



LAS-Q001 A

**GENERAL REQUIREMENTS FOR ACCREDITATION OF
TESTING/CALIBRATION LABORATORIES**

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TTLABS ACCREDITATION PROCESS

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**TRINIDAD AND TOBAGO LABORATORY ACCREDITATION SERVICE
(TTLABS)**

**General
Requirements
for
Accreditation
of
Testing/Calibration Laboratories**

**[Intended for use with ISO/IEC 17025. This document does not include the
text of ISO/IEC 17025.]**

December 18, 2006

GENERAL REQUIREMENTS FOR ACCREDITATION OF TESTING/CALIBRATION LABORATORIES

December 2006

Foreword

The Trinidad and Tobago Laboratory Accreditation Service (TTLABS) is a semi-autonomous, governmental unit within the Trinidad and Tobago Bureau of Standards (TTBS) dedicated to operating a nationwide, broad spectrum laboratory accreditation system. Accreditation is a formal recognition of competence that a laboratory can perform specific tests or calibrations.

Accreditation is available to any type of testing or calibration laboratory, be it in the private sector (independent or in-house) or in the government sector. Accreditation is available for virtually all types of tests, calibrations, measurements and observations that are reproducible and properly documented.

The accreditation of laboratories is offered in the following fields of testing:

Chemical and Biological	Mechanical	Medical
Electrical	Calibration and	Agricultural
	Measurement	
Civil Engineering and Nondestructive		

Special programs can be developed in response to user needs and may cut across more than one field of testing.

If only a few tests from a second field are to be included and all testing is managed in one facility under one management system, these tests may be added to the scope of accreditation in the primary field at no charge for a second field. If there are two managers of equivalent status responsible for the testing in each field, accreditation will be necessary in both fields.

Users of accredited laboratories are advised to obtain the Scope(s) of Accreditation from any accredited laboratory or from TTLABS. The Scope(s) of Accreditation identifies the specific tests or types of tests or calibration capability for which the laboratory is accredited.

The general requirements (general criteria) for accreditation used by TTLABS are from the international standard, ISO/IEC 17025-2005, "General requirements for the competence of testing and calibration laboratories" (ISO 15189-2003, "Medical laboratories – Particular requirements for quality and competence"). Additional program requirements (specific criteria) for specific fields may be established in the future to complement these general requirements in particular areas.

In effect, TTLABS accreditation attests that a laboratory has demonstrated that:

- it is competent to perform specific tests, types of tests, calibrations, or types of calibrations listed on its Scope(s) of Accreditation;
- its management system addresses and conforms to all elements of ISO/IEC 17025-2005 (or 15189), is documented per ISO/IEC 17025 (or 15189), and is fully operational;
- it conforms to any additional requirements of TTLABS or specific fields or programs necessary to meet particular user needs.

It is TTLABS policy not to accredit or renew accreditation of a laboratory that fails to meet the above criteria (see Part B, Conditions for Accreditation and Part C, Accreditation Process, sections on nonconformities, accreditation decisions and suspension or withdrawal of accreditation).

_____, Manager, TTLABS

**GENERAL REQUIREMENTS FOR ACCREDITATION OF TESTING/CALIBRATION
LABORATORIES**

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PART A

EXPLANATORY NOTES for the GENERAL REQUIREMENTS FOR THE COMPETENCE OF TESTING AND CALIBRATION LABORATORIES (ISO/IEC 17025-2005)

Introduction by TTLABS

All testing and calibration laboratories accredited by the Trinidad and Tobago Laboratory Accreditation Service (TTLABS) are required to comply with ISO/IEC 17025-2005, "General requirements for the competence of testing and calibration laboratories", unless there is some unusual circumstance in the laboratory making conformity with a specific provision inappropriate. **Laboratories will be assessed against the full text of the standard. Laboratories must obtain a copy of ISO/IEC 17025. Part A of this document does not include all the requirements of the standard. The *TTLABS Explanatory Notes* that follow (sections in *Italics*) are interpretative guidance on particular requirements in the text. Although these explanatory notes address ISO/IEC 17025, most also apply to ISO 15189, which has equivalent text. These explanatory notes are not to be interpreted as additional requirements, but rather as clarification and recommendations for implementation.**

ISO/IEC 17025 covers both calibration and testing laboratories, so the pairing of "calibration and test" is frequently repeated. In this context, test laboratories should ignore the word "calibration" (with the exception of sections 5.4.6.1 and 5.6.2.2) and calibration laboratories should ignore the word "test."

