2.3. RMADS

7.1.2.4. Concessions, waivers and limitations of use;

7.1.3. Acceptance of any documentation or deliverables required for System Acceptance specified in the relevant task.

7.2. The Authority is obliged to accept the System before adopting it for operational use (including trials or end user training), unless otherwise agreed. The System shall be deemed accepted upon entering operational use.