
Release Notes

Standard Glossary of Terms used in Software Testing

Version 3.2

International Software Testing Qualifications Board



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Glossary Working Group: Matthias Hamburg (Chair), Judy McKay (Vice-Chair), 2018.

Release Notes

Version 3.2 of April 15th, 2018

This new version is a major release supporting the new Foundation Level 2018 Syllabus.

Changes have been included based on one of the following reasons:

- Alignment with the Foundation Level 2018 Syllabus, including new key terms;
- Change requests raised by users of the Glossary that are either related to terms used in Foundation Level or have high priority;
- Changes of the international standards referenced in the Glossary for terms used in Foundation Level.

The changes are categorized in different change types and listed in separate tables below.

1. New terms added

The table below enlists the terms added in this release.

Name	Definition	See Also	Reference	Remark
ad hoc reviewing	A review technique carried out by independent reviewers informally, without a structured process.		After ISO 20246	Used in CTFL.
checklist-based reviewing	A review technique guided by a list of questions or required attributes.		ISO 20246	Used in CTFL.
collapsed decision table	A decision table in which combinations of inputs that are impossible or lead to the same outputs are merged into one column (rule), by setting the conditions that do not influence the outputs to don't care.			Used in CTAL TA.
compatibility	The degree to which a component or system can exchange information with other components or systems.			New product quality characteristic in ISO 25010.
contractual acceptance testing	Acceptance testing conducted to verify whether a system satisfies its contractual requirements.			Used in CTFL.
facilitator	The leader and main person responsible for an inspection or review process.	moderator	After IEEE 1028	Used in CTFL.

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Name	Definition	See Also	Reference	Remark
informal group review	An informal review performed by three or more persons.	informal review	ISO 20246	Used in CTFL.
performance testing tool	A test tool that generates load for a designated test item and that measures and records its performance during test execution.			Used in CTFL.
perspective-based reading	A review technique whereby reviewers evaluate the work product from different viewpoints.		After ISO 20246	Used in CTFL.
problem	An unknown underlying cause of one or more incidents.		ISO 24765	Problem shall not be the same as defect.
regression	A degradation in the quality of a component or system due to a change.			Used in CTFL.
regulatory acceptance testing	Acceptance testing conducted to verify whether a system conforms to relevant laws, policies and regulations.			Used in CTFL.
role-based reviewing	A review technique where reviewers evaluate a work product from the perspective of different stakeholder roles.		After ISO 20246	Used in CTFL.
scenario-based reviewing	A review technique where the review is guided by determining the ability of the work product to address specific scenarios.		ISO 20246	Used in CTFL.
sequential development model	A type of development lifecycle model in which a complete system is developed in a linear way of several discrete and successive phases with no overlap between them.			Used in CTFL.
software development lifecycle	The activities performed at each stage in software development, and how they relate to one another logically and chronologically.			Used in CTFL.
test completion	The activity that makes test assets available for later use, leaves test environments in a satisfactory condition and communicates the results of testing to relevant stakeholders.		After ISO 29119	Used in CTFL.
test execution tool	A test tool that executes tests against a designated test item and evaluates the outcomes against expected results and postconditions.			Used in CTFL.

Name	Definition	See Also	Reference	Remark
test leader	On large projects, the person who reports to the test manager and is responsible for project management of a particular test level or a particular set of testing activities.	test manager		Test leader shall not be a synonym of test manager.
test procedure	A sequence of test cases in execution order, and any associated actions that may be required to set up the initial preconditions and any wrap up activities post execution.	test script	ISO 29119	Used in CTFL.
test report	Documentation summarizing test activities and results.			Test report is no longer a synonym of test summary report, but a generic term. Used in CTFL.
test-first development	The practice of designing tests based on the specification of a test item before developing the corresponding test item.	test-driven development		Test-first development shall not be a synonym of test-driven development.

2. Terms renamed

The table below enlists the terms renamed in this release, with possibly changed definitions.

Name	Definition	Old name	See Also	Reference	Remark
black-box test technique	A procedure to derive and/or select test cases based on an analysis of the specification, either functional or non-functional, of a component or system without reference to its internal structure.	black-box test design technique			Test design technique is renamed to test technique.
defect detection percentage	The number of defects found by a test level, divided by the number found by that test level and any other means afterwards.	Defect Detection Percentage	escaped defect		Name written in lower-case; See also: escaped defects in singular.
experience-based test technique	A procedure to derive and/or select test cases based on the tester's experience, knowledge and intuition.	experience-based test design technique			Test design technique replaced by test technique. Improved the definition.

