Telecommunications Industry Association (TIA)
QuEST Forum

TL 9000
Quality Management System

Requirements Handbook

R6.3 Point Release

The ICT Quality Management System
Performance Excellence through Global ICT Quality

For information about TIA/ QuEST Forum
visit https://tiaonline.org/what-we-do/tia-quest-forum/

For TL 9000 specific information,
visit the TL 9000 website at https://tl9000.org

Sections of this document contain copyrighted material from a variety of sources; these sources are identified in the Bibliography of this handbook.

Throughout this document the term 'TL 9000' refers to *TL 9000 Quality Management System Requirements* Handbook Point Release R6.3, namely this volume, unless specifically stated otherwise. Also, the term 'ISO 9001' refers to ISO 9001:2015 [2], unless specifically stated otherwise.

Requirements Handbook Point Release R6.3 included changes in several places where clarification was needed regarding requirements that include sustainability considerations. The review was performed because of questions and concerns from TL 9000 users and auditors. This resulted in 1 new requirement, 1 reworded requirement, 3 new notes, and 1 reworded note. Two additional requirements were reworded during the subsequent review of the full document by all TIA QuEST Forum participants. Please see the available R6.3 Change History document on the tl9000.org website for full details on the changes.

All TL 9000 Certified organizations are required to transition to meet Requirements Handbook Point Release R6.3 even if not impacted by the changes in this release.

Approved and adopted
by
TIA QuEST Forum
Effective

October 1, 2021

4. Context of the organization

4.1 Understanding the organization and its context

There are no additional requirements for this section of ISO 9001.

4.2 Understanding the needs and expectations of interested parties

There are no additional requirements for this section of ISO 9001.

4.3 Determining the scope of the quality management system

Additional requirements for TL 9000 are shown below.

4.3.C.1 Declaration of Requirement and Measurement Applicability – The organization shall declare in its registration profile any requirements determined as not applicable, as well as any measurement exemptions claimed.

4.3.C.1-NOTE 1 It is not necessary for an organization to declare a TL 9000 requirement as not applicable if the requirement is outside the scope of the TL 9000 registration specialty option(s) the organization has selected. Also, it is not necessary for an organization to declare as not applicable any TL 9000 requirement where the requirement itself or an associated note states the requirement is not applicable to the organization's product or service category type.

4.3.C.1-NOTE 2 See Measurements Handbook[5] for definition of measurement exemptions.

4.3.C.2 TL 9000 Profile and Scope – An organization seeking certification shall determine, in coordination with its Certification Body (CB), the

- TL 9000 scope statement,
- ISO 9001 scope statement,
- requirements determined as not applicable,
- measurement exemptions,
- registration specialty options,
- NACE codes,
- product categories,
- locations or sites,
- ISO 9001 version, and
- TL 9000 Requirements and Measurements release levels.

All the registration information shall be recorded and maintained on TL 9000's Registration Management System (RMS) in a registration profile. The TL 9000 Administrator shall provide relevant information to the IAF database of accredited certifications. The certificate issued by the CB shall reference the registration profile on the RMS by the TL ID number assigned to the registration by the TL 9000 Administrator when the profile is created.

The scope statement shall include

a) an identification of the organization being registered, which may encompass the entire organization, an organizational unit, or a combination of units, and
b) products/product lines covered by the registration. If not all products/product lines are included in the registration, then either the included or excluded products/product lines shall be listed.

The scope statement shall not include
a) product category codes,
b) locations or sites,
c) ISO 9001, Requirements Handbook and Measurements Handbook release levels,
d) registration specialty option, and
e) other parameters identified as individual fields in the registration profile.

4.4 Quality management system and its processes

4.4.1

There are no additional requirements for this section of ISO 9001.

4.4.2

There are no additional requirements for this section of ISO 9001.

8. Operation

8.1 Operational planning and control

Additional requirements for TL 9000 are shown below.

8.1.C.1 Life Cycle Model – The organization shall establish and maintain documented information that covers the life cycle of its products and services. The documented information shall include, as appropriate, the processes, activities, and tasks involved in the concept, definition, development, introduction, production, operation, maintenance, and disposal of products or cessation of services.

8.1.C.1-NOTE 1 The life cycle model should take into consideration sustainability practices such as improved energy performance and resource consumption, ecologically responsible disposal, and proper end-of-life treatment. A life cycle assessment should be considered to facilitate the analysis of the relevant environmental topics. See Sustainability in the Glossary for examples of environmental topics to consider.

