

# Code of Practice for the TL 9000 Certification Process

## Release 9.1

This document is a product of the Oversight Work Group of the TIA QuEST Forum (“TIA QF”). It is subject to change by the Oversight Work Group with the latest version always appearing on the TL 9000 website.

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## Section 1: Introduction

This document is intended for organizations, Certification Bodies and Accreditation Bodies. It contains information designed to improve the contents and consistency of the audit process, including oversight.

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### Definitions

- **Correction** – action to eliminate a detected nonconformity (ISO 9000)
- **Corrective action** – action to eliminate the cause of a detected nonconformity or other undesirable situation (ISO 9000)
- **Findings include** –
  1. Major Nonconformity
  2. Minor Nonconformity
  3. Opportunities for Improvement
- **Nonconformity** –
  1. Per ISO/IEC 17021-1 3.11 “Non-fulfillment of a requirement.
  2. A nonconformity requires a written corrective action which has to be satisfactorily implemented and verified in order for the nonconformity to be closed.
- **Nonconformity, Major** –
  1. Nonconformity that affects the capability of the management system to achieve the intended results. Note: Nonconformities could be classified as major in the following circumstances:
    - If there is a significant doubt that effective process control is in place; or that products or services will meet specified requirements; - a number of minor nonconformities associated with the same requirement or issue could demonstrate a systematic failure and thus constitute a major.\*
  2. In addition a major nonconformity can be one or more of the following:
    - a. The absence of, or the failure to implement and maintain, all aspects of one or more requirements for TL 9000 certification/registration; or
    - b. A minor nonconformity that was previously issued and not addressed effectively.
- **Nonconformity, Minor** – Nonconformity that does not affect the capability of the management system to achieve the intended results.\*

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- **Opportunities for Improvement** – Documented statements that may identify areas for potential improvement in the organization’s system, but shall not include specific recommendations nor require action by the organization. Nonconformities shall not be recorded as opportunities for improvement.

### Acronyms

AB	Accreditation Body
CAP	Corrective Action Plan
CB	Certification Body
Pre-Audit CB Information Package	Information provided by the Org to the CB prior to its scheduled certification, surveillance or recertification audit.
QMS	Quality Management System

### Associated References

- ISO/IEC 17011:2017 Conformity Assessment-Requirements for Accreditation Bodies Accrediting Conformity Assessment Bodies
- ISO/IEC 17021-1:2015 Conformity Assessment-Requirements for Bodies Providing Audit and Certification of Management Systems Part 1: Requirements

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- Certification Suspension Processes
- Management of Registration Profiles
- QFE-005 - TL 9000 Auditor Time Chart
- QFE-013 - Qualification and Experience Requirements for TL 9000 Certification Body Auditors
- TL 9000 Accreditation Body Implementation Requirements
- BPCE-016 - Certification Body Quarterly Data Submission
- QFP-034 - Third Party Effectiveness Verification Program

### ***Associated (Optional) Documents:***

- ISO 9000 Quality Management Systems – Fundamentals and Vocabulary
- QFF-014 COP Checklist Guidelines
- QFF-015 -Optional Measurements Handbook Checklist

## **Section 2: General CB Requirements**

The CB must be accredited by a body recognized by the TIA QF. The CB's scope of accreditation shall cover the activity being registered (i.e., Hardware, Software, or Services, or any combination). Recognized Accreditation Bodies are listed on the TL 9000 website (<http://tl9000.org>). In order to support the synchronization of data from TL 9000's registration database to the IAF CertSearch database as required in our TL 9000 RHB, CBs are required to activate their accounts in the IAF CertSearch database. We understand the value of a central database and support the expanded use of the IAF CertSearch database.

For each three-year interval, 100% of the entire scope of the organization being registered and all applicable TL 9000 requirements and measurements shall be audited. The Audit Report shall clearly document the portions of the quality management system that were audited.

The CB audit team shall provide documented findings at the end of each audit. A written report shall be provided to the organization within 30 days of the conclusion of each audit, or within 30 days of the conclusion of a multi-site audit. The report will include the documented findings, overall audit conclusions, significant audit trails and recommendations.

CBs, or bodies related to a CB, that have provided management system consulting services and/or paid private training to a particular client may not conduct certification services for that client, nor may they supply auditors for a period of two years after the services were provided.

Auditors who fulfill the requirements of the Qualification and Experience Requirements for TL 9000 Certification Body Auditors document must perform the audit of any portion of an organization within the TL 9000 scope.