Name	Definition	Old name	See Also	Reference	Remark
functional suitability	The degree to which a component or system provides functions that meet stated and implied needs when used under specified conditions.	functionality		After ISO 25010	Functionality (quality characteristic) becomes functional suitability.
performance efficiency	The degree to which a component or system uses time, resources and capacity when accomplishing its designated functions. Synonym: performance	performance		After ISO 25010	Performance (quality characteristic) becomes performance efficiency. Improved definition.
quality characteristic	A category of product attributes that bears on quality.	quality attribute		ISO 24765	Quality characteristic is the name used throughout the ISO standards and in the syllabi.
test technique	A procedure used to derive and/or select test cases.	test design technique			Test technique is now the primary term and test design technique is a synonym.
white-box test technique	A procedure to derive and/or select test cases based on an analysis of the internal structure of a component or system.	white-box test design technique			Renamed test design technique to test technique.

3. Terms changed

The table below enlists the terms with changed definitions in this release, with possible changes in other attributes (See Also, reference).

Name	Definition	See Also	Reference	Remark
acceptance criteria	The criteria that a component or system must satisfy in order to be accepted by a user, customer, or other authorized entity.		ISO 24765	Improved the definition wording and updated the reference.



Name	Definition	See Also	Reference	Remark
accessibility	The degree to which a component or system can be used by people with the widest range of characteristics and capabilities to achieve a specified goal in a specified context of use.		After ISO 25010	Improved the definition wording and updated the reference. Removed the 'See Also' references to other quality characteristics.
adaptability	The degree to which a component or system can be adapted for different or evolving hardware and software environments.		After ISO 25010	Aligned the definition with ISO 25010. Removed the 'See Also' references to other quality characteristics.
alpha testing	Simulated or actual operational testing conducted in the developer's test environment, by roles outside the development organization.			Improved the definition wording; deleted the notes (second sentence).
analyzability	The degree to which an assessment can be made for a component or system of either the impact of one or more intended changes, the diagnosis of deficiencies or causes of failures, or the identification of parts to be modified.		After ISO 25010	Aligned the definition with ISO 25010. Removed the 'See Also' references to other quality characteristics.
audit	An independent examination of a work product, process, or set of processes that is performed by a third party to assess compliance with specifications, standards, contractual agreements, or other criteria.		After IEEE 1028	Aligned with the definition given in IEEE 1028-2008.
availability	The degree to which a component or system is operational and accessible when required for use.		After ISO 25010	Deleted the notes (second sentence) and updated the reference.
beta testing	Simulated or actual operational testing conducted at an external site, by roles outside the development organization.			Aligned the definition with alpha testing. Deleted the notes (second sentence).

Name	Definition	See Also	Reference	Remark
big-bang testing	An integration test approach in which software elements, hardware elements, or both are combined all at once into a component or an overall system, rather than in stages.	integration testing	After IEEE 610	Testing approach changed to test approach.
boundary value	A minimum or maximum value of an ordered equivalence partition.			Improved the definition to make it clearer.
boundary value analysis	A black-box test technique in which test cases are designed based on boundary values.	boundary value		Changed test design technique to test technique.
boundary value coverage	The coverage of boundary values.			Improved the definition wording by using the known term boundary value.
branch	A transfer of control from one location to a different location in the code.			Made the definition independent of the term basic block.
branch coverage	The coverage of branches.			Improved the definition wording by using the known term branch.
checklist-based testing	An experience-based test technique whereby the experienced tester uses a high-level list of items to be noted, checked, or remembered, or a set of rules or criteria against which a product has to be verified.			Test design technique replaced with test technique.
co-existence	The degree to which a component or system can perform its required functions while sharing an environment and resources with other components or systems without a negative impact on any of them.		After ISO 25010	Aligned the definition with ISO 25010. Removed the 'See Also' references to other quality characteristics.
compiler	A computer program that translates programs expressed in a high-order language into their machine language equivalents.		ISO 24765	Aligned the definition with ISO 24765.
component	A minimal part of a system that can be tested in isolation.			Generalized the definition to also include HW/SW components.

