### **INTERNATIONAL STANDARD**



First edition 2021-09

# Software and systems engineering — Certification of software and systems engineering professionals —

Part 3: Systems engineering

Ingénierie du logiciel — Certification des professionnels de <sup>e</sup><sup>s</sup> jciei ierie des s, l'ingénierie du logiciel —

Partie 3: Ingénierie des systèmes



Reference number ISO/IEC 24773-3:2021(E)



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Published in Switzerland

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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.

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see <u>www.iso.org/</u><u>iso/foreword.html</u>. In the IEC, see <u>www.iec.ch/understanding-standards</u>.

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, *Software and systems engineering*.

A list of all parts in the ISO/IEC 24773 series can be found on the ISO and IEC websites.

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 <u>www.iso.org/members.html</u> and <u>www.iec.ch/national</u> <u>-committees</u>.

### Introduction

The ISO/IEC 24773 series addresses the certification of professionals in software and systems engineering. ISO/IEC 24773-1 contains general requirements for such certification schemes. This document contains requirements specific to certification schemes for systems engineering professionals.

The concepts, and requirements for certification schemes contained in ISO/IEC 24773-1 and ISO/IEC 17024 apply to this document.

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### Software and systems engineering — Certification of software and systems engineering professionals —

## Part 3: **Systems engineering**

### 1 Scope

This document elaborates requirements and recommendations for certifications schemes based on ISO/IEC 24773-1, which are specific to the domain of systems engineering.

### 2 Normative reference

The following documents are referred to in the text in such a way that some or all 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 17024, Conformity assessment — General requirements for bodies operating certification of persons

ISO/IEC 24773-1:2019, Software and systems engineering — Certification of software and systems engineering professionals — Part 1: General requirements

ISO/IEC TS 17027, Conformity assessment — Vocabulary related to competence of persons used for certification of persons

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 17024, ISO/IEC TS 17027, ISO/IEC 24773-1 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at https://www.electropedia.org/

### 3.1

#### system

combination of interacting elements organized to achieve one or more stated purposes

Note 1 to entry: A system is an integrated set of elements, subsystems, or assemblies that accomplish a defined objective. These elements include products (hardware, software, firmware), processes, people, information, techniques, facilities, services, and other support elements in combination organized to achieve one or more stated purposes (see INCOSE Systems Engineering Handbook<sup>[2]</sup>).

[SOURCE: ISO/IEC/IEEE 15288:2015, 4.1.46, modified — The original notes 1, 2 and 3 to entry have been removed; a new note 1 to entry has been added.]