4 Management requirements

4.1 Organization

4.1.1 Legal responsibility

TTLABS Explanatory Note: *The laboratory can be a public or private entity, an established business or corporation, or an identifiable division or in-house activity of a business or corporation, which meets the applicable legal requirements of the governmental jurisdiction in which it conducts business. Legal responsibility aids in addressing issues of liability/accountability, uniqueness, and independence of operation.*

4.1.5 b) Undue internal and external pressures

TTLABS Explanatory Note: *Both in-house as well as commercial laboratory personnel should be insulated from work-related undue pressures which would compromise the quality of work. The source of undue pressure may be internal (e.g., management pressure, deadlines) or external (e.g., customer complaints, priority requests). Management should decide which types of undue pressure laboratory personnel might encounter and implement clear policies and instructions for countering them. Precautions should be taken to ensure that there are no conflicts of interest between laboratory personnel and customers. If relevant, the laboratory should have a written policy against acceptance of gifts and gratuities by employees from customers in order to avoid perception of conflict of interest. Also, a policy*

for handling internal complaints or concerns from employees should be included. Communications (priority requests, complaints, status inquiries, etc.) could be directed through supervision or administrative personnel. Ethics programs, skip-level management interviews, arbitrator programs, etc., may also provide avenues of coordination that preclude adverse effects resulting from commercial pressures. All these efforts may be included in the quality manual or issued as policy statements to employees.

4.1.5 d) Avoidance of involvement in any inappropriate activities

TTLABS Explanatory Note: This clause refers to activities undertaken by the laboratory or its staff outside of normal operations that could cast doubt upon the laboratory's integrity.

4.1.5 e) Organization and management structure

TTLABS Explanatory Note: An organization chart or charts with the reporting relationship to any parent organization or ownership should normally be a sufficient presentation of the organization and management structure of the laboratory.

4.1.5 j) Deputies

TTLABS Explanatory Note: Arrangements for designating the person(s) acting in the absence of the technical and quality management should be documented to ensure continuity of operation in case of absence(s). If the integrity of the laboratory is jeopardized by lack of other key laboratory personnel, deputies for those positions should also be provided. Designated deputies should have the required knowledge and expertise to assume the position, or the activities should be appropriately curtailed where knowledge and expertise do not exist with the deputy. A deputy Authorized Representative, knowledgeable about TTLABS accreditation policies and procedures, should also be named.

4.2 Management system

4.2.1 Management system: documented, communicated

TTLABS Explanatory Note: Laboratory activities may already be incorporated in a quality manual covering a parent organization's total range of operations. If so, it may be necessary to extract that information and expand on it to establish quality policy and objectives, and perhaps create a separate manual, specifically relating to the laboratory's functions.

The laboratory may communicate the system's documentation through the use of (1) a controlled distribution list of individuals having numbered copies of the quality documentation (or equivalent electronic means of distribution), and (2) a documented laboratory training program.

4.2.2 Management system policies and objectives; quality policy statement

TTLABS Explanatory Note: At a minimum, the quality manual must include a reference to each quality system policy indicating where in the quality system documentation the full policy can be found.

4.3 Document control

No TTLABS Explanatory Notes

4.4 Review of requests, tenders and contracts

4.4.1 c) Procedures for review of requests, tenders and contracts: selection of appropriate test and/or calibration method

TTLABS Explanatory Note: During contract review, calibration laboratories should specifically discuss their measurement uncertainty with their customers to ensure they can meet the customers' specifications.

4.5 Subcontracting of tests and calibrations

TTLABS Explanatory Note:

Laboratories should document their policies and procedures for hiring subcontractors. Accredited laboratories using the services of a subcontracting laboratory are responsible for ensuring to their customers that the subcontracting laboratory has a satisfactory management system and is competent to perform the required calibrations or tests. Reliance on TTLABS-accredited status for the pertinent calibrations or tests is sufficient. When a subcontractor is not accredited by TTLABS or another organization recognized as equivalent, the laboratory should record its assessment of that laboratory's capability to meet 17025 requirements on a requirement-by-requirement basis and competently carry out the tests involved. Investigations of non-accredited subcontractor laboratories should be done using an audit process similar to its own internal audit system as required by Section 4.14. As an example, the laboratory should require the following subcontractor records to demonstrate compliance with ISO/IEC 17025 for the work in question prior to subcontracting:

- A copy of the subcontractor's quality manual that meet the requirements of ISO/IEC 17025,
- A copy of the subcontractor's procedure(s) for the work in question,
- A copy of training records for the personnel responsible for performing the subcontracted work, and
- An example test report or certificate for the testing intended to be subcontracted.

4.6 Purchasing services and supplies

4.6.4 Evaluation of suppliers of critical consumables, supplies and services

TTLABS Explanatory Note: The laboratory should identify the inputs to its processes in terms of equipment, materials and services which affect the integrity of its calibrations and tests and develop appropriate specifications and quality control measures.