Name	Definition	See Also	Reference	Remark
component testing	The testing of individual hardware or software components.		ISO 24765	Aligned the definition with ISO 24765.
configuration item	An aggregation of work products that is designated for configuration management and treated as a single entity in the configuration management process.		ISO 24765	Aligned the definition with ISO 24765. Now it also includes testware.
confirmation testing	Dynamic testing conducted after fixing defects with the objective to confirm that failures caused by those defects do not occur anymore.			Improved definition.
control flow	The sequence in which operations are performed during the execution of a test item.		ISO 29119	Aligned the definition with ISO 29119.
control flow analysis	A form of static analysis based on a control flow graph.			Shortened the definition by using the known term control flow graph. Removed the examples.
Control flow graph	An abstract representation of all possible control flows through a component or system.			Shortened the definition by using the known term control flow.
control flow testing	A test technique in which test cases are designed on the basis of control flows.	path testing, branch testing, condition testing, decision testing, statement testing		Shortened the definition by using the known term control flow; deleted the notes (second sentence).
coverage	The degree to which specified coverage items have been determined or have been exercised by a test suite expressed as a percentage.		After ISO 29119	Aligned the definition with ISO 29119.
coverage item	An attribute or combination of attributes that is derived from one or more test conditions by using a test technique that enables the measurement of the thoroughness of the test execution.		ISO 29119	Removed the circular reference to coverage in coverage item. Aligned the definition with ISO 29119.

Name	Definition	See Also	Reference	Remark
cyclomatic complexity	The maximum number of linear, independent paths through a program. Cyclomatic complexity may be computed as $L - N + 2P$, where L = the number of edges/links in a graph, N = the number of nodes in a graph, P = the number of disconnected parts of the graph (e.g., a called graph or subroutine).		After McCabe	Replaced " $L = N + 2P$ " with " $L - N + 2P$ " in the formula.
decision	A type of statement in which a choice between two or more possible outcomes controls which set of actions will result.		ISO 29119	Aligned the definition with ISO 29119.
decision coverage	The coverage of decision outcomes.			Shortened the definition by using the known terms coverage and decision outcome.
decision outcome	The result of a decision that determines the next statement to be executed.			Reworked the definition to become independent of the term branch.
decision table	A table used to show sets of conditions and the actions resulting from them.		ISO 24765	Aligned the definition with ISO 24765.
decision table testing	A black-box test technique in which test cases are designed to execute the combinations of inputs and/or stimuli (causes) shown in a decision table.	decision table	Egler63	Replaced test design technique with test technique in the definition.
decision testing	A white-box test technique in which test cases are designed to execute decision outcomes.			Test design technique replaced with test technique.
defect	An imperfection or deficiency in a work product where it does not meet its requirements or specifications.		After IEEE 1044	Extended the scope to other work products beyond component or system; deleted the examples and the notes (second sentence).
defect density	The number of defects per unit size of a work product.		After ISO 24765	Extend the scope to other work products beyond component or system.

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defect management	The process of recognizing and recording defects, classifying them, investigating them, taking action to resolve them, and disposing of them when resolved.	incident management		Fixed the references to standards and to related terms.
defect management tool	A tool that facilitates the recording and status tracking of defects.	incident management tool		Removed the tracking of changes from the definition; deleted the notes (second sentence).
defect report	Documentation of the occurrence, nature, and status of a defect.	incident report		Shortened the definition by using the known term defect.
entry criteria	The set of conditions for officially starting a defined task.		Gilb and Graham	Shortened the definition; deleted the notes (second sentence).
equivalence partition	A portion of the value domain of a data element related to the test object for which all values are expected to be treated the same based on the specification.		After ISO 29119	Extended the definition beyond inputs and outputs.
equivalence partitioning	A black-box test technique in which test cases are designed to exercise equivalence partitions by using one representative member of each partition.		After ISO 29119	Aligned the definition with ISO 29119.
error guessing	A test technique in which tests are derived on the basis of the tester's knowledge of past failures, or general knowledge of failure modes.		ISO 29119	Aligned the definition with ISO 29119.
escaped defect	A defect that was not detected in a previous test level which is supposed to find such type of defects.	defect detection percentage		See also: defect detection percentage written in lower-case.
exit criteria	The set of conditions for officially completing a defined task.		After Gilb and Graham	Shortened the definition; deleted the notes (second sentence).

Name	Definition	See Also	Reference	Remark
expected result	The predicted observable behavior of a component or system executing under specified conditions, based on its specification or another source.		After ISO 29119	Aligned the definition with ISO 29119.
exploratory testing	An approach to testing whereby the testers dynamically design and execute tests based on their knowledge, exploration of the test item and the results of previous tests.		After ISO 29119	Changed the wording in the definition. Changed the reference to ISO 29119.
failure	An event in which a component or system does not perform a required function within specified limits.		After ISO 24765	Aligned the definition with ISO 24765 to state more precisely that a failure is caused by a defect and not by a user error.
failure rate	The ratio of the number of failures of a given category to a given unit of measure.		ISO 24765	Removed the examples; updated the reference to ISO 24765.
formal review	A form of review that follows a defined process with a formally documented output.		ISO 20246	Adapted the definition from ISO 20246. Removed the example, which created a circular reference.
functional requirement	A requirement that specifies a function that a component or system must be able to perform.		ISO 24765	Aligned the definition with ISO 24765.
functional testing	Testing conducted to evaluate the compliance of a component or system with functional requirements.	black-box testing	ISO 24765	Aligned the definition with ISO 24765.
high-level test case	A test case without concrete values for input data and expected results.	low-level test case		Removed the brackets which may create confusion; deleted the notes (second sentence).
impact analysis	The identification of all work products affected by a change, including an estimate of the resources needed to accomplish the change.		After ISO 24765	Aligned the definition with ISO 24765.

