DO Qualification Kit

Software Quality Assurance Plan (SQAP)

R2017a

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DO Qualification Kit: Software Quality Assurance Plan (SQAP)

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Document Title: **Software Quality Assurance Plan for <*Project*>.**

**Document Number: *<DocNo>***

Revision: ***<Revision>***

Project: **<*Project*>**

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| --- | --- | --- |
| Approvals: |  |  |
| *<Name1>*, Author |  | Date |
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| *<Name 3>*, Engineering |  | Date |
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| *<Name 4>*, Quality Engineering |  | Date |

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|  |  |  |  |  |
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# Introduction

## Purpose and Scope

The purpose of this document is to provide the Software Quality Assurance Plan (SQAP) for the project <*Project*>. This document provides the planning data defined in DO-178C, Section 11.5.The certification authority uses the SQAP for a project as an establishment of the methods to be used to achieve the objectives of the software quality assurance process.

Therefore, this document explains how the software quality assurance process objectives of the project *<Project>* are satisfied, including:

* Description of the software quality assurance environment.
* Description of the software quality assurance process activities, including problem resolution.
* Definition of software quality assurance records.

The purpose of the SQAP is to establish the software quality assurance methods for the project <*Project*>.

This document provides the planning data defined in [DO-178C] Section 11.5 and [DO-331] Section MB.11.5, respectively.

You can use this SQAP template as a resource when creating a SQAP. If you are updating an existing SQAP to support Model-Based Design (MBD), you can use this template as a reference document. Although representative of SQAPs used in the industry, this SQAP template has not been reviewed, approved, or accepted by any certification authority. It is the user’s responsibility to gain approval and acceptance of their SQAP by the appropriate certification authority.

## Applicable Documents

Table 1 – Regulations and Standards

| ID | Document Title |
| --- | --- |
| DO-178C | *Software Considerations in Airborne Systems and Equipment Certification*.  RTCA, Inc., 2011 |
| DO-330 | *Software Tool Qualification Considerations*.  RTCA, Inc., 2011 |
| DO-331 | *Model-Based Development and Verification Supplement to DO-178C and DO-278A*.  RTCA, Inc., 2011 |
|  | *<List additional documents here, e.g. Advisory Circulars, EASA Certification Memos, etc.>* |

Table 2 – Company and Project Plans, Standards, and Documents

| Document | Document Title |
| --- | --- |
| PSAC | ***Plan for Software Aspects of Certification for*** <*Project*> |
| SDP | ***Software Development Plan for*** <*Project*> |
| SVP | ***Software Verification Plan for*** <*Project*> |
| SCMP | ***Software Configuration Management Plan for*** <*Project*> |
| SQAP | ***Software Quality Assurance Plan for*** <*Project*> This document. |
| SRS | ***Software Requirements Standards for*** <*Project*> |
| SDS | ***Software Design Standards for*** <*Project*> |
| SCS | ***Software Code Standards for*** <*Project*> |
| SMS | ***Software Model Standards for*** <*Project*> |
| SCI | ***Software Configuration Index for*** <*Project*> \* |
| SECI | ***Software Life Cycle Environment Configuration Index for*** <*Project*> \*\* |
| SAS | *Software Accomplishment Summary* ***for*** <*Project*> |
|  | *<List additional documents>* |

\* The information that defines the software configuration for the project <*Project*> is recorded in the *Software Configuration Index* (SCI).

\*\* The tool environment used for the project <*Project*> is defined in the *Software Life Cycle Environment Configuration Index* (SECI).

This initial release will identify the versions of completed documents, versions of the tools used, and the initial software configuration.

At the completion of the project, the SCIs and SECI will be updated with the final configuration information and final document version information.

If any of the plans are revised during the project, the reasons for the changes are captured and documented in the *Software Accomplishment Summary* (SAS).

## Referenced Documents

| ID | Document Title |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |
|  | *<List additional documents here.>* |

# Environment

## Scope

* <Describe.>

## Organizational Responsibilities and Interfaces

* <Describe.>

## Standards

* <Describe.>

## Procedures, Tools, and Methods

* <Describe.>

# 

# Authority

# Activities

## SQA Methods

* <Describe.>

## Problem Reporting, Tracking, and Corrective Action System

* <Describe.>

## Software Comformity Review

* <Describe.>

# 

# Transition Criteria

# Timing

# SQA Records

# Supplier Oversight