

FAQAS Framework

IRD

Software Interface Requirements Document

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ITT-1-9873-ESA-FAQAS-IRD

Issue 1, Rev. 1

September 17, 2021

Revisions

Issue Number	Date	Authors	Description
ITT-1-9873-ESA-FAQAS-IRD Issue 1 Rev. 1	September 20th, 2021	Oscar Cornejo, Fabrizio Pastore, Enrico Viganò.	Initial release.

Contents

1	Introduction	5
2	Applicable and reference documents	6
3	Terms, definitions and abbreviated terms	7
4	System Overview	8
5	Software product assurance program implementation	9
5.1	Organization	9
5.2	Responsibilities	9
5.3	Resources	9
5.4	Reporting	9
5.5	Quality models	9
5.6	Risk management	9
5.7	Supplier selection and control	9
5.8	Methods and tools	9
5.9	Process assessment and improvement	9
5.10	Operations and maintenance (optional)	9
6	Software process assurance	10
6.1	Software development cycle	10
6.2	Projects plans	10
6.3	Software dependability and safety	10
6.4	Software documentation and configuration management	10

6.5	Process metrics	10
6.6	Reuse of software	10
6.7	Product assurance planning for individual processes and activities	10
6.8	Procedures and standards	10
7	Software product quality assurance	11
8	Compliance matrix to software product assurance requirements	12

Chapter 1

Introduction

The SPAP shall contain a description of the purpose, objective, content and the reason prompting its preparation.

Chapter 2

Applicable and reference documents

- D1 - Mutation testing survey
- D2 - Study of mutation testing applicability to space software

Chapter 3

Terms, definitions and abbreviated terms

- FAQAS: activity ITT-1-9873-ESA
- FAQAS-framework: software system to be released at the end of WP4 of FAQAS
- D2: Deliverable D2 of FAQAS, *Study of mutation testing applicability to space software*
- KLEE: Third party test generation tool, details are provided in D2.
- MLFS: Mathematical Library for Flight Software
- SUT: Software under test, i.e, the software that should be mutated by means of mutation testing.
- WP: Work package

Chapter 4

System Overview

The SPAP shall include or refer to a description of the system and software products being developed

Chapter 5

Software product assurance program implementation

5.1 Organization

5.2 Responsibilities

5.3 Resources

5.4 Reporting

5.5 Quality models

5.6 Risk management

5.7 Supplier selection and control

5.8 Methods and tools

5.9 Process assessment and improvement

5.10 Operations and maintenance (optional)

Chapter 6

Software process assurance

6.1 Software development cycle

6.2 Projects plans

6.3 Software dependability and safety

6.4 Software documentation and configuration management

6.5 Process metrics

6.6 Reuse of software

6.7 Product assurance planning for individual processes and activities

6.8 Procedures and standards

Chapter 7

Software product quality assurance

Chapter 8

Compliance matrix to software product assurance requirements