Name	Definition	See Also	Reference	Remark
incident	An event occurring that requires investigation.			Replaced "Any event" by "An event".
incident management	The process of recognizing and recording incidents, classifying them, investigating them, taking action to resolve them, and disposing of them when resolved.	defect management		Improved the wording; removed the reference to IEEE 1044.
incident management tool	A tool that facilitates the recording and status tracking of incidents.	defect management tool		Deleted the notes (second sentence).
incident report	Documentation of the occurrence, nature, and status of an incident.		ISO 29119	Aligned the definition with ISO 29119. Shortened the definition by using the known term incident.
incremental development model	A development lifecycle model in which the project scope is generally determined early in the project lifecycle, but time and cost estimates are routinely modified as the project team understanding of the product increases. The product is developed through a series of repeated cycles, each delivering an increment which successively adds to the functionality of the product.	iterative development model	After PMBOK	Aligned the definition with the PMBOK Guide.
indicator	A measure that provides an estimate or evaluation of specified attributes derived from a model with respect to defined information needs.		ISO 25040	Aligned the definition with ISO 25040.
informal review	A type of review without a formal (documented) procedure.		ISO 20246	Aligned the definition with ISO 20246.
input	Data received by a component or system from an external source.		ISO 24765	Aligned the definition with ISO 24765.
inspection	A type of formal review to identify issues in a work product, which provides measurement to improve the review process and the software development process.		After ISO 20246	Aligned the definition with ISO 24765. Removed the See also reference to peer review.



Name	Definition	See Also	Reference	Remark
interoperability	The degree to which two or more components or systems can exchange information and use the information that has been exchanged.		After ISO 25010	Aligned the definition with ISO 25010.
lifecycle model	A description of the processes, workflows, and activities used in the development, delivery, maintenance, and retirement of a system.	software lifecycle	CMMI	Improved the definition.
load testing	A type of performance testing conducted to evaluate the behavior of a component or system under varying loads, usually between anticipated conditions of low, typical, and peak usage.	performance testing, stress testing	After ISO 29119	Aligned the definition with ISO 29119.
low-level test case	A test case with concrete values for input data and expected results.	high-level test case		Removed the brackets which may create confusion; deleted the notes (second sentence).
maintainability	The degree to which a component or system can be modified by the intended maintainers.		After ISO 25010	Aligned the definition with ISO 25010.
maintenance	The process of modifying a component or system after delivery to correct defects, improve quality attributes, or adapt to a changed environment.		After ISO 14764	Improved the definition wording and updated the reference.
master test plan	A test plan that is used to coordinate multiple test levels or test types.	test plan		Improved the definition to indicate that this is an overarching test plan.
maturity	(1) The capability of an organization with respect to the effectiveness and efficiency of its processes and work practices. (2) The degree to which a component or system meets needs for reliability under normal operation.		ISO 25010	Aligned the second definition with ISO 25010. Removed the 'See Also' references to CMMI, TMMI and to other quality characteristics.
model coverage	The coverage of model elements.			Shortened the definition by using the known term coverage.

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Name	Definition	See Also	Reference	Remark
moderator	A neutral person who conducts a usability test session.	facilitator		Not used in the sense of review facilitator anymore.
monitoring tool	A software tool or hardware device that runs concurrently with the component or system under test and supervises, records and/or analyzes the behavior of the component or system.	dynamic analysis tool	ISO 24765	Added a 'See Also' reference to dynamic analysis tool. Updated the reference to standards.
non-functional requirement	A requirement that describes how the component or system will do what it is intended to do.		After ISO 24765	Aligned the definition with ISO 24765.
non-functional testing	Testing conducted to evaluate the compliance of a component or system with non-functional requirements.			Improved the definition by using the known term non-functional requirement.
offline MBT	Model-based test approach whereby test cases are generated into a repository for future execution.			Testing approach changed to test approach
online MBT	Model-based test approach whereby test cases are generated and executed simultaneously.			Testing approach changed to test approach
operational profile	An actual or predicted pattern of use of the component or system.			Shortened and improved the definition.
output	Data transmitted by a component or system to an external destination.		After ISO 24765	Aligned the definition with ISO 24765.
pair programming	An agile software development practice in which two programmers work together on one workstation.		extremeprogramming.org	Aligned the definition with the original one from Extreme Programming which is clearer.
path coverage	The coverage of paths.			Shortened and improved the definition by using the known term coverage.