8.1.C.1-NOTE 2 The new product or service introduction methods should include provisions for such programs as quality and reliability prediction studies, pilot production, demand and capacity studies, sales and service personnel training, customer documentation and training, and new product or service post-introduction evaluations.

8.1.C.2 Product and Service Security – The organization shall establish and maintain methods for the identification and analysis of security risks and vulnerabilities for products and services throughout their life cycle. The results of the analysis shall be used to support secure network operation by prevention or mitigation of security vulnerabilities in product and service design and operational controls. The continuing effectiveness of the design and operational controls shall be assessed throughout the product and service life cycle by the selection and use of appropriate security measurements.

8.1.C.2-NOTE 1 The requirement focuses on risks related to the possible exploitation of vulnerabilities through communication and/or user/operator interfaces of products and services.

8.1.C.2-NOTE 2 As defined in ISO 27001[4], an operational control is a means of managing risk, including policies, documented information, guidelines, practices, or organizational structures, which can be administrative, technical, management, or legal in nature. Examples of operational controls include a process for granting and removing access (both physical and logical) to systems, documented operating procedures, documented change control procedures, and procedures to control the installation of software on operational systems.

8.1.C.2-NOTE 3 The 'Security Measurements Guidance Document' referenced at tl9000.org/links may be used as a resource in selecting and establishing appropriate security measurements for products and services.

8.1.C.3 End of Life Planning – The organization shall maintain documented information for the discontinuance of manufacturing and/or support of products and services. The documented information should include

a) cessation of full or partial support after a certain period of time,
b) archiving product and/or service documentation and software,
c) responsibility for any future residual support issues,
d) transition to the new product and/or service, if applicable,
e) accessibility of archive copies of data, and
f) disposition of the organization's parts and assemblies.

8.1.C.4 Tools Management – The organization shall ensure that internally developed software and/or tools used in the product and service life cycle are subject to the appropriate quality method(s).

8.1.C.4-NOTE Examples of tools to be managed include design and development, testing, configuration management, documentation, scripts, customizations, dies, stamps, fixtures, and diagnostic tools, as well as software used to build and test product.

8.2 Requirements for products and services

8.2.1 Customer communication

Additional requirements for TL 9000 are shown below.

8.2.1.C.1 Problem Severity Classification – Except for those products and services specifically excluded from severity level reporting, the organization shall assign severity levels to customer-reported problems based on the impact to the customer in accordance with the definitions of critical, major, and minor problem reports contained in the Measurements Handbook. The severity level shall be used in determining the timeliness of the organization's response.

8.2.1.C.1-NOTE The customer and the organization should jointly determine the priority for resolving customer reported problems.

8.2.1.C.2 Problem Escalation – The organization shall maintain documented information for the escalation and resolution of customer-reported problems.

8.2.1.C.3 Problem Report Feedback – The organization shall provide the customer with feedback on problem reports.

8.2.1.HS.1 Product Replacement – The organization shall maintain documented information for identifying and replacing products that are unfit to remain in service.

8.2.1.HS.2 Notification About Critical Problem Reports – The organization shall maintain documented information to notify all customers who may be affected by a critical problem report.

8.2.1.V.1 Notification About Critical Service Disruption – The organization shall establish and maintain a method for affected customers to obtain real time information about current outages.

8.2.1.V.1-NOTE This requirement is applicable only to organizations that supply services to end-customers.

8.2.2 Determining the requirements for products and services

There are no additional requirements for this section of ISO 9001.

8.2.3 Review of requirements for products and services

Additional requirements for TL 9000 are shown below.

8.2.3.1

Additional requirements for TL 9000 are shown below.

8.3.3.C.2 Design and Development Requirements – Design and development requirements shall be defined and documented, and should include
a) quality and reliability requirements,
b) functions and capabilities of the products and services,
c) business, organizational, and user requirements,
d) safety, environmental, sustainability, security, and privacy requirements,
e) manufacturability, installability, usability, interoperability, and maintainability requirements,
f) design constraints,
g) testing requirements,
h) product computing resources,
i) lessons learned from previous projects and retrospectives, and
j) hardware packaging requirements (including environmental topics).

8.3.3.C.2 NOTE See Sustainability in the Glossary for examples of environmental topics to consider.

8.3.3.C.3 Requirements Allocation - The organization shall document the allocation of product and service requirements to their architecture.

