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ISO/ IEC/IEEE 15026-3

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Systems and software engineering — Systems and software assurance —

Part 3: **System integrity levels**

Ingénierie du logiciel et des systèmes — Assurance du logiciel et des systèmes —

Partie 3: Niveaux d'intégrité du système



ISO/IEC/IEEE 15026-3:2023(E)



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Contents			Page
Fore	Foreword		
1	Scor	oe	1
2	_	mative references	
3	Terms and definitions		
4	Defining integrity levels		
	4.1	Users of this clause	
	4.2	Appropriate area to define integrity levels	
	4.3	Specifying context of integrity levels	
		4.3.1 Specifying system-related information	
		4.3.2 Specifying risk-related information	4
	4.4	Specifying integrity level claim and integrity levels	
		4.4.1 Key concepts	
		4.4.2 Specifying an integrity level claim	
	4 5	4.4.3 Specifying a set of integrity levels	
	4.5	Specifying integrity level requirements	
		4.5.2 Specifying the justification between integrity levels and their integrity	
		level requirements	8
	4.6	Specifying the integrity level determination process	
5	Hain	g integrity levels	
Э	5.1	Users of this clause	
	5.2	Purpose for using integrity levels	
	5.3	Outcomes of using integrity levels	
6		em integrity level determination	
	6.1	General	
	6.2	Purpose of the system integrity level determination process	
	6.3	Outcome of the system integrity level determination process	12
	6.4	Activities of the system integrity level determination process	
7			
	7.1	gning system element integrity levels Purpose of the assigning system element integrity levels process	13
	7.1	Outcome of the assigning system element integrity levels process	
	7.2	Activities of the assigning system element integrity levels process	
8			
	мее 8.1	ting integrity level requirements	
	8.1	General Purpose of meeting integrity level requirements	
	8.3	Outcome of meeting integrity level requirements	
	8.4	Activities of meeting integrity level requirements	
9		eement and approval authorities	
Annex A (informative) An example of use of ISO/IEC/IEEE 15026-3			
Bibliography			
IEEE notices and abstract			22

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.

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 document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives or 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.

This third edition cancels and replaces the second edition (ISO/IEC 15026-3:2015), which has been technically revised.

The main changes are as follows:

- removal of duplicate terminological entries already included in ISO/IEC/IEEE 15026-1:2019 except for a few essential terms which are included in this edition for ease of reference;
- updates to normative references to the current edition of each reference.

A list of all parts in the ISO/IEC/IEEE 15026 series can be found on the ISO and IEC websites.

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Systems and software engineering — Systems and software assurance —

Part 3:

System integrity levels

1 Scope

This document specifies the concept of integrity levels with the corresponding integrity level requirements for achieving the integrity levels. Requirements and recommended methods are provided for defining and using integrity levels and their corresponding integrity level requirements. This document covers systems, software products, and their elements, as well as relevant external dependences.

This document is applicable to systems and software and is intended for use by:

- a) definers of integrity levels such as industry and professional organizations, standards organizations, and government agencies;
- b) users of integrity levels such as developers and maintainers, suppliers and acquirers, system or software users, assessors of systems or software and administrative and technical support staff of systems and/or software products.

One important use of integrity levels is by suppliers and acquirers in agreements, for example, to aid in assuring safety, financial, or security characteristics of a delivered system or product.

This document does not prescribe a specific set of integrity levels or their integrity level requirements. In addition, it does not prescribe the way in which integrity level use is integrated with the overall system or software engineering life cycle processes. It does, however, provide an example of use of this document in Annex A.

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, Systems and software engineering — Software life cycle processes

ISO/IEC/IEEE 15288, Systems and software engineering — System life cycle processes

ISO/IEC/IEEE 15026-1, Systems and software engineering — Systems and software assurance — Part 1: Concepts and vocabulary