The review of the audit report package (Ref. ISO/IEC 17021-1:2015 Section 9.5.2) and confirmation of the assessment team's recommendation for certification shall be performed by a qualified TL 9000 Lead Auditor who was not a member of the assessment team. (See Qff-014 COP Checklist Guidelines). The final certification decision shall be made by the CB organization. The TL 9000 Lead Auditor requirements are defined in *Qualification and Experience Requirements for TL 9000 Certification Body Auditors*. Quality management system consultants to the organization, if present during the audit, are limited to the role of observer.

All major nonconformities shall be resolved prior to the issuance of the TL 9000 certificate. All nonconformities are handled in accordance with the CB's standard operating procedure(s).

CBs are authorized to cite conformance to TL 9000 on ISO 9001 certificates, when they: a) contract with an organization to follow this Code of Practice, and b) are accredited by a TIA QF-recognized Accreditation Body to issue TL 9000 certificates.

The CB must have a process to settle disputes over interpretations of the TL 9000 standard.

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All CBs shall submit quarterly audit data to TIA QF per BPCE-016 CB Quarterly Data Submission document. Failure to do so will result in CB suspension as detailed in the CB Quarterly Data Submission document.

### Section 3: Classification of Audit Findings and Resolution

#### ***Nonconformity Process***

CBs shall have a documented process to close major and minor nonconformities identified in a TL 9000 audit.

The process for closing nonconformities shall include:

1. A Corrective Action Plan (CAP) for each nonconformity shall be received by the CB within 30 days following the Organization's receipt of the audit report. This CAP shall include containment/correction, root cause analysis, and an implementation due date. CBs are required to respond to the proposed CAP in a timely manner. Resolution by the organization of a major nonconformity requires acceptable evidence of implementation of the CAP within the CB's specified timeframe, not to exceed 90 days from the Organization's receipt of the audit report. Resolution by the organization of a minor nonconformity requires acceptable evidence of implementation of the CAP no later than the next scheduled audit. Exceptions to these resolution timeframes shall be approved by the CB, fully justified by the organization and documented. A follow-up visit within the 90-day timeframe will be required for major nonconformities to verify effective implementation of the corrective action unless otherwise justified and documented.
2. A TL 9000 certification shall not be issued until: (a) all major nonconformities are fully resolved; and (b) minor nonconformities are fully resolved or corrective action plans are defined consistent with the above timing requirements.
3. A certified organization shall not receive re-certification if there are overdue minor nonconformities from the previous audit or any unresolved major nonconformities at the time the certificate expires. Failure to meet the deadline for closing a major nonconformity after a surveillance audit shall lead to the withdrawal of the TL 9000 certificate. The certificate may be reinstated on resolution of the nonconformity.

CBs shall have a documented process to ensure that findings raised during audits are being recorded in accordance with the findings definition listed in Section 1. This process shall include an evaluation of the quantity and type of audit findings raised: majors, minors, and opportunities for improvements. The process shall include investigation and, where necessary, performance improvement of individual auditors who consistently misclassify audit findings.

**NOTE:** See "Guidance for Monitoring Auditor Performance" on the tl9000.org website for additional information on factors to be considered in these evaluations and other guidance.

#### **Examples of Major and Minor Nonconformities:**

##### **Major Nonconformities:**

- The omission of all aspects of a specific requirement of the Requirements or Measurements Handbooks.
- Systemic failure of the organization to implement and maintain effective internal audit and management review processes.
- Failure to achieve the fundamental aim of a system element. For example, the fundamental aim of calibration is to ensure the measuring equipment conforms to the requirements for its intended use.
- Failure to follow legal/statutory requirements applicable to the product or service.
- Multiple minor non-conformities within the same element of the standard, process or part of the system which when combined represent a breakdown of the organization's systems.

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- Where judgment and experience can reasonably demonstrate the likelihood of non-conforming product being shipped or nonconforming service provided resulting from the inability to control processes or as a direct result of a system failure.
- Failure to correct minor nonconformities previously raised by the CB unless evidence is in place showing progress and tracking to an established implementation due date.
- Repeated submission of data inconsistent with the counting rules in the Measurements Handbook or conscious lack of resubmitting previous data when it is known to be inaccurate.

### **Minor Nonconformities:**

- An observed lapse in following a process, procedure or the management system where judgment and experience can demonstrate there is minimal risk to the product being supplied.
- Any failure of the audited system to satisfy the effective implementation of a requirement of the TL 9000 Requirements or Measurements Handbooks, that is not considered to be a major nonconformity.

## **Section 4: Consistent Audit Approach Definition & Criteria for CB & Organization**

There are three areas requiring consistency by the CB and Organization. Each section below describes the requirements.