8.3.3.C.3-NOTE Examples of requirements which should be allocated are response time for software, heat dissipation for hardware and service response time for services.

8.3.4 Design and development controls

Additional requirements for TL 9000 are shown below.

8.3.4.C-NOTE Organizations may include customers or third parties during various validation stages.

8.3.4.C.1 Verification of User Documentation - The organization shall verify the customer and/or user documentation for products and services prior to delivery.

8.3.4.HS.1 Stress Testing – To confirm design margins, the organization shall test the product under stress conditions, including, but not limited to
a) out-of-boundary and invalid input conditions,
b) high-volume and peak load simulations, and
c) operational errors.

8.3.4.HS.2 Abnormal Conditions - The organization shall test the products to confirm expected product operation under abnormal conditions, which shall include, as appropriate
a) hardware failures,
b) software failures,
c) operations, administration, maintenance and provisioning (OAM&P) errors,
d) overload traffic,
e) invalid user input, and
f) system recovery from an outage.

8.3.4.HS.3 System Testing – The product release shall be subjected to system testing in accordance with test documentation (see 8.3.2.C.4).

8.3.4.HS.4 Release Management - The organization shall maintain documented information to ensure that the release and delivery of products and related documentation are carried out under controlled conditions. The documented information should provide for the delivery to the customer of
a) product information and release schedules,
b) detailed descriptions of product features delivered, including any changes incorporated in new and existing products or releases, and
c) advisories regarding current or planned changes to contractual terms (see 8.3.6.C.2).

8.3.5 Design and development outputs

Additional requirements for TL 9000 are shown below.

8.3.5.HS.1 Product Design and Development Output – Product design and development outputs to support, maintain, and use the product should include, but are not limited to
a) system architecture,
b) system detailed design,
c) source code, and
d) user documentation.

8.3.5.HS.1-NOTE Product design and development output may also include items such as training materials and Application Program Interface (API) specifications.

8.3.5.V.1 Services Design and Development Output - The required output from the services design and development shall contain a complete and precise statement of the service to be provided. Design and development outputs should include, but are not limited to
a) documented service delivery information,
b) resource and skill requirements,
c) reliance on external providers,
d) service characteristics subject to customer evaluation, and
e) standards of acceptability for each service characteristic.

8.3.6 Design and development changes

Additional requirements for TL 9000 are shown below.

8.3.6.C.1 Change Management Process - The organization shall maintain documented information to ensure that all requirements and design changes, which may arise at any time during the product and service life cycle, are managed and tracked in a systematic and timely manner. The organization shall ensure that changes which adversely affect mutually agreed conditions for quality, reliability, and functional intent are reviewed with the customer prior to approval. Management of changes should include
a) impact analysis, including impact on resources and schedule,
b) planning,
c) implementation,
d) testing,
e) documentation,
f) communication, and
g) review and approval.

8.3.6.C.1-NOTE A change management process is required throughout the life cycle. For example, during design and development, the organization needs the ability to react to rapidly changing customer requirements and take advantage of emerging technologies with an encompassing, responsive change management process. After General Availability, the change management process scope considers how changes to the operation and maintenance of products and services and the installed base impact the community of interested parties. The consideration includes quality, reliability, and functional intent.

8.3.6.C.2 Informing Customers of Design Changes – The organization shall ensure that customers are informed when design changes affect contractual commitments.

8.3.6.C.3 Problem Resolution Configuration Management – The organization shall ensure that its configuration management system tracks fixes to problems and incorporates those fixes in future revisions.

8.3.6.H.1 Component Changes - The organization shall maintain documented information to ensure that material or component substitutions or changes do not adversely affect conformity to product/service requirements or performance. The documented information should include

a) functional testing,
b) qualification testing,
c) stress testing,
d) approved parts listing, and/or
e) critical parts listing.

8.4 Control of externally provided processes, products, and services

8.4.1 General

Additional requirements for TL 9000 are shown below.

8.4.1.C.1 Procurement Process – The organization shall maintain documented information on the procurement process to ensure

a) product and service requirements are clearly defined,
b) risks are understood and managed,
c) qualification criteria are established,
d) acceptance criteria are established,
e) contracts are defined,
f) proprietary, usage, ownership, warranty, and licensing rights are satisfied,
g) future support for products and services is planned,
h) ongoing supply-base management and monitoring is in place, and
i) external provider selection criteria are defined.

