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Systems and software engineering — Software life cycle processes —

Part 2: Relation and mapping between ISO/IEC/IEEE 12207:2017 and ISO/IEC 12207:2008

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the rules given in the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and systems engineering*, in cooperation with the Systems and Software Engineering Standards Committee of the IEEE Computer Society, under the Partner Standards Development Organization cooperation agreement between ISO and IEEE.

A list of all parts in the ISO/IEC/IEEE 12207 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

The processes in ISO/IEC/IEEE 12207:2017 form a comprehensive set from which an organization can construct software system life cycle models appropriate to its products and services. An organization, depending on its purpose, can select and apply an appropriate subset to fulfil that purpose.

However, ISO/IEC/IEEE 12207:2017 does not include "software-specific processes" as a specialization of system processes, as identified in ISO/IEC 12207:2008, Clause 7. Those processes are partially represented as activities, tasks and NOTEs in processes defined in ISO/IEC/IEEE 12207:2017. This document supports software engineering users of ISO/IEC 12207:2008 in applying their current processes, activities and tasks based on the previous edition to perform effectively and efficiently processes, activities and tasks in ISO/IEC/IEEE 12207:2017. This document also intends to help system engineers using ISO/IEC/IEEE 12207:2017 (or ISO/IEC/IEEE 15288:2015) collaborate with software engineers who have used ISO/IEC 12207:2008.

This document can be used in one or more of the following modes in conjunction with ISO/IEC/IEEE 12207:

— By an organization — to help use the current organizational software processes and assets derived from ISO/IEC 12207:2008 in establishing an environment of desired processes of ISO/IEC/IEEE 12207:2017.

— By a project — to help use the current project's software processes and assets derived from ISO/IEC 12207:2008 and extend these to processes of ISO/IEC/IEEE 12207:2017 to provide software systems as products and services.

— By an acquirer and a supplier — to help use the current agreement concerning processes and activities derived from ISO/IEC 12207:2008 in establishing an environment of desired processes of ISO/IEC/IEEE 12207:2017.

— By process assessors — to serve as an aid to mapping tasks and activities of the previous edition of ISO/IEC 12207:2008 to the process reference model in ISO/IEC/IEEE 12207:2017, Annex C for process assessments that may be used to support organizational process improvement.

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Systems and software engineering — Software life cycle processes —

Part 2: Relation and mapping between ISO/IEC/IEEE 12207:2017 and ISO/IEC 12207:2008

1 Scope

This document provides the mapping expressing corresponding relations between software life cycle processes in ISO/IEC/IEEE 12207:2017 and the processes in ISO/IEC 12207:2008.

These relations are demonstrated by means of mapping tables that show relationships between activities and tasks, and process outcomes.

This mapping assists users of ISO/IEC 12207:2008 to transition to using ISO/IEC/IEEE 12207:2017.

This document will help users understand the differences between the reference processes and requirements of the two editions of ISO/IEC/IEEE 12207, and any potential gaps or process enhancements that can be needed in seeking conformance to and/or using ISO/IEC/IEEE 12207:2017. Also, this document provides to such users the mapping which helps to identify corresponding process outcomes, activities and tasks of processes for software systems in ISO/IEC/IEEE 12207:2017.

The mapping between ISO/IEC/IEEE 12207:2017 and ISO/IEC 12207:2008 in this document can be used as a basis to continuously conduct, improve and extend current process assets including software specific process assets based on ISO/IEC 12207:2008 for effective implementation of ISO/IEC/IEEE 12207:2017. These process activities and tasks can be applied iteratively.

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2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC/IEEE 12207:2017, *Systems and software engineering — Software life cycle processes*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC/IEEE 12207:2017 apply.

ISO, IEC and IEEE maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/

— IEC Electropedia: available at http://www.electropedia.org/

— IEEE Standards Dictionary Online: available at: http://dictionary.ieee.org

NOTE Definitions for software engineering terms typically can be found in ISO/IEC/IEEE 24765, available at www.computer.org/sevocab.

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