Name	Definition	See Also	Reference	Remark
peer review	A form of review of work products performed by others qualified to do the same work.		After ISO 20246	Aligned the definition with ISO 20246. Peers are not colleagues at the same organizational level but rather colleagues who are qualified to do the same work.
postcondition	The expected state of a test item and its environment at the end of test case execution.			Improved the definition wording.
precondition	The required state of a test item and its environment prior to test case execution.			Improved the definition wording.
product risk	A risk impacting the quality of a product.	risk		Stated the relationship of risk to product more precisely.
product-based quality	A view of quality, wherein quality is based on a well-defined set of quality characteristics. These characteristics must be measured in an objective and quantitative way. Differences in the quality of products of the same type can be traced back to the way the specific quality characteristics have been implemented.	manufacturing-based quality, quality characteristic, transcendent-based quality, user-based quality, value-based quality Tags No tags attached.		Quality attribute renamed to quality characteristic.
project risk	A risk that impacts project success.	risk		Stated the relationship of risk to project more precisely.
quality risk	A product risk related to a quality characteristic.	quality characteristic, product risk		Quality attribute renamed to quality characteristic.

Name	Definition	See Also	Reference	Remark
regression testing	Testing of a previously tested component or system following modification to ensure that defects have not been introduced or have been uncovered in unchanged areas of the software, as a result of the changes made.			Improved the definition wording.
reliability	The degree to which a component or system performs specified functions under specified conditions for a specified period of time.		After ISO 25010	Aligned the definition with ISO 25010.
requirement	A provision that contains criteria to be fulfilled.		ISO 24765	Aligned the definition with ISO 24765.
requirements phase	The period of time in the software lifecycle during which the requirements for a software product are defined and documented.		ISO 24765	Aligned the definition with ISO 24765.
review	A type of static testing during which a work product or process is evaluated by one or more individuals to detect issues and to provide improvements.		After IEEE 1028	Improved the wording. Deleted the examples. Restricted to static testing.
reviewer	A participant in a review, who identifies issues in the work product.		After ISO 20246	Improved the wording. Deleted the note (second sentence).
risk analysis	The overall process of risk identification and risk assessment.			Aligned the definition with the usage of the term in the syllabi.
risk assessment	The process to examine identified risks and determine the risk level.	product risk, project risk, risk, risk impact, risk level, risk likelihood		Aligned the definition with the usage of the term in the syllabi.
risk identification	The process of finding, recognizing and describing risks.		ISO 31000	Aligned the definition with ISO 31000.
risk level	The qualitative or quantitative measure of a risk defined by impact and likelihood.			Improved the wording. Deleted the note (second sentence).



Name	Definition	See Also	Reference	Remark
risk management	The coordinated activities to direct and control an organization with regard to risk.		ISO 31000	Aligned the definition with ISO 31000.
risk mitigation	The process through which decisions are reached and protective measures are implemented for reducing or maintaining risks to specified levels.			Improved the definition wording.
risk type	A set of risks grouped by one or more common factors.			Shortened the definition and removed the examples.
risk-based testing	Testing in which the management, selection, prioritization, and use of testing activities and resources are based on corresponding risk types and risk levels.		After ISO 29119	Aligned the definition with ISO 29119.
safety	The capability that a system will not, under defined conditions, lead to a state in which human life, health, property, or the environment is endangered.		After ISO 24765	Aligned the definition with ISO 24765.
scribe	A person who records information during the review meetings.		After IEEE 1028	Improved the wording. Deleted the note (second sentence).
security	The degree to which a component or system protects information and data so that persons or other components or systems have the degree of access appropriate to their types and levels of authorization.		After ISO 25010	Aligned the definition with ISO 25010. Removed the 'See Also' references to other quality characteristics.
stability	The degree to which a component or system can be effectively and efficiently modified without introducing defects or degrading existing product quality.		ISO 25010	Aligned the definition with ISO 25010. Removed the 'See Also' references to other quality characteristics.
state transition testing	A black-box test technique using a state transition diagram or state table to derive test cases to evaluate whether the test item successfully executes valid transitions and blocks invalid transitions.	N-switch testing		Improved the definition wording.
statement testing	A white-box test technique in which test cases are designed to execute statements.			Test design technique replaced by test technique.