8.4.1.C.1 NOTE Sustainability requirements should be considered when selecting external providers such as, but not limited to supplier sustainability performance, supply principles, code of conduct, or internationally recognized standards.

8.4.1.C.2 External Provider Performance Management – The organization shall plan and perform external provider performance management and development activities so that

a) external provider quality performance is tracked, and feedback is provided to external providers to drive continual improvement, and
b) for identified key external providers, alignment toward conformity to TL 9000 requirements and measurements or other appropriate quality management systems for the external provider's products and services occurs, with a preference toward TL 9000.

8.4.1.C.2-NOTE 1 External provider performance management planning and activities should be in conjunction with the organization improvement processes of Section **Error! Reference source not found.**.

8.4.1.C.2-NOTE 2 It is recognized that it is not possible for an organization to provide the same level of interaction with all external providers. The level provided may depend on the amount of business with an external provider, the criticality of products or services, history of problems, organization expectations, significance of an external provider within the supply chain or other factors.

8.4.1.C.2-NOTE 3 Examples of alignment toward conformity to appropriate quality management systems may include

a) surveys,
b) external provider questionnaires,
c) external provider education and training regarding conformance to standards,
d) the use of TL 9000 requirements and measurements, in full or in part,
e) second-party audits evaluating TL 9000 conformance or conformance to an appropriate quality management system, and
f) Certification to TL 9000 or other quality standards accredited by a signatory of the IAF MLA (where this is available).or by the appropriate sector accreditation body. Examples include ISO 9001[2], AS9100[6], CMMI[7], IATF 16949[8], etc.

8.4.2 Type and extent of control

There are no additional requirements for this section of ISO 9001.

8.4.3 Information for external providers

There are no additional requirements for this section of ISO 9001.

8.5 Production and service provision

8.5.5 **Post-delivery activities**

Additional requirements for TL 9000 are shown below.

8.5.5.H.1 Testing of Repair and Return Products – Repair and return products shall be subjected to the appropriate evaluation(s) and/or test(s) to ensure functionality to product specification(s).

8.5.5.HS.1 Emergency Service Provisioning – The organization shall ensure that services and resources are available to support recovery from emergency failures of product in the field throughout its expected life. The organization shall identify potential situations that may have an impact on its ability to provide the emergency service and shall have response plans to address these situations. These plans shall be based on risk and periodically assessed.

8.5.5.S.1 Software Patching Information – The organization shall maintain documented information for software patching that

a) guides the decision to solve problems by patching,
b) addresses patch development information, propagation (forward and backward), and resolution,
c) is consistent with customer needs or contractual requirements for maintenance support,
d) ensures that the organization provides the customer with a statement of impact on the customer's operation for each patch, and
e) ensures that all documentation required to describe, test, install, and apply a patch has been verified and delivered with the patch.

8.5.6 Control of changes

There are no additional requirements for this section of ISO 9001.

8.6 Release of products and services

Additional requirements for TL 9000 are shown below.

8.6.HV.1 Inspection and Test Documentation – Each inspection or testing activity performed during production, operation, maintenance, and disposal of products or cessation of services shall have detailed documentation. Details should include, but are not limited to

a) parameters to be checked with acceptable tolerances,
b) the use of statistical techniques, control charts, etc.,
c) sampling plan, including frequency, sample size, and acceptance criteria,
d) handling of nonconformities,
e) documented information to be retained (see 7.5.3),
f) defect classification scheme,
g) method for designating an inspection item or lot, and
h) electrical, functional, and feature testing.

8.6.HV.2 Documentation Retained from Inspection and Test Activities - Documentation retained from inspection or test activities during any part of the product or service's life cycle shall include

a) product or service identification,
b) quantity of product,
c) documented procedure(s) followed,
d) person(s) performing the test or inspection,
e) calibrated equipment used (see 7.1.5),

f) date performed,
g) test and inspection results, and
h) number, type, and as applicable, severity of defects found.

8.6.S.1 Test Documentation - Documented information retained from software testing shall include
a) test results,
b) analysis of test results,
c) conformity to expected results, and
d) problem reporting for nonconforming items.

8.7 Control of nonconforming outputs

8.7.1

There are no additional requirements for this section of ISO 9001.

8.7.2

There are no additional requirements for this section of ISO 9001.

9. Performance evaluation

9.1 Monitoring, measurement, analysis and evaluation

9.1.1 General

Additional requirements for TL 9000 are shown below.

