TL 9000 R6.0

Requirements

Nancy Patterson – Nokia

Tom Yohe - Consultant
TL 9000 contains all of the auditable clauses of ISO 9001:2008

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**TL 9000 Informational Alert**

<table>
<thead>
<tr>
<th>1. Originating Workgroup:</th>
<th>2. Alert Number:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workgroup: IGQ and OSWG</td>
<td>14-002A</td>
</tr>
<tr>
<td>Contact: <a href="mailto:contact@questforum.org">contact@questforum.org</a></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>3. Documentation Affected:</th>
<th>4. Issue Date:</th>
</tr>
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<tbody>
<tr>
<td>Requirements Handbook</td>
<td>April 21, 2014</td>
</tr>
<tr>
<td>Code of Practice for TL 9000 Certification Bodies</td>
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</table>

<table>
<thead>
<tr>
<th>5. Reason for Alert:</th>
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<tbody>
<tr>
<td>A reminder of the relationship between ISO 9001:2008 and TL 9000</td>
</tr>
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<table>
<thead>
<tr>
<th>6. Description:</th>
</tr>
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<tbody>
<tr>
<td>Based on questions received by QuEST Forum and anecdotal reports, it appears the relationship between ISO 9001:2008 and TL 9000 is not clear to everyone. The TL 9000 Quality Management System is based on ISO 9001. The TL 9000 Quality Management System Requirements Handbooks R5.0 and R5.5 contain all of the auditable clauses of ISO 9001:2008. Therefore a certification to TL 9000 includes by default certification to ISO 9001:2008. A single certificate showing both may be issued and any contractual obligation to be ISO 9001 certified is fully met by TL 9000 certification. For simplification, the issuance of single certificate is highly encouraged.</td>
</tr>
</tbody>
</table>

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[http://tl9000.org/alerts/alerts.html#10](http://tl9000.org/alerts/alerts.html#10)
QuEST Forum has Strategic Relationships with the organizations listed below. The purpose of a Strategic Relationship is to encourage cooperation in order to better serve both the members of QuEST Forum and the members of the Strategic Relationship organization.

### Strategic Relationships

<table>
<thead>
<tr>
<th>Organization</th>
<th>Logo</th>
</tr>
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<tbody>
<tr>
<td>Alliance for Telecommunications Industry Solutions (ATIS)</td>
<td><img src="ati.png" alt="ATIS Logo" /></td>
</tr>
<tr>
<td>ETIS – the Global IT Association for Telecommunications</td>
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<tr>
<td>International Accreditation Forum, Inc. (IAF)</td>
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<tr>
<td>International Organization for Standardization Technical Committee 176 (ISO/TC 176)</td>
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<tr>
<td>Telecommunications Industry Association (TIA)</td>
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<tr>
<td>TeleManagement (TM) Forum</td>
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QuEST Forum is also a member of:
- ISO CASCO and ISO CASCO STAR
- USTAG Liaison Group
HANDBOOK PRODUCTION PROCESS

**Input**

Member Companies & TL 9000 Users

- **IGQ Sub-teams**
  - Rejected proposal can be reworked
  - Develop Proposal
  - Scrub Teams

- **IGQ Work Group**
  - Pursue?
  - Assign to Sub-team
  - Accepts, Modifies, or Rejects

- **Member Companies**
  - No
  - Into Draft
  - Yes
  - Reviews Draft Document
  - Publish

- Yes
  - Reviews Draft Document
  - Publish

- No
  - Accepts or Rejects Final Document
  - Publish

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1. Scope</td>
<td>1. Scope</td>
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<tr>
<td>2. Normative references</td>
<td>2. Normative references</td>
</tr>
<tr>
<td>3. Terms and definitions</td>
<td>3. Terms and definitions</td>
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<tr>
<td>5. Leadership</td>
<td>5. Management responsibility</td>
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<tr>
<td>7. Support</td>
<td>7. Product realisation</td>
</tr>
<tr>
<td>8. Operation</td>
<td>8. Measurement, analysis and improvement</td>
</tr>
<tr>
<td>9. Performance Evaluation</td>
<td></td>
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<tr>
<td>10. Improvement</td>
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</table>

ISO 9001:2015 follows a new “high-level structure” called Annex SL that will be used for all future management system development.
Conceptual Changes

- a shift to risk-based thinking to support and improve the process approach
- fewer prescribed requirements
- less emphasis on documents
- improved applicability for services
- a requirement to define the boundaries of the QMS
- increased emphasis on organizational context
- increased leadership requirements
- greater emphasis on achieving desired outcomes to improve customer satisfaction
Detailed Changes

• “procedures” and “records” are not mentioned instead “maintain documented information” and “retain documented information”

• A quality manual and a management representative are no longer required

• “products and services” replaces products
  • ISO 9000 will be updated to address changes in terms & definitions

• “applicability” replaces “exclusions”
TL 9000 R6.0 Requirements Handbook
Timeline Summary

