

### **BSI Standards Publication**

### Software and systems engineering — Software testing

Part 3: Test documentation



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### **National foreword**

This British Standard is the UK implementation of <a href="ISO/IEC/IEEE 29119-3:2021">ISO/IEC/IEEE 29119-3:2021</a>. It supersedes <a href="ISS ISO/IEC/IEEE 29119-3:2013">ISS ISO/IEC/IEEE 29119-3:2013</a>, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee IST/15, Software and systems engineering.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Part 3: **Test documentation** 

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## BS ISO/IEC/IEEE 29119-3:2021 **ISO/IEC/IEEE 29119-3:2021(E)**



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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/IEC documents should be noted. This document was drafted in accordance with the rules given in 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/direct

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<u>ISO/IEC/IEEE 29119-3</u> 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 29119-3:2013), which has been technically revised.

The main changes compared to the previous edition are as follows:

the concept of test conditions has been replaced by test models, as feedback on the previous edition
of this document highlighted a problem with users' understanding of 'test conditions' and their use
for deriving test cases.

A list of all parts in the ISO/IEC/IEEE 29119 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 <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> and <a href="https://www.iec.ch/national-committees"

### Introduction

The purpose of <u>ISO/IEC/IEEE 29119</u> (all parts) is to define an internationally-agreed set of standards for software testing that can be used by any organization when performing any form of software testing.

<u>ISO/IEC/IEEE 29119-1</u> introduces software testing concepts. This document uses the concepts of <u>ISO/IEC/IEEE 29119-1</u>.

ISO/IEC/IEEE 29119-2 comprises test process descriptions that define the software testing processes at the organisational level, test management level and dynamic test levels. It supports dynamic testing, functional and non-functional testing, manual and automated testing and scripted and unscripted testing, and can be utilized within any lifecycle model, including agile and traditional methodologies. Supporting diagrams describing the processes are also provided.

<u>ISO/IEC/IEEE 29119-4</u> defines software test design techniques, which can be used within any lifecycle and for any product.

ISO/IEC/IEEE 29119-5 addresses the use of keyword-driven testing.

This document defines templates and provides examples of test documentation that are produced during the test process. An overview of the test documentation is provided in Figure 1. The templates are arranged within clauses reflecting the overall test process description structure in ISO/IEC/IEEE 29119-2, i.e. by the test process in which they are being produced. Annex A contains a list of all the information items identified in Clauses 6, 7 and 8 with the corresponding level of conformance (shall/should/may) from ISO/IEC/IEEE 29119-2. Annex B contains an overview of the examples. Annexes C to R contain examples of the application of the templates. Annex S provides mappings to existing standards. Annex T explains why the concept of test conditions has been replaced by test models in this document. A Bibliography is provided at the end of the document.

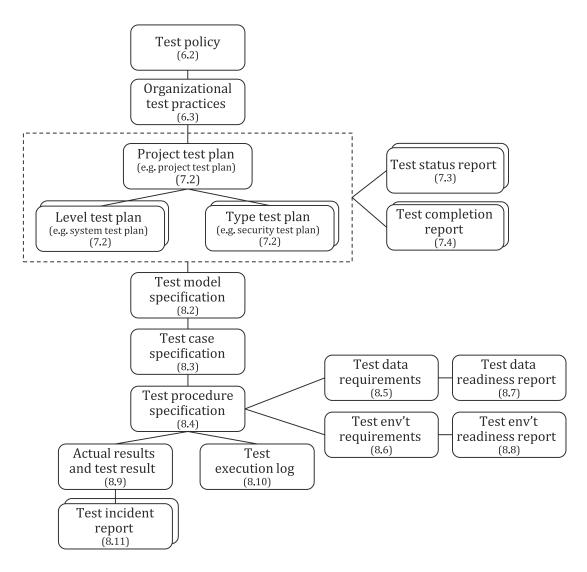


Figure 1 — Overview of test documentation

The test documentation described in this document can be on paper or in electronic form (e.g. records in test tools, spreadsheets, mind maps, white board photos).

The nomenclature of test documentation within this document (e.g. document names, section headings) and the contents of each document can be tailored to suit the unique needs of an organization, under the tailoring clause (see <u>Clause 4</u>).

This document uses the traditional concept of organizations and projects, but some organizations, especially those using an agile approach, do not organize their development in terms of projects; instead they run product development based on more long-lasting product teams. Users of this document can substitute the term 'product' for 'project', where appropriate.

ISO/IEC/IEEE 29119 (all parts) aims to provide stakeholders with the ability to manage and perform software testing in any organization. This document can be adopted under any lifecycle methodology including traditional (e.g. waterfall, iterative), agile or DevOps.