TEST PLAN

1.0 Introduction

This section provides an overview of the entire test document. This document describes both the test plan and the test procedure.

1.1 Goals and objectives

Overall goals and objectives of the test process are described.

1.2 Statement of scope

A description of the scope of software testing is developed. Functionality/features/behavior to be tested is noted. In addition any functionality/features/behavior that is not to be tested is also noted.

1.3 Major constraints

Any business, product line or technical constraints that will impact the manner in which the software is to be tested are noted here.

2.0 Test Plan

This section describes the overall testing strategy and the project management issues that are required to properly execute effective tests.

2.1 Software (SCIís) to be tested

The software to be tested is identified by name. Exclusions are noted explicitly.

2.2 Testing strategy

The overall strategy for software testing is described.

2.2.1 Unit testing

The strategy for unit tested is described. This includes an indication of the components that will undergo unit tests or the criteria to be used to select components for unit test. Test cases are NOT included here.

2.2.2 Integration testing

The integration testing strategy is specified. This section includes a discussion of the order of integration by software function. Test cases are NOT included here.

2.2.3 Validation testing

The validation testing strategy is specified. This section includes a discussion of the order of validation by software function. Test cases are NOT included here.

2.2.4 High-order testing

The high-order testing strategy is specified. This section includes a discussion of the types of high order tests to be conducted, the responsibility for those tests. Test cases are NOT included here.

2.3 Testing resources and staffing

Specialized testing resources are described and staffing is defined.

2.4 Test work products

The work products produced as a consequence of the testing strategy are identified.

2.5 Test record keeping

Mechanisms for storing and evaluating test results are specified.

2.6 Test metrics

A description of all test metrics to be used during the testing activity is noted here.

2.7 Testing tools and environment

A description of the test environment, including tools, simulators, specialized hardware, test files, and other resources is presented here.

2.8 Test schedule

A detailed schedule for unit, integration, and validation testing as well as high order tests is described.

3.0 Test Procedure

This section describes as detailed test procedure including test tactics and test cases for the software.

3.1 Software (SCIís) to be tested

The software to be tested is identified by name. Exclusions are noted explicitly.

3.2 Testing procedure

The overall procedure for software testing is described.

3.2.1 Unit test cases

The procedure for unit testing is described for each software component (that will be unit tested) is presented. This section is repeated for all components i.

3.2.1.2 Stubs and/or drivers for component i

3.2.1.3 Test cases component i

3.2.1.4 Purpose of tests for component i

3.2.1.5 Expected results for component i

3.2.2 Integration testing

The integration testing procedure is specified.

3.2.2.1 Testing procedure for integration

3.2.2.2 Stubs and drivers required

3.2.2.3 Test cases and their purpose

3.2.2.4 Expected results

3.2.3 Validation testing

The validation testing procedure is specified.

3.2.3.1 Testing procedure for validation

3.2.3.3 Expected results

3.2.3.4 Pass/fail criterion for all validation tests

3.2.4 High-order testing (a.k.a. System Testing)

The high-order testing procedure is specified. For each of the high order tests specified below, the test procedure, test cases, purpose, specialized requirements and pass/fail criteria are specified. It should be noted that not all high-order test methods noted in Sections 3.2.4.n will be conducted for every project.

3.2.4.1 Recovery testing

3.2.4.2 Security testing

3.2.4.3 Stress testing

3.2.4.4 Performance testing

3.2.4.5 Alpha/beta testing

3.2.4.6 Pass/fail criterion for all validation tests

3.3 Testing resources and staffing

Specialized testing resources are described and staffing is defined. The role of any ITG is also defined.

3.4 Test work products

The work products produced as a consequence of the testing procedure are identified.

3.5 Test record keeping and test log

Mechanisms for storing and evaluating test results are specified. The test log is used to maintain a chronological record of all tests and their results.