Name	Definition	See Also	Reference	Remark
static analysis	The process of evaluating a component or system without executing it, based on its form, structure, content, or documentation.		After ISO 24765	Aligned the definition with ISO 24765.
static testing	Testing a work product without code being executed.			Replaced artifact by work product and removed the examples.
system	A collection of interacting elements organized to accomplish a specific function or set of functions.		After ISO 24765	Aligned the definition with ISO 24765.
System Integration Testing	Testing the combination and interaction of systems.			Simplified and improved the definition and removed the examples.
system under test	A type of test object that is a system.			Not any kind of test object, only systems as test objects.
Systematic Test and Evaluation Process	A structured testing methodology also used as a content-based model for improving the testing process. It does not require that improvements occur in a specific order.	content-based model		Removed the term name and the acronym from the definition.
technical review	A formal review type by a team of technically-qualified personnel that examines the suitability of a work product for its intended use and identifies discrepancies from specifications and standards.		Gilb and Graham, IEEE 1028	Aligned the definition with ISO 1028.
test analysis	The activity that identifies test conditions by analyzing the test basis.			Focused the definition to the main objective of the activity.
test approach	The implementation of the test strategy for a specific project.			Deleted the note (second sentence).
test basis	The body of knowledge used as the basis for test analysis and design.		After TMap	Extended from documents to any kind of information.
test case	A set of preconditions, inputs, actions (where applicable), expected results and postconditions, developed based on test conditions.		After ISO 29119	Included preconditions and actions; deleted the example 'such as'.

Name	Definition	See Also	Reference	Remark
test case specification	Documentation of a set of one or more test cases.	test specification	ISO 29119	Removed the redundant explanation of a test case in brackets. Aligned the definition with ISO 29119.
test charter	Documentation of test activities in session-based exploratory testing.	exploratory testing		Removed mentioning specific contents of the documentation, restricted to session-based testing.
test condition	An aspect of the test basis that is relevant in order to achieve specific test objectives.			Improved the definition combining ISO 29119 and the explanations in CTFL chapter 1.
test data	Data created or selected to satisfy the execution preconditions and inputs to execute one or more test cases.		After ISO 29119	Aligned the definition with ISO 29119.
test design	The activity of deriving and specifying test cases from test conditions.	test design specification	After ISO 29119	Aligned the definition with the CTFL syllabus and with ISO 29119.
test design specification	Documentation specifying the features to be tested and their corresponding test conditions.	test specification	ISO 29119	Aligned the definition with ISO 29119.
test execution schedule	A schedule for the execution of test suites within a test cycle.			Adapted to the CTFL 2018 test process; deleted the note.
test implementation	The activity that prepares the testware needed for test execution based on test analysis and design.			Focused the definition to the main objective of the activity.
test item	A part of a test object used in the test process.	test object		Aligned the entities SUT to test object to test item.
test level	A specific instantiation of a test process.		After ISO 29119	Aligned the definition with ISO 29119.
test logging	The activity of creating a test log.			Simplified the definition.

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test management	The planning, scheduling, estimating, monitoring, reporting, control and completion of test activities.		ISO 29119	Aligned the definition with ISO 29119.
test monitoring	A test management activity that involves checking the status of testing activities, identifying any variances from the planned or expected status, and reporting status to stakeholders.	test management		Aligned the definition with CTFL chapter 1.
test oracle	A source to determine expected results to compare with the actual result of the system under test.		After Adrion	Deleted the note (second sentence).
test plan	Documentation describing the test objectives to be achieved and the means and the schedule for achieving them, organized to coordinate testing activities.		After ISO 29119	Aligned the definition with ISO 29119.
test procedure specification	Documentation specifying one or more test procedures.	test specification	After ISO 29119	Aligned the definition with ISO 29119. Shortened the definition by using the new term test procedure.
test process	The set of interrelated activities comprising of test planning, test monitoring and control, test analysis, test design, test implementation, test execution, and test completion.			Adapted the list of test activities to the current FL syllabus.
test progress report	A test report produced at regular intervals about the progress of test activities against a baseline, risks, and alternatives requiring a decision.	After ISO 29119	After ISO 29119	Rephrased as a type of test report.
test script	A sequence of instructions for the execution of a test.	test procedure		Definition made more generic, and suitable for Agile.
test specification	The complete documentation of the test design, test cases and test procedures for a specific test item.		ISO 29119	Aligned the definition with ISO 29119.
test strategy	Documentation that expresses the generic requirements for testing one or more projects run within an organization, providing detail on how testing is to be performed, and is aligned with the test policy.		After ISO 29119	Generalised the definition to support the specific test strategies.