### ***Pre-Audit Information***

The CB is required to obtain the following information and data from the Organization a minimum of three weeks (or within an agreed timeframe) prior to scheduled audit:

1. List number of people within the registration scope for the site audited.
2. List processes (for example, development, technical assistance center, coding, manufacturing, training, or repair) and applicable Requirement and Measurement Handbooks' requirement elements executed within the scope of registration. For each site to be audited, list the processes executed at the site. Note: An example applicability matrix is available on the tl9000.org website.
3. List Product Categories applicable at the site undergoing audit.
4. List Product(s) under TL 9000 registration by location separated by Hardware, Software and Services **and list all major outsourced entities**, for example, board manufacturing, development, design) and their locations, in support of the Product(s).
5. Provide information on significant organizational changes, acquisitions, outsourcing or significant changes that have occurred since the last audit or registration contract approval.
6. The organization may re-use the last Pre-Audit CB Information Package, but shall clearly highlight what has changed.

The CB is required to undertake the following Pre-Audit Requirements:

1. Obtain the required Pre-Audit CB Information Package within required timeframe.
2. Use the Pre-Audit CB Information Package provided by the Organization in planning the subsequent audit.
3. Pre-Audit CB Information Package is a required record.

NOTE: Organizations who plan their surveillance and recertification audits close to the surveillance and recertification audit deadline are at risk of having their certificates suspended if Pre-Audit CB information package requirements are not met. It is recommended that surveillance and recertification audits be planned well in advance of deadlines.

### ***On-Site Audit Requirements***

**While on site the CB is required to:**

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1. Comply with most current version of ISO/IEC 17021 Conformity Assessment-Requirements for Bodies for Providing Audit and Certification of Management Systems.
2. Confirm Pre-Audit CB information Package data is still current.
3. Review effectiveness of the corrective action system processes to include sampling of corrective actions that are overdue and corrective actions not considered overdue but are still open after nine months.
4. When reviewing documentation requirements ensure that current practice is reflected in the documented procedure and aligns with the applicable TL 9000 release.
5. Review a sampling of customer TL 9000 audit findings and customer satisfaction results since the last CB audit.
6. Follow-up on progress of any relevant formal complaints registered with the CB against the organization.
7. Review root cause of pertinent product recalls to identify processes for additional focus within the audit.
8. Use the process audit approach for TL 9000 Measurements to include collection, validation and submittal in accordance with Section 6 below.
9. For those processes audited, the process review shall include an assessment of the effectiveness of that process.

CB Installation Site Audit Guidance (Applicable to organizations with 7.1.1 and 7.1.4 in their scope)

Upon initial certification and at least once during each 3 year certification cycle the CB shall conduct at least one audit of an active installation site. This audit may be conducted per IAF MD4. All applicable process requirements shall be covered during this allocated time. The organization shall coordinate all necessary arrangements with the customer and the audit team for site access.

During the remaining audit of the 3 year certification cycle when an on-site audit of an active installation is not performed:

- The organization shall have an installer available at the managing location or via phone conference for process auditing purposes.
- The organization shall provide evidence for all applicable installation process requirements that can be substantiated remotely. (e.g. training records, test records, calibration records.)
- If the CB determines that the audit results require an on-site visit of an active installation the organization shall make appropriate arrangements within a reasonable time frame.

### ***Post-Audit Requirements***

CB is required to monitor audit reports to ensure conformance with ISO/IEC 17021-1 auditing requirements and include evidence that items in the Code of Practice are addressed and documented in the audit report even if the item is not applicable.

## **Section 5: AB Oversight Requirements**

AB is required, during any TL 9000 CB oversight audit, to verify that this Code of Practice for TL 9000 Certification Bodies is followed.

ABs are required to verify compliance to the listed documents in the ***Associated References*** section of the Code of Practice for TL 9000 Certification Bodies.

For CB withdrawals or suspensions, the AB shall make the required changes to the RMS.

## Section 6: Responsibilities for Measurement Audits

During the audit each CB has responsibility to verify that all measurement processes are in place and effective to insure the validity of TL 9000 measurements, including definitions and requirements. The information below can be used to help clarify the expectations of the CB Auditor. This guidance is not intended to identify any additional requirements - only clarifications to those that exist in the TL 9000 handbooks. As these are only clarifications, they are not expected to result in a need for additional audit days.