9.1.1.C.1 Process Measurement – Process measurements shall be identified, documented, and monitored at appropriate points to ensure continued suitability and promote increased effectiveness of processes. Key process measurements that impact conformity to requirements should have specific targets or control limits established. When planned results are not achieved, correction and corrective action shall be taken, as appropriate.

9.1.2 Customer satisfaction

Additional requirements for TL 9000 are shown below.

9.1.2.C.1 Customer Satisfaction Data – The organization shall collect data directly from customers. This data shall be trended and analyzed for improvement opportunities.

9.1.3 Analysis and evaluation

Additional requirements for TL 9000 are shown below.

9.1.3.C.1 Trend Analysis of Nonconforming Product or Service – Trend analysis of nonconforming product or service shall be performed on a defined, regular basis and results utilized as input for corrective action and continual improvement.

9.1.3.C.2 Performance Data – The quality management system shall include the collection and analysis of product or service performance data including no trouble found (NTF) for hardware and software products which can be used to help identify the cause and frequency of failure. This information shall be provided to the appropriate organizations to foster continual improvement.

9.1.3.C.3 Sustainability Assessment – The organization should assess the status of its sustainability efforts as appropriate to its organization, products, and services.

9.1.3.C.3–NOTE 1 A sample sustainability assessment model is available at tl9000.org/resources/resources.

9.1.3.C.3-NOTE 2 The assessment results should be considered during planning and should be appropriate to the organization, products, and services.

9.2 Internal audit

There are no additional requirements for this section of ISO 9001.

9.2.1

There are no additional requirements for this section of ISO 9001.

9.2.2

Additional requirements for TL 9000 are shown below.

9.2.2.C.1 Internal Audit Program Planning – The internal audit program shall include all applicable Requirements and Measurements Handbook requirements.

9.3 Management review

9.3.1 General

There are no additional requirements for this section of ISO 9001.

9.3.2 Management review inputs

Additional requirements for TL 9000 are shown below.

9.3.2.C.1 Sustainability Assessment Results – The results from sustainability assessment should be reviewed during management review and areas for improvement identified (see 9.1.3.C.3).

9.3.3 Management review outputs

There are no additional requirements for this section of ISO 9001.

Appendix B - Glossary

Note: The definitions of the following terms are to be used when interpreting and auditing to the associated TL 9000 handbooks.

Accredited Certification Bodies	Qualified organizations certified by a national body (e.g., ANSI-ASQ National Accreditation Board in the U.S.) to perform audits to TL 9000 and to register the audited company when they are shown as conforming to the TL 9000 requirements.
ASRP	Advanced Surveillance and Reassessment Procedure.
Certification	Procedure(s) by which a third party gives written assurance that a product, process, or quality management system conforms to specified requirements.
Configuration Management	A discipline applying technical and administrative direction and surveillance to identify and document the functional and physical characteristics of a configuration item, control changes to those characteristics, record and report changes, processing, and implementation status, and verify conformance to specified requirements.
Design Change	Changes affecting form, fit, and/or function including ISO 9000:2015[2] definition for “Design and Development.”
Design and Development Process Quality Measurements	A suite of indicators employed during the design and development of the product to assess its quality and maturity.
Disaster Recovery	The response to an interruption in the ability to recreate and service the product and service throughout its life cycle by implementing a plan to recover an organization’s critical functions.
Electrostatic Discharge	The transfer of charge between bodies at different electrical potential.
End-customer	See Measurements Handbook Glossary[5].
End of Life	See “Product Discontinued” in Measurements Handbook Glossary[5].
Field Replaceable Unit	A distinctly separate part that has been designed so that it may be exchanged at its site of use for the purposes of maintenance or service adjustment.
Fix	A correction to a problem that either temporarily or permanently corrects a defect.
General Availability	The start of the General Availability Phase. See Measurements Handbook Glossary[5] for “General Availability Phase.”

