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IEEE Standard for Application of Systems Engineering on Defense Programs

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IEEE Standard for Application of Systems Engineering on Defense Programs

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Software & Systems Engineering Standards Committee
of the
IEEE Computer Society

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Abstract: The requirements for the application of ISO/IEC/IEEE 15288, System Life Cycle Processes for defense systems engineering needs are provided in this standard. This standard implements ISO/IEC/IEEE 15288 for use by United States Department of Defense (DoD) organizations and other defense agencies in acquiring systems or systems engineering support. While primarily supporting the acquirer-supplier agreement mode, this standard also can be used to support the other modes: use by organizations, projects, and process assessors. This standard provides the basis for selection, negotiation, agreement, and performance of necessary systems engineering activities and delivery of products, while allowing flexibility for both innovative implementation and tailoring of the specific systems engineering process(es) to be used by system suppliers, either contractors or government system developers, integrators, maintainers, or sustainers.

Keywords: 15288, acquisition, agreement processes, allocated baseline, attributes, defense program, Department of Defense, functional baseline, IEEE 15288.1™, information management, life cycle processes, organizational project-enabling processes, outputs, process activities, process outcomes, process tasks, product baseline, project assessment, system life cycle, systems engineering, technical management processes, technical processes

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Introduction

This introduction is not part of IEEE Std 15288.1-2014, IEEE Standard for Application of Systems Engineering on Defense Programs.

For effective and efficient application of ISO/IEC/IEEE 15288 on defense programs, additional application requirements are needed. ISO/IEC/IEEE 15288 is written in a general manner to address all types of systems and different modes of application. Thus, it does not have requirements specific to the use by defense projects that facilitate effective implementation of an acquirer-supplier agreement, such as use in defense contracts.

This standard implements ISO/IEC/IEEE 15288 for application on defense programs, providing the defense-specific language and terminology to help ensure the correct application of acquirer-supplier requirements for a defense program. This standard includes the expected/required outputs and associated attributes.

Contents

IEEE Standard for Application of Systems Engineering on Defense Programs

1. Overview

1.1 Scope

This standard establishes the requirements for systems engineering activities to be performed on projects of the United States (US) Department of Defense (DoD) and other defense agencies across the entire system life cycle, including the planning, acquisition, modification, and sustainment of defense systems. It provides the foundation for systems engineering within the context of ISO/IEC/IEEE 15288[1] and the acquisition environment of DoD and other defense agencies at all levels of system hierarchy. This standard provides detailed requirements for the application of the life cycle processes, activities, and tasks of ISO/IEC/IEEE 15288 for use on any defense system and includes the effective integration of agreement processes, technical processes, technical management processes, and essential specialty engineering requirements.

1.2 Purpose

This standard provides requirements for the application of ISO/IEC/IEEE 15288 for defense systems engineering needs. This standard implements ISO/IEC/IEEE 15288 for use by DoD organizations and other defense agencies in acquiring systems or systems engineering support. While primarily supporting the

[1]Information on normative references can be found in Clause 2.