The following CB auditor responsibilities shall be clearly defined:

1. The CBs shall verify that the organization has a documented system in place that covers:
  - a. Measurements collection: Much, if not all, of Measurements Handbook sections 3.5.2 subsections a), c) through j), and the collection/submission portion of b), can be verified prior to going on-site.
  - b. Measurements validation in accordance with Measurements Handbook section 3.5.2. The CB shall audit to the depth necessary to assure effective implementation of TL 9000 requirements (see item 8 below).
  - c. Measurements reporting, in accordance with Requirements Handbook section 5.4.1.C.1 (RHBr5.5) or 6.2.1.C.1 (RHBr6) and Measurements Handbook sections 3.2 subsections a) and b).
2. Ensure the TL 9000 measurements are used internally by the organization per Measurements Handbook section 3.1 Requirements for Measurements Usage. This includes reviews by management, quality/strategic objective setting for continual improvement, result/trend reviews, and corrective action plans for any performance deviating from the organization's defined quality/strategic objectives, in accordance with Requirement Handbook sections 5.4.1.C.1 (RHBr5.5) or 6.2.1.C.1 (RHBr6), 5.6 (RHBr5.5) or 9.3 (RHBr6), 8.5.2 (RHBr5.5) or 10.2 (RHBr6) and Measurement Handbook sections 3.1 first hyphen, 3.5.2 subsections i) and j).
3. If any measurements are identified as "EXEMPT", as defined in Measurements Handbook, sections 3.2 b) and 4.2.8 b), the documented rationale for the exemption shall be reviewed and accepted if valid by the CB auditor. The CB auditor shall ensure this documentation has been available for review if requested by the organization's customers. The claimed exemption(s) also shall be noted on the organization's registration profile.
4. The CB auditor shall verify that measurements are being used in customer/organization relationships, in accordance with Measurement Handbook section 3.1.
5. The CB auditor shall verify that necessary information is being shared by the organization with its suppliers in accordance with the Measurement Handbook section 3.5.2 n) and o).
6. The CB auditor shall verify that measurements are reported to the TL 9000 Administrator [UTD] in full accordance with the Measurement Handbook sections 3.1 third hyphen, 3.2 subsections a) and b), 3.5.2 subsections b) through h), and 3.5.2 k). This is to include a review of the Data Submission Receipts for:
  - a. "Passed" designation
  - b. "EXEMPT" designations
  - c. Any notes or advisories on the Data Submission Receipts and
  - d. ProbationsAdditionally, the CB Auditor shall verify the following:
  - e. Any claimed exemptions are documented and valid
  - f. All items shown "EXEMPT" on the Data Submission Receipt are in full compliance with the Measurement Handbook and item 3 above
  - g. The Organization's data submission history since the last audit.

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7. If current performance shows an undesirable deviation from the organization's defined quality/strategic objectives for TL 9000 Measurements, the CB auditor shall verify that corrective action has/is being taken, is documented, and progress is being tracked, in accordance with Measurements Handbook sections 3.1 a), 3.5.2 subsections i) and j), and 3.5.5 c), and Requirements Handbook section 8.5.2 (RHBr5.5) or 10.2 (RHBr6).
8. The CB auditor shall verify that measurements collected are consistent with scope of registration, registration option [HSV], and product category, in accordance with Measurements Handbook sections 3.2 subsections a) and b), and 3.5.2 c). This can be done prior to the on-site activities.
9. CB auditors shall review the actual data submissions, verifying proper implementation of the counting rules for required measurements. This check is to review data consistency covering a minimum one-year period except when the organization and/or new product have been certified for less than one year in which case the data shall be reviewed for at least as long as the organization and/or new product has been certified.

For the initial registration audit, pre-certification data submissions (minimum of 3 consecutive months' data) require verification. This shall be done to fulfill Measurements Handbook requirement 3.3.1 first hyphen and in accordance with sections 3.5.2 subsections a) and b).

10. When an Organization upgrades its registration to a new version of the Measurements Handbook as part of its Surveillance or Re-certification Audit, at least the most recent month's data submission shall use the new version of handbook. CB auditors will verify that all relevant counting rule changes have been properly implemented for the required measurements.
11. While the sample size for the above requirement is left to the CB, it is expected that the depth of assessment for the sampled measurements assures accurate and comprehensive calculation, counting rules, reporting mechanisms, and validation of the measurements. The actual time spent auditing the measurements shall be documented and shall be verified by the technical report reviewer.
12. CB auditors shall confirm that the registration information (for example, scope, product category, and locations) contained in the Registration Management System ("RMS") is current and accurate during each assessment, to support the verification of Measurements Handbook sections 3.4.1 and 3.5.2 c). This can be started prior to the on-site activities.
13. CB auditors shall confirm that the product categories chosen by the organization are correct for their products, in accordance with Measurements Handbook section 3.5.2 c). This can be done prior to the on-site activities.

