DO Qualification Kit

Software Verification Plan (SVP)

R2017a

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DO Qualification Kit: Software Verification Plan (SVP)

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

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Project: **<*Project*>**

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| --- | --- | --- |
| Approvals: |  |  |
| *<Name1>*, Author |  | Date |
|  |  |  |
| *<Name 2>*, Project Management |  | Date |
|  |  |  |
| *<Name 3>*, Engineering |  | Date |
|  |  |  |
| *<Name 4>*, Quality Engineering |  | Date |

| Change History | | | | |
| --- | --- | --- | --- | --- |
| Rev. | Modification / Description | Date | Author | Checked |
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# Introduction

## Purpose and Scope

The purpose of this document is to provide the Software Verification Plan (SVP) for the project <*Project*>. This document provides the planning data defined in DO-178C, Section 11.3. The certification authority uses the SVP for a project as a description of the verification procedures to be used to satisfy the software verification process objectives.

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

* Organizational responsibilities within the verification process.
* Description of the methods for establishing vefication independence.
* Description of the verification methods.
* Description of the verification environment.
* Considerations for software modifications, existing software, and software versions.

The purpose of the SVP is to describe the software verification process for the project <*Project*>.

This document provides the planning data defined in [DO-178C] Section 11.3 and [DO-331] Section MB.11.3, respectively.

You can use this SVP template as a resource when creating a SVP. If you are updating an existing SVP to support Model-Based Design (MBD), you can use this template as a reference document. Although representative of SVPs used in the industry, this SVP 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 SVP 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*> This document. |
| SCMP | ***Software Configuration Management Plan for*** <*Project*> |
| SQAP | ***Software Quality Assurance Plan for*** <*Project*> |
| 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.>* |

# Organization

## Responsibilities of the Program Manager

* <Describe.>

## Responsibilities of System Engineering

* <Describe.>

## Responsibilities of Software Engineering

* <Describe.>

## Responsibilities of System Integration and Test

* <Describe.>

## Responsibilities of Quality Assurance

* <Describe.>

## Responsibilities of the Designated Engineering Representative (DER)

* <Describe.>

# Independence

# Verification Methods

## Verification Approach

* <Describe.>

## Software Plans Verification Methods

* <Describe.>

## Software Requirements Verification Methods

* <Describe.>

## Software Design Verification Methods

* <Describe.>

## Software Code Verification Methods

* <Describe.>

## Software Integration Verification Methods

* <Describe.>

# Verification Environment

## Verification Tools and Equipment

* <Describe.>

# Transition Criteria

# Partitioning Considerations

# Compiler Assumptions

# Reverification Method

# Previously Developed Software

# Multiple-Version Dissimilar Software