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**Software Code Standard**

**of <LRU/System Name>**

**for**

**<Platform Name>**

**Template No.**

CEMILAC\_SYSGP\_SCS\_08

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**Disclaimer:**

This document is a guidance document. Applicable section / table rows may be considered. Any additional details may be added. Any not applicable section/ table rows may be deleted. The template is very general and vary with process to process followed by Development Agency. The document may be fine-tuned with the TAA for finalization.

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# Introduction

Software Code Standards define the programming languages, methods, rules, and tools to be used to code the software.

Software Design Standards defines the methods, rules, and tools to be used to develop the software architecture and low-level requirements

# Purpose and Scope

This document is used to provide guidelines to develop low-level requirements and software architecture for <LRU\_NAME>. This is one of the major lifecycle data to be generated during the planning phase of the project in accordance with Section 4.5 and 11.10 of RTCA/DO-178C.

This document describes naming conventions, restrictions for source code.

#  Applicable Documents

Define the list of all applicable documents in following sections:

## External Documents

Define the list of all applicable documents of external origin, relevant for this project with Document Name, Document No., Issue and Date.

## Internal Documents

Define the list of all applicable documents of internal origin, relevant for this project with Document Name, Document No., Issue and Date.

##  Part Number and Nomenclature

Define the details of all software components having unique part number and nomenclature to identify them through the software development life cycle.

#  Acronyms and Abbreviations

Define all the abbreviations and acronyms are listed with their expanded names.

#  Programming Language

Define the boundaries and guidelines for how a programming language should be used in a project to ensure that the language usage is well defined, controlled and consistent with the project need. Potentially restricting the use of certain feature to maintain quality, security or clarity in the code.

# Presentation Standards

## 3.1 Source Code Presentation Standard

Define the guidelines that dictate how the source code should be formatted to assure reliability, consistency, and maintainability across project.

For example, line length restriction, indentation, and blank line usage.

##  Code Document Standard

Define the guideline that specify how the document the source code to ensure the code purpose functionality and changes are clear to current and future developer.

For example, name of author, revision history, inputs and outputs, and affected global data.

# Naming Convections

Define all the Naming Convections to be used during the coding process to determine the different elements in a code base.

Example- Components, Subprograms, Variables, and Constants etc.

# Coding Conditions and Constraints

Define the conditions and constraint that are imposed on coding to ensure the final product is reliable, maintainable and align with the airborne system objective.

Example- the degree of coupling between software components and the complexity of logical or numerical expressions and rationale for their use.

# Constraint On Coding Tools

Define limitation or guidelines placed on selection and usage of software tools during development. These constrain ensure that the output produce is more reliable, consistent and maintainable.