



TL 9000 EXPERTS

WHITE PAPER

Release 5.0 of TL 9000

What You Need To Know About Upgrading Your Quality Management System To Release 5.0

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Introduction

The completion and introduction of Release 5.0 of the TL 9000 Quality Management System Requirements Handbook was announced in November of 2009 in conjunction with the updated ISO 9001 standard, ISO 9001:2008. The ultimate result is that all organizations that are registered to TL 9000 will need to up grade their Quality Management System at some point. There are a number of things to know about the changes in requirements so let's look at some of the highlights.

First , some basic background on TL 9000. As you may or may not know, the TL 9000 quality standard is a telecommunications industry specific quality standard based on ISO 9001. It is overseen by QuEST Forum, a not for profit organization comprised of member companies within telecommunications such as AT&T, Verizon, TELUS, Alcatel, Corning, Motorola, and many others. Early in the development of TL 9000 QuEST Forum members made a commitment to align TL 9000 with ISO 9001. Although TL 9000 is updated for various reasons, one reason is that ISO 9001 is updated about every eight years or so. When that happens the TL 9000 Requirements Handbook must be updated too. This time other requirements were considered by member companies and the TL 9000 requirements were also updated.

What to know

What was updated?

Only the Requirements portion of the standard was updated. TL 9000 requirements are found in two handbooks, the TL 9000 Quality Management System Requirements Handbook, and the TL 9000 Quality Management System Measurements Handbook. TL 9000 is unique in that measurements are required to be reported monthly from certifying organizations. **ONLY THE REQUIREMENTS HANDBOOK WAS UPDATED.** Work on the measurements handbook has began in September of 2009.

When is the update effective?

There is a deadline for conversion and an overlap period. All organizations may use Release 5.0 or 4.0 of the Requirements Handbook as of November 15, 2009. However, all organizations *must* use Release 5.0 of the Requirements Handbook to develop or update their quality management system prior to being audited after November 15, 2010. All audits conducted after November 15, 2010 must be conducted to the Release 5.0 requirements.

What are some of the important changes and why were they made?

It would be impossible to cover all of the changes and their individual rational in this article. Below is a summary of the changes.

Type	Adders	Notes
New	2	11
Expanded Scope	2	1

Renumbered	2	2
Reworded	26	11
Deleted	0	1
Unchanged	60	16
TOTAL	92	42

Table 1 Overview of Adders

In developing the new requirements handbook, workgroups considered inputs from member companies, and several sub teams analyzed the CMMI quality framework, and the TS16949 Automotive standard. Several key themes emerged. First, members wanted to include more emphasis on management of project risk. Second, it was important to strengthen current requirements. Third, the standard needed to be aligned with ISO 9001:2008. Let’s look at some examples.

Risk Management

Regarding risk, several changes were made including the addition of a new adder, 7.3.1.C.4 Risk Management Plan. *The adder says “The organization shall develop and document a plan for the identification, analysis, and control of risks to the project that can impact cost, schedule or product performance.”* Organizations will now need to identify project risks that can impact projects and control them to the best of their ability. Examples of project risk might be a single source supplier that could negatively impact project schedules, or a lack of availability of qualified personnel.

Also, 7.1.V.1 Service Delivery Plan was modified to make sure that organizations that are responsible for the delivery or implementation of a service shall *now comply with both* the Project Plan and Risk Management requirements of 7.3.1.C.1 and 7.3.1.C.4.

Sustainability

A note was added to 5.4.1.C.2 Long and short Term Planning to ask that sustainability be considered as an additional factor in planning along with cycle time, customer service, training, cost. Furthermore, 7.3.2.C.2 *Design and Development Requirements* was modified to ensure that design requirements include sustainability. 7.1.C.1 Life Cycle Model, which requires an organization to have an integrated set of method throughout a product lifecycle which include the concept, definition, development, introduction, production, operation, maintenance, and disposal of products, spanning the life of the products.

Strengthening

Study of the TS 16949 automotive standard and the CMMI quality framework indicated that TL 900 could be strengthened in the area of managing project risks. One of only two new adders to the Release 5.0 Requirements Handbook, 7.1.C.4 Risk Management Plan, now requires organizations to “develop

and document a plan for the identification, analysis, and control of risks to the project that can impact cost, schedule or product performance.” In a note of explanation the handbook states:

Risk Management should be performed during all phases of product development and should include:

- a) the means to determine risk sources, categories, and priorities
- b) identification of significant or critical characteristics and failure modes, including customer experience
- c) a definition of risk parameters (e.g. impact, probability, severity) and scoring mechanism (an example of a mature risk analysis tool is: FMEA - Failure Mode Effects Analysis)
- d) how risks will be managed (e.g. tools to be used, actions to reduce risk, mitigation strategies, monitoring and reporting requirements)
- e) inputs from appropriate functional disciplines, and
- f) a mechanism for capturing lessons learned and updating risk controls

As is always the case, notes are not auditable, however they do provide good direction on what the intent of the requirement is.

Project planning requirements in *7.3.1.C.1, Project Plan*, were modified to include design for X requirements to ensure that organizations include consideration of things like manufacturability, reliability, regulatory, serviceability, safety, *sustainability*, and testability in their project plans. Notice that sustainability is one of the areas that are required to be considered in the project design.

The requirement *6.3.C.1, Infrastructure Security* now requires that organizations not only identify critical areas of infrastructure and provide for security, but to also develop an infrastructure security plan and periodically assess it for effectiveness.

The verbiage *throughout the product lifecycle* was added to *8.2.4.HV.1 Inspection and Test Documentation* because this adder was commonly misunderstood to be limited only to post design and development or manufacturing inspections or tests. The intent of the adder was to ensure that inspections tests are conducted in a certain way no matter where they are performed.

Alignment with ISO 9001

As previously mentioned all ISO 9001:2008 requirements were included in the Release 5.0 of the Requirements Handbook. One specific adder was changed to align with the language. 7.6.C.1 was changed from Monitoring and Measuring Devices, to Monitoring and Measuring Equipment to stay aligned with the identical change in the ISO section 7.6, *Control of Monitoring and Measuring Equipment*.

How should we approach upgrading our QMS to TL 9000 Release 5.0?

Consider upgrading as soon as resource allows. Why wait? You can make the changes in your documentation, conduct an internal audit or audits on the changed items and be ready before November 15, 2010. An additional incentive for this is that your registrar can continue to audit your Release 4.0 system but since ISO 9001:2008 is already effective, they will need to issue you a certificate specifying that you only meet ISO 9001:2000 requirements if you don't upgrade.

Get some training and/or help from a consultant/trainer. The trickiest part of upgrading will as always be knowing where to make the additions and how to interpret what the standard is saying and the impact of the requirement on your particular business. While consultants and trainers will cost some money up front, they can and will save you a lot of wasted dollars in rework.

- Key Milestones for upgrading
- Consider and retain professional help where needed
- Train and analyze the changes
- Develop a project plan for adding the requirements
- Solicit help from process owners
- Develop strategies to meet the new requirements
- Document the strategies and make other needed document changes
- Audit the changes
- Conduct management review of the QMS with emphasis on evaluating the changes
- Conduct Registrar Audit or Surveillance

Summary

Upgrading your TL 9000 QMS involves making changes as determined in the TL 9000 Requirements Handbook. While there are only two brand new adders you can see from Table 1 that 30 other adders were touched in some way. There were also many clarifications to the ISO standard that will need to be considered and updated. BIZPHYX has both training for Release 5.0 and a program using our templates to add the new required procedures, make the necessary changes to your current documentation. IF you have questions please call us at (972)429-5560 or E-mail info@bizphyx.com.