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Name	Definition	See Also	Reference	Remark
test suite	A set of test cases or test procedures to be executed in a specific test cycle.			Definition improved and related more closely to test execution.
test summary report	A test report that provides an evaluation of the corresponding test items against exit criteria.		After ISO 29119	Rephrased as a type of test report.
test type	A group of test activities based on specific test objectives aimed at specific characteristics of a component or system.		After TMap	Extended to static testing and removed the examples.
testability	The degree of effectiveness and efficiency with which tests can be designed and executed for a component or system.		After ISO 25010	Aligned the definition with ISO 25010. Removed the 'See Also' references to other quality characteristics.
testability review	A review to evaluate the testability of the test basis.		After TMap	Shortened and improved the definition by using the known term testability.
testware	Work products produced during the test process for use in planning, designing, executing, evaluating and reporting on testing.		After ISO 29119	Replaced artifact by work product and extended the definition to all test activities.
traceability	The degree to which a relationship can be established between two or more work products.	horizontal traceability, vertical traceability	After ISO 19506	Improved the wording: The degree (as in other characteristics); any work products rather than items in documentation and software; removed the example.

Name	Definition	See Also	Reference	Remark
usability	The degree to which a component or system can be used by specified users to achieve specified goals in a specified context of use.		After ISO 25010	Replaced software product by component or system; removed the sub-characteristics (effectiveness, efficiency, and satisfaction) in order to avoid circular references.
use case testing	A black-box test technique in which test cases are designed to execute scenarios of use cases.			Changed test design technique to test technique.
user acceptance testing	Acceptance testing conducted in a real or simulated operational environment by intended users focusing their needs, requirements and business processes.	acceptance testing		Replaced future users by intended users; removed the brackets from 'simulated'; added business processes.
V-model	A sequential development lifecycle model describing a one-for-one relationship between major phases of software development from business requirements specification to delivery, and corresponding test levels from acceptance testing to component testing.			Made the note to the specific characteristic in the definition that distinguishes the V-model among sequential models.
walkthrough	A type of review in which an author leads members of the review through a work product and the members ask questions and make comments about possible issues.	peer review	After ISO 20246	Aligned the definition with ISO 20246.
work breakdown structure	Deliverable oriented hierarchical decomposition of the work to be executed by the project team to accomplish the project objectives (according to PMBOK).		PMBOK	Aligned with the definition in PMBOK.

4. References changed

References to outdated standards have been updated for terms used in the Foundation level. In addition to the terms changed that are listed above, the following terms have updated references without any change to their definitions:

Name	New Reference
acceptance testing	After ISO 24765
compliance	IEEE 730
configuration management	ISO 24765
error	ISO 24765
measure	After ISO 25040
measurement	After ISO 25040
metric	None (Ref. to ISO 14598 removed)
quality	ISO 24765
resumption requirements	None (Ref. to IEEE 829 removed)
robustness	ISO 24765
severity	None (Ref. to IEEE 610 removed)
simulation	ISO 2382
simulator	ISO 24765
software	ISO 24765
state diagram	After ISO 24765
stress testing	ISO 24765
test	None (Ref. to IEEE 829 removed)
test environment	ISO 24765
test log	ISO 24765

5. Terms removed

Some terms have been removed because they are not used as keywords in any syllabus and, in addition, defining them does not add any value:

Name	Remark
audit trail	Not a testing term.
baseline	Not a testing term.
basic block	Not mentioned in any syllabus.
basis test set	Not mentioned in any syllabus.
buffer	Not a testing term. Only mentioned in AL-TTA. Not a keyword in any of the syllabi.
buffer overflow	Not a testing term.
code	Not a testing term.
concurrency testing	Not mentioned in any syllabus.
configuration auditing	Not mentioned in any syllabus.
configuration control	Not a testing term.
configuration control board	Not mentioned in any syllabus. Not a testing term.
configuration identification	Not a testing term.

Name	Remark
data quality	Just a simple combination of two other terms, with the obvious meaning 'quality of data'.
defect type	Just a simple combination of two other terms, with the obvious meaning 'type of defect'.
deliverable	Not a testing term.
development testing	Not a keyword; Not mentioned in any LO; Only mentioned once in Foundation nSyllabus, where it is explained.
documentation testing	Not mentioned in any syllabus.
domain	Not a testing term.
exception handling	Not a testing term.
factory acceptance testing	Not a keyword; Only mentioned once in Foundation Syllabus as an example.
incident logging	Not a testing term.
input domain	Not mentioned in any syllabus.
load testing tool	Just a simple combination of two other terms, with the obvious meaning 'tool for load testing'.
output domain	Not mentioned in any syllabus.
performance testing tool	Just a simple combination of two other terms, with the obvious meaning 'tool for performance testing'.
procedure testing	Not mentioned in any syllabus.
scripting language	Not a testing term.
site acceptance testing	Not a keyword; Only mentioned once in Foundation Syllabus as an example.
test deliverable	Just a simple combination of two other terms, with the obvious meaning 'deliverable of testing'.
test execution tool	Just a simple combination of two other terms, with the obvious meaning 'tool for test execution'.
test target	Not mentioned in any syllabus.