The TTLABS Traceability Policy requires that calibration services be obtained from laboratories accredited to ISO/IEC 17025 by TTLABS or another accrediting body recognized by TTLABS, when such laboratories are available for the calibrations required. This ensures that traceability to the relevant national or international metrology standards as required by Section 5.6 is authenticated. Laboratories should evaluate the measurement uncertainties claimed by their calibration provider to ensure any applicable specifications or requirements are met.

4.7 Service to the customer

No TTLABS Explanatory Notes

4.8 Complaints

Policy and procedure for resolution of complaints

TTLABS Explanatory Note: Complaints received need not be in writing. Many complaints arrive via telephone or other oral means. A record should be made of the complaint at the time received. They should be assigned to someone for resolution. Guidance should be supplied in the quality manual as to

when a conversation becomes recorded as a complaint. All complaints should be concluded and a file should include the substance of the complaint and its resolution. Complaints may be generated by external customers or from within the laboratory's organization. Section 4.8 refers to complaints about the laboratory's activities. Complaints referred to in this section should not be confused with complaints against quality characteristics of the actual product or item being tested or calibrated.

4.9 Control of nonconforming testing and/or calibration work

No TTLABS Explanatory Notes

4.10 Improvement

No TTLABS Explanatory Notes

4.11 Corrective action

No TTLABS Explanatory Notes

4.12 Preventive action

No TTLABS Explanatory Notes

4.13 Control of records

4.13.1 General

4.13.1.1 Procedures for quality and technical records

TTLABS Explanatory Note: The Conditions for Accreditation (Part B of this document) require that the laboratory retain all quality records (as defined in ISO/IEC 17025, Clause 4.13.1.1) and technical records supporting reported results (as defined in ISO/IEC 17025, Clause 4.13.2.1, and Clauses 5.10.2 through 5.10.4) throughout the period between TTLABS on-site assessments.

4.14 Internal audits

TTLABS Explanatory Note for Section 4.14: This section requires that the laboratory have its own internal audit system. Internal audits are those of the laboratory itself. The laboratory can procure the services of an outside audit professional, provided the scope of the audits and follow-up activities cover the full range of operations as required in 4.14.1. It is not sufficient to rely only on external (second- or third-party) audits. TTLABS assessments may complement, but not substitute for, the laboratory's own audits. Internal audits should also include audits of data quality. Audits should determine:

- whether procedures described in the management system are being followed;
- whether objectives (as defined by the management system) are being achieved;
- whether designated duties are being carried out satisfactorily; and
- whether there are opportunities for improvements.

4.15 Management reviews

No TTLABS Explanatory Notes

5 Technical requirements

5.1 General

No TTLABS Explanatory Notes

5.2 Personnel

5.2.1 Competent personnel

TTLABS Explanatory Note: *The appraisal of personnel is a major part of laboratory assessments. This criterion is evaluated based on the range, complexity and frequency of performance of calibrations or tests for which accreditation is sought. For many tests, "sufficient personnel" may mean more than one person is involved to assure technical competency. For example, a supervisor exercising technical control may be relatively inexperienced with respect to one facet of the laboratory's work, but another person or persons working in close collaboration with the supervisor may compensate for this inexperience. The accreditation in such a case would be reviewed if there were a major change in either person's duties. The loss of key personnel may affect continuing accreditation. For example, TTLABS assessors identify key (or indispensable) laboratory personnel whose absence would reduce the laboratory's technical competence and may prompt a reassessment before it would be normally scheduled or removal of the affected tests from the Scope of Accreditation.*

Technical personnel should have demonstrable knowledge and skills to perform calibrations or tests and compute results. They may be asked to demonstrate tests or specific techniques during an assessment.

The qualifications and experience required for senior laboratory personnel are reviewed during the assessment. Factors to be considered include:

- *the number of calibrations or tests for which accreditation is sought;*
- *the technical complexity of the calibrations or tests;*
- *measurement uncertainty claimed;*
- *the frequency at which specific calibrations or tests are conducted, particularly those calibrations or tests that are judged to be highly experience dependent;*
- *the contact that the senior laboratory personnel maintains with the development of methodology and adoption of new methodology within the laboratory.*

In all cases senior laboratory personnel need to demonstrate appropriate understanding of the calibration or test areas in which they exercise supervision.

In assessing qualifications, the balance between relevant academic qualifications and practical calibration or test experience is considered in the light of the range, complexity and accuracy required.

For a laboratory seeking accreditation for a wide range of complex calibrations or tests, senior Laboratory personnel would be expected to have attained a high level of education in the relevant discipline together with sufficient experience in the relevant calibrations or tests.

