### ISO/IEC/IEEE FDIS 15026-1:2024(en)

ISO/IEC /JTC 1/SC 7-N9752

Secretariat: BIS

Date: 2025-<u>07-</u>04<del>-15</del>

# Systems and software engineering — Systems and software assurance —

Part 1: Concepts
Vocabulary and vocabulary concepts

Partie 1: Concepts Vocabulaire et vocabulaire concepts

Document Preview

SO/IEC/IEEE FDIS 15026-1

https://standards.iteh.ai/catalog/standards/iso/e048a9d1-dc88-48b2-a60c-6fd458d2ff87/iso-jec-jeee-fdis-15026-

FDIS stage

### :20xx(E:2025(en)

### © ISO-2024/IEC/IEEE 2025

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or <a href="ISO's member body">ISO's member body</a> in the country of the requester.

ISO Copyright Office copyright office

CP 401 • <u>Ch. de Blandonnet 8</u> CH-1214 Vernier, Geneva

Phone: + 41 22 749 01 11

Email: E-mail: copyright@iso.org Website: www.iso.org

Published in Switzerland-

# iTeh Standards (https://standards.iteh.ai) Document Preview

<u>ISO/IEC/IEEE FDIS 15026-1</u>

https://standards.iteh.ai/catalog/standards/iso/e048a9d1-dc88-48b2-a60c-6fd458d2ff87/iso-iec-iece-fdis-15026-j

### ISO/IEC/IEEE FDIS 15026-1:2025(en)

### Contents Page

Fore	word	iv
Intro	oduction	vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
3.1	Terms related to assurance	1
3.2	Terms related to system life cycles	5
3.3	Terms related to integrity level	
3.4	Terms related to risks and dependability	7
4	Basic concepts	
4.1	General	
4.2	Assurance	
4.3	Stakeholders	
4.4	System and product	
4.5	Property	
4.6	Uncertainty and confidence	
4.7	Conditions and initiating events	
4.8	Consequences	
5	Using multiple parts of the ISO/IEC/IEEE 15026 series	15
5.1	General	
5.2	Initial usage guidance	
5.3	Relationships among parts of the ISO/IEC/IEEE 15026 series	
5.4	AuthoritiesPreylet	15
6	The ISO/IEC/IEEE 15026 series and the assurance case	16
6.1	General	
6.2	Justification of method of reasoning	16
6.3	Means of obtaining and managing evidence	17
6.4	Certifications and accreditations	18
7	The ISO/IEC/IEEE 15026 series and integrity levels	18
7.1	General	18
7.2	Risk analysis	18
8	The ISO/IEC/IEEE 15026 series and the life cycle	19
8.1	General	
8.2	Assurance activities in the life cycle	20
Bibli	iography	21
IEEE	notices and abstract	28

### :20xx(E:2025(en)

#### 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 <a href="www.iso.org/directives">www.iso.org/directives</a> or <a href="www.iso.org/directives">www.iso.org/directives<

IEEE Standards documents are developed within the IEEE Societies and the Standards Coordinating Committees of the IEEE Standards Association (IEEE-SA) Standards Board. The IEEE develops its standards through a consensus development process, approved by the American National Standards Institute, which brings together volunteers representing varied viewpoints and interests to achieve the final product. Volunteers are not necessarily members of the Institute and serve without compensation. While the IEEE administers the process and establishes rules to promote fairness in the consensus development process, the IEEE does not independently evaluate, test, or verify the accuracy of any of the information contained in its standards.

ISO and IEC draw attention to the possibility that the implementation of this document may involve the use of (a) patent(s). ISO and IEC take no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, ISO and IEC had not received notice of (a) patent(s) which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at <a href="https://patents.iec.ch">www.iso.org/patents</a> and <a href="https://patents.iec.ch">https://patents.iec.ch</a>. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>. In the IEC, see <a href="https://www.iec.ch/understanding-standards">www.iec.ch/understanding-standards</a>.

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 second edition cancels and replaces the first edition (ISO/IEC/IEEE 15026-1:2019), which has been technically revised.

The main changes are as follows:

### ISO/IEC/IEEE FDIS 15026-1:2025(en)

- definitions of terms introduced in other parts of <u>the ISO/IEC/IEEE 15026 series</u> have been added or modified;
- definitions of terms whose definitions were sourced from ISO/IEC 15288 and ISO/IEC/IEEE 24774 have been updated.

A list of all parts in the ISO/IEC/IEEE 15026 series can be found on the ISO-website 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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a> and <a href="https://www.iec.ch/national-committees">www.iso.org/members.html</a> and <a href="https://www.iec.ch/national-committees">www.iec.ch/national-committees</a>.

# iTeh Standards (https://standards.iteh.ai) Document Preview

ISO/IEC/IEEE FDIS 15026-1

https://standards.iteh.ai/catalog/standards/iso/e048a9d1-dc88-48b2-a60c-6fd458d2ff87/iso-jec-jeee-fdis-15026-