Life Cycle Model	The processes, activities, and tasks involved in the concept, definition, development, production, operation, maintenance, and, if required, disposal of products, spanning the life of products.
Maintenance	Any activity intended to keep a functional hardware or software unit in satisfactory working condition. The term includes tests, measurements, replacements, adjustments, changes, and repairs.
Malware	Software intentionally designed to cause damage to a computer, server, client, or computer network.
Method	A means by which an activity is accomplished which is not necessarily documented but which is demonstrated to be consistent and effective throughout the organization. Effective implementation of a method is demonstrated by the existence of verifiable objective evidence (e.g., observation or retained documented information).
No Trouble Found (NTF)	See Measurements Handbook Glossary[5].
Operator	Person who operates machinery, tools, or equipment.
Outage	See Measurements Handbook Glossary[5].
Patch	An interim software change between releases delivered or made available for delivery to the field. It consists of one or more changes to affected parts of the program.
Plan	A scheme or method of acting, proceeding, etc., developed in advance.
Problem Escalation	The process of elevating a problem to appropriate management to aid in its resolution.
Problem Report	See Measurements Handbook Glossary[5].
Program	A planned, coordinated group of activities, procedure(s), etc., often for a specific purpose.
TIA QuEST Forum	Quality Excellence for Suppliers of Telecommunications
Reliability	The ability of an item to perform a required function under stated conditions for a stated time period.
Return	Any unit returned for repair or replacement due to any suspected mechanical or electrical defect occurring during normal installation, testing, or in-service operation of the equipment.
Risk Management	A proactive approach for enabling business continuity. A loss prevention methodology that encompasses identification and evaluation of risk, selection of risks to control, identification of preventive actions, cost benefit, analysis and implementation of mitigating plans.
Service Provider	A company that provides information and communication technologies services.
Severity	See Measurements Handbook Glossary[5].

Sustainability	Meeting the needs of the present without compromising the ability of future generations to meet their own needs. This includes environmental, social, and economic topics such as environmental management, resource efficiency optimization, carbon footprint and ozone depletion, corporate and social responsibility, supply chain management, stakeholder engagement, organizational engagement and capability, eco-design, end to end delivery, circular economy, and life cycle management.
System Test	Testing conducted on a complete integrated system to evaluate the system's conformance to its specified requirements.
Temporary Fix	See Measurements Handbook Glossary[5].
Test Plan	Describes the scope, strategy, and methodology for testing.
Work Instructions	Type of document that provides information about how to perform activities and processes consistently.

ISO 9000:2015 Defined Terms [1] the numbers after each item below reference the ISO 9000:2015 document

A

audit 3.13.1
audit client 3.13.11
audit conclusion 3.13.10
audit criteria 3.13.7
audit evidence 3.13.8
audit findings 3.13.9
audit programme 3.13.4
audit team 3.13.14
auditee 3.13.12
auditor 3.13.15

C

capability 3.6.12
characteristic 3.10.1
competence 3.10.4
concession 3.12.5
conformity 3.6.11
context of the organization 3.2.2
continual improvement 3.3.2
correction 3.12.3
corrective action 3.12.2
customer 3.2.4
customer satisfaction 3.9.2

D

defect 3.6.10
dependability 3.6.14
design and development 3.4.8
deviation permit 3.12.6
document 3.8.5
documented information 3.8.6

E

effectiveness 3.7.11
efficiency 3.7.10
external provider 3.2.6

F

feedback 3.9.1

G

grade 3.6.3

I

information 3.8.2
infrastructure 3.5.2
inspection 3.11.7
interested party 3.2.3
involvement 3.1.3

M

management 3.3.3
management system 3.5.7
measurement 3.11.4
measurement management system 3.5.7
measurement process 3.11.5
measuring equipment 3.11.6

N

nonconformity 3.6.9

O

objective evidence 3.8.3
organization 3.2.1

P

performance 3.7.8
preventive action 3.12.1
procedure 3.4.5
process 3.4.1
product 3.7.6
project 3.4.2
provider 3.2.5

Q

quality 3.6.2
quality assurance 3.3.6
quality characteristic 3.10.2
quality control 3.3.7
quality improvement 3.3.8
quality management 3.3.4
quality management system 3.5.4
quality manual 3.8.8
quality objective 3.7.2
quality plan 3.8.9
quality planning 3.3.5
quality policy 3.5.9

R

record 3.8.10
regrade 3.12.4
release 3.12.7
repair 3.12.9
requirement 3.6.4
review 3.11.12
rework 3.12.8
risk 3.7.9

S

scrap 3.12.10
service 3.7.7
specification 3.8.7
supplier 3.2.5
system 3.5.1

T

technical expert 3.13.16
test 3.11.8
top management 3.1.1
traceability 3.6.13

V

validation 3.8.13
verification 3.8.12

W

work environment 3.5.5