- Map R5.5 adders to ISO 9001:2015 DIS  Done
- Review ISO content vs TL adders  Done
- Collect general feedback/suggestions  Done
- Section teams work on alignment/wording  Done
- FDIS published  Done
- Review impact of changes in FDIS on draft  Done
- Full Forum review  Done
- Scrub, Forum vote, and publish  Done
- Effective  Sept 15, 2016
- Mandatory (NOTE 2 YEAR TRANSITION)  Sept 15, 2018
• Suggestions were received from:
  – QuEST Forum member companies
  – Subteams set up for each major section of the Handbook
  – Other sub-teams
  – Sustainability Subteam
  – “Contact Us” Questions
• Suggestions reviewed and formal proposals for changes submitted to IGQ
• IGQ reviewed proposals
• Draft was completed
CURRENT STATUS

• Initial draft Handbook completed
• Full Forum Review completed
• Comments resolved
• Final formatting and editing completed
• Official approval vote completed
• Printing completed
• Available for purchase July 1, 2016 printed, June 15 electronic
• Formal delta training available July 1, 2016
• Effective date September 15, 2016
May use for audits conducted on and after September 15, 2016

Must be certified to R6.0 by September 15, 2018

Matches September 15, 2018 ISO 9001:2015 transition end
Changes presented here are based on the released TL 9000:2016 (R6) Handbook.

The Measurements Handbook R5.0 is not changing now.
# Summary of Changes

**Modified** = requirement has changed

**Terminology** = no change to the requirement

**Reworded** = wording changed for clarity only

<table>
<thead>
<tr>
<th>Type</th>
<th>Adders</th>
<th>Notes</th>
</tr>
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<tbody>
<tr>
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**No real change**

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<td>67</td>
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**TOTAL R5.5**

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**TOTAL R6.0**

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<th>Adders</th>
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<tbody>
<tr>
<td>84</td>
<td>41</td>
</tr>
</tbody>
</table>
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 A sample sustainability assessment model is available at tl9000.org.
9.2.2.C.1 Internal Audit Program Planning – The internal audit program shall include all applicable Requirements and Measurements Handbook requirements.
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.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,
- TL 9000 Requirements and Measurements release levels, and
- use of Advanced Surveillance and Reassessment Procedure (ASRP).

All the registration information shall be recorded and maintained on QuEST Forum’s Registration Management System (RMS) in a registration profile. 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.
Three previously Software only Requirements were changed to None.
Combined Adders

R5.5

7.3.1.HS.2 Design and Development Process Quality Measurement Planning and Implementation

R6.0

8.3.2.HS.3 Design and Development Process Quality Measurement Planning and Implementation

7.2.3.HS.2 Design and Development Process Quality Measurements Data Reporting
COMBINED ADDERS

R5.5

7.3.2.H.1 Content of Requirements

R6.0

8.3.3.C.2 Design and Development Requirements

7.3.2.C.2 Design and Development Requirements
5.2.C.1 Customer Relationship Development
6.4.C.1 Work Areas
7.1.V.1 Service Delivery Plan
7.2.2.C.1 Closure Tracking
7.3.2.S.1 Identification of Software Requirements
7.5.1.C.1 Customer Service Resources
7.5.1.S.3 Replication
8.5.1.C.1 Continual Improvement Program(s)
DELETED NOTES

- 6.2.2.C NOTE
- 7.1.HS.1 NOTE
- 7.2.3.C.1 NOTE 2
- 7.3.1.C.1 NOTE 1
- 7.3.1.C.2 NOTE
- 7.3.2.C.1 NOTE
- 7.3.2.C.2 NOTE
- 7.4.1.C.1 NOTE
- 8.5.1.C.1 NOTE
<table>
<thead>
<tr>
<th>R5.5</th>
<th>R6.0</th>
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<tbody>
<tr>
<td>4.2.3.C.1 Control of Customer-Supplied Documents and Data</td>
<td>7.5.3.2.C.1</td>
</tr>
<tr>
<td>5.4.2.C.1 Long- and Short-Term Quality Planning</td>
<td>6.2.2.C.3</td>
</tr>
<tr>
<td>5.4.2.C.2 Customer Input</td>
<td>6.2.2.C.1</td>
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<tr>
<td>6.2.2.HV.1 Qualification of Personnel</td>
<td>7.2.HV.1</td>
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<tr>
<td>7.1.C.2 Disaster Recovery</td>
<td>7.1.1.C.1</td>
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<tr>
<td>7.2.3.C.3 Problem Report Feedback</td>
<td>8.2.1.C.3</td>
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<td>7.3.1.C.2 Requirements Traceability</td>
<td>8.3.2.C.3</td>
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<td>7.3.3.V.1 Services Design and Development Output</td>
<td>8.3.5.V.1</td>
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<td>7.3.7.C.2 Informing Customers of Design Changes</td>
<td>8.3.6.C.2</td>
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<td>7.4.1.C.2 Supplier Performance Management</td>
<td>8.4.1.C.2</td>
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<tr>
<td>8.2.1.C.1 Customer Satisfaction Data</td>
<td>9.1.2.C.1</td>
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<tr>
<td>8.2.3.C.1 Process Measurement</td>
<td>9.1.1.C.1</td>
</tr>
<tr>
<td>8.2.4.HV.1 Inspection and Test Documentation</td>
<td>8.6.HV.1</td>
</tr>
</tbody>
</table>
7.5.3.2.C.1 (was 4.2.3.C.1)
Control of Customer-Supplied Documents and Data

