Integration Test Plan

Eindhoven, January 15, 2010

ITP-1.0.3108

TU/e Technische Universiteit Eindhoven University of Technology

Where innovation starts

Project Manager:
Wilco Belgraver Thissen, 0514143

Quality Assurance Manager:
Jelle Hellings, 0592127

Senior management:
Mark van den Brand, HG 5.59
Lou Somers, HG 5.36

Advisor:
Erik Luit, HG 7.12

Customer:
Natalia Sidorova, HG 7.84

Project team:
Roy Berkeveld, 0608170
Gijs Direks, 0611093
Michael van Duijkeren, 0535368
Neal van den Eertwegh, 0610024
Dion Jansen, 0590077
Koen Kivits, 0608715
Sander Leemans, 0608896
Kevin van der Pol, 0620300
Nick van der Veeken, 0587266

Computer Science, TU/e

Abstract

This document is the Integration Test Plan (ITP) of GROUP QIS. This project is part of the Software Engineering Project (2IP35) and is one of the assignments at Eindhoven University of Technology. The document complies with the ITP from the Software Engineering Standard, as set by the European Space Agency [1].

This document provides the main guidance for the Integration Test (IT) during the Detailed Design (DD) phase for the QIS application.

Contents

Document Status Sheet

Document status overview

General

Document title:	Integration Test Plan
Identification:	ITP-1.0.3108
Authors:	Gijs Direks, Neal van den Eertwegh, Nick van der Veeken
Document status:	Final

Document history

Version	*Date*	*Author*	*Reason of change*
0.0	10-11-2009	Neal	Draft
1.0	12-01-2010	Nick van der Veeken	First version

Document Change Records since previous issue

General

Date:	12-01-2010
Document title:	Integration Test Plan
Identification:	ITP-1.0.3108

Changes

Page	*Paragraph*	*Reason to change*

Chapter 1

Introduction

1.1 Purpose

The Integration Test Plan (ITP) describes the plan for testing the integrated software against the architectural design, defined in the ADD[2]. The integration tests make sure that QIS complies with the design in the Detailed Design (DD) phase of the QIS project as described in the ESA software engineering standard[1].

1.2 Overview

Integration testing is done as part of the Acceptance Test. Chapter 2 details how this is established. Because of this way of testing the remaining chapters are not applicable, and they have been marked as such.

1.3 List of definitions

ADD	Architectural Design Document
DD	Detailed Design
ESA	European Space Agency
IT	Integration Test
ITP	Integration Test Plan
SVVP	Software Validation and Verification Plan

1.4 List of references

[1] ESA Board for Software Standardization and Control (BSSC). European space agency software engineering standards, February 1991. (ESA PSS-05-0 Issue 2).

[2] Group QIS. Architectural design document. Technical report, Eindhoven University of

Technology, Computer Science, November 2009.

[3] Group QIS. Software project manangement plan. Technical report, Eindhoven University of Technology, Computer Science and Engineering, sep 2009.

[4] Group QIS. User requirements document. Technical report, Eindhoven University of Technology, Computer Science, September 2009.

Chapter 2

Test plan

The software to be tested is QIS. QIS must conform to the design as stated in the ADD[2]. The integration between each defined component should be tested.

Integration testing of QIS is done manually by testing for conformance of QIS with the requirements in the URD[4] that apply to the interaction between components. These tests are exectuted already during development, as specified in section 6.4.1 of the SPMP [3]. Integration is tested when a branch is merged into the trunk.

At the end of the DD phase, when all components of QIS have been developed, an overall integration test is done using the tests specified in the ATP. All tests in the ATP are executed. The tests in the ATP cover the integration testing of all components. Reports of failed ATP tests regarding system testing are documented as specified in the ATP.

No automatic system tests are performed, therefore the remaining sections of this document are not applicable.

2.1 Test items

This section is not applicable.

2.2 Features to be Tested

This section is not applicable.

2.3 Test deliverables

This section is not applicable.

2.4 Testing tasks

This section is not applicable.

2.5 Environmental needs

This section is not applicable.

2.6 Test case pass/fail criteria

This section is not applicable.

Chapter 3

Test case specifications

This section is not applicable.

Chapter 4

Test procedures

This section is not applicable.

Chapter 5

Test reports

This section is not applicable.