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## Systems and software engineering — Life cycle management —

Part 2:

Guidelines for the application of ISO/IEC/IEEE 15288 (System life cycle processes)

Ingénierie des systèmes et du logiciel — Gestion du cycle de vie — Partie 2: Lignes directrices pour l'application de l'ISO/IEC/IEEE 15288 (Processus du cycle de vie du système)



#### ISO/IEC/IEEE 24748-2:2018(E)



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#### Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC | TC 1.

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of ISO/IEC JTC 1 is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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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 Software and Systems Engineering Standards Committee of the IEEE Computer Society, under the Partner Standards Development Organization cooperation agreement between ISO and IEEE.

This first edition cancels and replaces ISO/IEC TR 24748-2:2011. The changes to this edition reflect changes in ISO/IEC/IEEE 15288:2015 from the 2008 edition, as well as the movement of concept material to ISO/IEC/IEEE 24748-1:2018.

A list of all parts in the ISO/IEC/IEEE 24748 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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

#### Introduction

This document and its companion, ISO/IEC TR 24748-3 *Guide to the application of ISO/IEC 12207 (Software life cycle processes)* specifically support use of ISO/IEC/IEEE 15288 and ISO/IEC/IEEE 12207, respectively. These two guidelines continue and make use of the alignment effort evident in the two revised International Standards. Terminology, structure and content in the guidelines are aligned consistent with that in the two International Standards. Consequently, the users of ISO/IEC/IEEE 12207 and ISO/IEC/IEEE 15288 will benefit from having documents complementarily addressing all aspects of services or products over their life cycle.

Besides the above, there is also increasing recognition of the importance of ensuring that all life cycle stages, and all aspects within each stage, are supported with thorough guidance enabling alignment with process documents that focus on areas besides systems and software. This can include hardware, humans, data, processes (e.g. review process), procedures (e.g. operator instructions), facilities and naturally occurring entities (e.g. water, organisms, minerals). The concept and structure of the ISO/IEC/IEEE 24748 series is intended to allow its extension to such additional domains where that will provide value to users.

## Systems and software engineering — Life cycle management —

#### Part 2:

# Guidelines for the application of ISO/IEC/IEEE 15288 (System life cycle processes)

#### 1 Scope

This document is a guideline for the application of ISO/IEC/IEEE 15288:2015. It addresses system, life cycle, organizational, project, and process, concept application, principally through reference to ISO/IEC/IEEE 24748-1 and ISO/IEC/IEEE 15288:2015. It gives guidance on applying ISO/IEC/IEEE 15288:2015 from the aspects of strategy, planning, application in organizations, and application on projects. It also provides comparison of the differences between ISO/IEC/IEEE 15288:2015 and the prior versions, ISO/IEC 15288:2008.

This document is intended to be consistent with both ISO/IEC/IEEE 24748-1 and ISO/IEC/IEEE 15288:2015 in its treatment of life-cycle concepts and systems engineering processes.

NOTE Systems engineering for defense programs is addressed in IEEE Std 15288.1, *Application of Systems Engineering on Defense Programs*.

#### 2 Normative references

There are no normative references in this document.