6. Synonym updates

There are some updates among the synonyms. Please recall that in the Glossary, 'synonym' denotes an alternative name for a term. Synonyms are commonly used by some communities, but within ISTQB, they are not the preferred name of the term.

New synonyms:

Term Name	Synonym	Remark
capture/playback	capture/replay	
capture/playback	record/playback	
entry criteria	definition of ready	
exit criteria	definition of done	
functional suitability	functionality	According to ISO 25010, functional suitability is the new name of the quality characteristic. The previous name 'functionality' becomes a synonym.

Term Name	Synonym	Remark
performance efficiency	performance	According to ISO 25010, performance efficiency is the new name of the quality characteristic. The previous name, performance, becomes a synonym.
state diagram	state transition diagram	
test policy	organizational test policy	A synonym of test policy used in ISO 29119.
test progress report	test status report	
test strategy	organizational test strategy	A synonym of test strategy used in ISO 29119.
test technique	test design technique	Since test technique is now the preferred name, the previous name, test design technique, becomes a synonym.
quality characteristic	quality attribute	Made quality characteristic to the primary term and quality attribute to a synonym.
black-box test technique	specification-based test technique	Replaced test design technique by test technique.
white-box test technique	structural test technique	Replaced test design technique by test technique.
white-box test technique	structure-based test technique	Replaced test design technique by test technique.

Deleted synonyms:

Term Name	Synonym	Remark
component testing	program testing	Program testing is not the same as component testing.
defect	problem	Problem becomes a separate term and is no longer a synonym of defect.
defect management	problem management	Problem is no longer a synonym of defect.
defect report	problem report	Problem is no longer a synonym of defect.
fail	test fail	Removed the synonyms 'test pass' from 'pass' and 'test fail' from 'fail'.
pass	test pass	Removed the synonyms 'test pass' from 'pass' and 'test fail' from 'fail'.
test manager	test leader	Test leader becomes a separate term.
test object	system under test	System under test becomes a separate term.

Glossary

Standard Glossary of Terms used in Software Testing

Term Name	Synonym	Remark
test progress report	test report	Test report becomes a separate term.

7. References

The references to standards, books and papers that have been used in these release notes are listed below.

Standards

[IEEE 1028]	IEEE 1028:2008 - Standard for Software Reviews and Audits
[IEEE 1044]	IEEE 1044:2009 - Standard Classification for Software Anomalies
[ISO 14767]	ISO/IEC 14764:2006 - Software Engineering -- Software Life Cycle Processes – Maintenance
[ISO 19506]	ISO/IEC 19506:2012 - Information technology -- Object Management Group Architecture-Driven Modernization (ADM) -- Knowledge Discovery Meta-Model (KDM)
[ISO 20246]	ISO/IEC 20246:2017 - Software and systems engineering -- Work product reviews
[ISO 24765]	ISO/IEC/IEEE 24765:2017 - Systems and software engineering -- Vocabulary
[ISO 25010]	ISO/IEC 25010:2011 - Systems and software engineering — Systems and software Quality Requirements and Evaluation (SQuaRE) — System and software quality models
[ISO 25040]	ISO/IEC 25040:2011 -Systems and software engineering -- Systems and software Quality Requirements and Evaluation (SQuaRE) -- Evaluation process
[ISO 29119]	ISO/IEC/IEEE 29119:2013 - Software and systems engineering -- Software testing
[ISO 31000]	ISO 31000:2009 - Risk management — Principles and guidelines

Books and Papers

[CMMI]	CMMI Institute: CMMI for Development, Version 1.3. Technical Report, 2010
[Egler63]	J. F. Egler. 1963. A procedure for converting logic table conditions into an efficient sequence of test instructions. Commun. ACM 6, 9 (September 1963), 510-514. DOI=10.1145/367593.367595
[Gilb and Graham]	T. Gilb and D. Graham (1993), <i>Software Inspection</i> , Addison-Wesley, ISBN 0-201-63181-4
[McCabe]	T. McCabe (1976), A complexity measure, in: <i>IEEE Transactions on Software Engineering</i> , Vol. 2, pp. 308-320
[PMBOK]	Project Management Institute: PMBOK Guide and Standards, PMI Lexicon of Project Management Terms.
[TMap]	T. Koomen, L. van der Aalst, B. Broekman, M. Vroon: TMap Next, for result-driven testing. UTN Publishers, 2006; ISBN-13: 978-9072194800