## Section 7: Document Change History

Version	Change	Date	Effective
9.1	Clarified in Section 2 that TL 9000 auditors are required to conduct TL 9000 Certificate audits. Also removed all the IAF MD1, MD2, MD4 and MD5 documents from <i>Associated Reference</i> section as they are all required documents for ABs and CBs. Removed obsoleted Guidance for Monitoring CB Auditor Performance from <i>Associated Optional References</i> section. Provided the reason for CBs to join the IAF Database Search. Update TIA BPC to TIA QF	Dec 17, 2020	Dec 31, 2020
9.0	Modified to include AB oversight documents to the reference section that address withdrawal process; added to AB oversight "For CB withdrawals or suspensions, the AB shall make the required changes to the RMS." Set effective date to December 31, 2020.	June 19, 2020	Dec 31, 2020



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8.1	Update Section 2 first paragraph to add: CBs are required to activate the IAF database account.	April 17, 2020	Dec 31, 2020
8.0	1. Update DSR Review requirements from reviewing each DSR to reviewing reports since last audit. 2. Updated reference to MD 4 replacing CAAT. 3. Remove Section 5 e-Audit requirements. 4. Replace QuEST Forum with TIA BPC. Renamed QFE-016 to BPCE-016.	Nov 6, 2018	Jan 1, 2019
7.2	1. Update Major, Minor and OFI definitions to align with 17021-1. Modified Nonconformity definition. 2. Removed "Exclusion" and "Exemption" definitions. Renamed QFF-015 to Measurements Handbook Checklist to remove reference of MHB version. Distinguish between who is required to review the audit report vs. making the certification decision. In Section 2.	Aug 18, 2017	Sept 1, 2017
7.1	Clarify Pre-Audit Information Section requirement: Pre-Audit Info to be provided by the Org to the CB is to include a cross-reference of TL requirements by process, and a cross-reference of processes by site. (A cross reference of TL requirements by process by site is neither expected nor required).	Feb 24, 2017	July 1, 2017
7.0	1. Scrub of Associated References Section and Associated (Optional) Documents Section; 2. Added that audits shall be performed by individuals who fulfill the requirements listed in the Qualification and Experience Requirements document; 3. Clarified certification decision authority. 4. Moved Pre-Audit Information Note from the top of the section to the bottom of the section; 5. Clarified wording of CB Installation Site Audit Guidance; 6. Added that ABs are required to verify compliance to listed documents in Associated References; 7. Updated to include references where needed to the TL 9000:2016 R6 Handbook; 8. Added a requirement that the actual time spent auditing the measurements shall be documented by the leader auditor and verified by the technical report reviewer.	Jan 2, 2017	July 1, 2017
6.2	1. The existing requirement for CB Quarterly Data Submission was documented in the last paragraph of Section 2 General CB Requirements; 2. Modified Section 4 On-Site Requirements regarding CB Installation Site Guidance applicable to product categories 7.1.1 and 7.1.4 as noted below; 3. Requirement Changes for installation Audits to remove reference to "on site" for an audit and added that the audit may be conducted per IAF MD4. 4. Updated Associated Documents/References section to include QFE-016 CB Quarterly Data Submission document, TL 9000 Auditor Time Chart and QFP-034 3 <sup>rd</sup> Party Effectiveness Verification Program.	June 1, 2016	June 1, 2016
6.1	Section 1 Changed all references to point to the current version of the reference document. Section 2 Paragraph 5 has changed the auditor qualifications to point specifically to the Qualifications and Experience Requirements for TL 9000 Certification Body Auditors document. Section 3 had added a requirement that CBs have a documented process to ensure that findings raised during audits are being recorded in accordance with the findings definition listed in Section 1 of the Code of Practice. A companion document "Guidance for Monitoring Auditor Performance" posted on the tl9000.org website provides additional information on factors to be considered in these evaluations and other guidance. Section 4 the example matrix has been removed from the document and posted on the tl9000.org website. Section 4 added the applicable Requirement and Measurement Handbooks required elements to the process information provided in the pre-audit information package. Section 4 added requirement the a installation or construction site be audited for initial certification and at least once during each 3 year certification cycle for organizations in product categories 7.1.1 Installation and 7.1.4 Tower construction. Multiple sections changed "nonconformances" to "nonconformities".	April 10, 2015	July 1, 2015