The organization shall establish a documented procedure to control all customer-supplied documents and data (e.g., network architecture, topology, capacity, installation termination assignments, drawings, and databases) if these documents and data influence the realization and/or support of products and/or services.
The organization’s quality planning activities shall include long- and short-term plans with goals for improving quality and customer satisfaction plans to achieve long- and short-term quality objectives. The plans shall address business factors relevant to the organization and its customers, including performance objectives established jointly with selected customers. Performance to these goals quality objectives shall be monitored and reported to top management. Top management shall demonstrate their active involvement in long- and short-term quality planning.
6.2.2.C.1 (was 5.4.2.C.2)  
Customer Input

The organization shall implement methods for soliciting and considering customer input for quality planning activities. The organization should establish joint quality improvement programs with selected customers.
7.2.HV.1 (was 6.2.2.HV.1)

**Qualification of Personnel**

Operator Qualification and Requalification

**NOW** - The organization shall identify activities for which operator qualification and requalification are necessary. Qualification and requalification requirements shall be established for identified activities. At a minimum, these requirements shall address education, experience, training, and demonstrated skills. The organization shall communicate this information to all those affected.

**WAS** - The organization shall establish personnel qualification and requalification requirements for all applicable processes. Qualification requirements shall address employee education, experience, training, and demonstration of skills.
7.1.1.C.1 (was 7.1.C.2)

Disaster Recovery

Business Continuity Planning

The organization shall establish and maintain documented plans for continuity of operations, disaster recovery, infrastructure, and security restoration (see 6.3.C.1) to ensure the organization’s ability to continue to support its products and services recreate and service the product throughout its life cycle. Disaster recovery Business continuity plans shall include, at a minimum, crisis management, disaster recovery, and information technology. Disaster recovery and infrastructure security restoration Business continuity plans shall be periodically evaluated for effectiveness and reviewed with appropriate levels of management.
8.2.1.C.3 (was 7.2.3.C.3)
Problem Report Feedback

The organization shall provide the customer with feedback on problem reports in a timely and systematic manner.
8.3.2.C.3 (was 7.3.1.C.2) 
Requirements Traceability

The organization shall establish and maintain a method documented information to trace each documented requirement through design and test.
8.3.5.V.1 (was 7.3.3.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 **shall** include, but are not limited to:

a) documented service delivery information procedures,
b) resource and skill requirements,
c) reliance on external providers suppliers,
d) service characteristics subject to customer evaluation, and

e) standards of acceptability for each service characteristic.
8.3.6.C.2 (was 7.3.7.C.2)
Informing Customers of Design Changes

The organization shall establish a documented procedure to ensure that customers are informed when design changes affect contractual commitments.
8.4.1.C.2 (was 7.4.1.C.2)

Supplier External Provider Performance Management

The organization shall plan and perform supplier external provider performance management and development activities so that

a) suppliers are qualified to established criteria;
b) evaluation results are considered during supplier selection activities;
c) suppliers are periodically re-evaluated using established criteria;

a) supplier external provider quality performance is tracked and feedback is provided to suppliers external providers to drive continual improvement, and

b) for identified key suppliers external providers, alignment toward conformity to TL 9000 requirements and measurements or other appropriate quality management systems for the supplier’s external provider’s products and services occurs, with a preference toward TL 9000.
9.1.2.C.1 (was 8.1.2.C.1)
Customer Satisfaction Data

**NOW** - The organization shall collect data directly from customers. This data shall be trended and analyzed for improvement opportunities.

**WAS** - The organization shall establish and maintain a method to collect data directly from customers concerning their satisfaction with provided products. The organization shall also collect customer data on how well the organization meets commitments and its responsiveness to customer feedback and needs. This data shall be analyzed and trended.
Process measurements shall be identified, documented, and monitored at appropriate points to ensure continued suitability and promote increased effectiveness of processes. This includes the establishment of appropriate design process measurements. Key process measurements that impact conformity to product requirements should have specific targets or control limits established. When planned results are not achieved, correction and corrective action shall be taken, as appropriate.
Each inspection or testing activity throughout the product life cycle 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), data to be recorded (see 4.2.4),
f) defect classification scheme,
g) method for designating an inspection item or lot, and
h) electrical, functional, and feature testing.
All of the adders have been renumbered since they have been repositioned to match the new ISO sections and also due to the deletion of some adders.
24 adders and 6 notes have been changed to match the new ISO terminology.

- Products and services in place of products
- Documented information in place of procedure
- Retained documented information in place of record
Use the Contact Us function on any page of questforum.org or tl9000.org.

(note that the Contact Us function is useful for Any question or problem you may have and is Continually monitored to ensure a response)
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