The senior Laboratory personnel engaged in a limited range of relatively simple calibrations or tests, while holding lesser qualifications, may demonstrate appropriate competence by having relevant calibration or test experience and demonstrable laboratory management expertise.

5.3 Accommodation and environmental conditions

5.3.1 Appropriate facilities and environment

TTLABS Explanatory Note: *These requirements also apply to off-site calibration or testing facilities in that care should be taken to monitor, record, and compensate for these environmental conditions.*

5.4 Test and calibration methods and method validation

5.4.4 Non-standard methods

TTLABS Explanatory Note: *TTLABS considers accreditation of in-house methods where existing standard methods are not suitable. These methods should be fully documented as described in the Note following Section 5.4.4 and appropriately validated in accordance with Section 5.4.5. Documentation of the validation of the method as established by the laboratory is the primary basis for determining if the method can be included in the scope of accreditation.*

5.4.6.2 Uncertainty of measurement for testing laboratories

TTLABS Explanatory Note: *Testing laboratories should evaluate the need for estimating measurement uncertainty for each test method according to the following two scenarios:*

1. *Methods that require the estimation of uncertainty are those where:*

- a) *Measurement results are quantitative, or*
- b) *Decisions are based on quantitative results, or*
- c) *There exists customer, specification, method or regulatory requirements for estimating uncertainty.*

2. *Methods that do not require the estimation of uncertainty are those where:*

- a) *Results are qualitative or,*
- b) *The major sources of uncertainty have been addressed in the test method (see Note 2 of 5.4.6.2).*

The evaluation of the need for estimating measurement uncertainty should at a minimum include an identification and assessment of the major or most significant sources of uncertainty.

Guidance documents enjoying worldwide acceptance are available to assist in the estimation of measurement uncertainty. A list of these documents is included in the Bibliography at the end of this Section.

5.4.7.2 Computers and automated equipment

TTLABS Explanatory Note: *Computers are used in many different aspects of a modern laboratory's business. Some test equipment has a significant computer function as an integral part of its operation. In*

this case, the laboratory should have supporting evidence that the equipment is capable to perform within the required uncertainty of measurement.

The laboratory should be able to demonstrate that the data generated by the software are equivalent to manually generated data across the full range of the equipment including input and as applicable display and print out. Procedures should address the use of the software and operation of the computerized system, including authorized access to and authorized amendment of computer records. The system should be capable of storing and retrieving all entries of and amendments to the data (see Section 4.12).

Some laboratories create their own management information systems that integrate data from different instruments, collate it, check it against reference standards, and print it out. In this case, the laboratory should have a system in place to handle computer operations including:

- *appropriate organization and management functions;*
- *knowledgeable personnel;*
- *an appropriate environment;*
- *necessary equipment;*
- *needed software.*

The laboratory should also have procedures for:

- *validating the software (see 5.4.7.2a);*
- *operating the equipment (including data entry and data interpretation);*
- *reporting results coming from the computer equipment.*

These computerized procedures should be adequate to meet revisions of test methods or standards whenever they apply. Regular back-ups of programs and data should be performed (see clause 4.12.1.4).

5.5 Equipment

5.5.1 Sampling, measurement and test equipment

TTLABS Explanatory Note: *According to the Conditions for Accreditation (Part B of this document), all equipment needed to perform the calibrations or tests (including environmental monitoring if required) must be available during on-site assessment. The requirements of 17025 and TTLABS Policies apply whether the equipment is owned, leased, rented, or borrowed.*

5.5.6 Procedures for safe handling, transport, storage, use and planned maintenance of measuring equipment

TTLABS Explanatory Note: *Maintenance procedures should state in detail:*

- *how historical maintenance information is kept;*
- *how an instrument that has been subjected to any influences that might cause doubt as to its integrity is handled;*
- *how out-of-service-equipment is identified and/or isolated to prevent its use;*
- *how effects of previous calibrations or tests are determined;*
- *how operational status is identified; and*
- *where equipment is held while out of service.*

5.6 Measurement traceability

5.6.2.1.1 Traceability to the International System of Units (SI) (Système international d'unités).

TTLABS Explanatory Note: *See the TTLABS Traceability Policy for additional requirements regarding calibration services and demonstration of traceability.*

5.7 Sampling

No TTLABS Explanatory Notes

5.8 Handling of test and calibration items

No TTLABS Explanatory Notes

5.9 Assuring the quality of test and calibration results

TTLABS Explanatory Note: *The laboratory should have a systematic quality control program for checking or monitoring the reliability or accuracy of its results for all methods and measurement processes. The particular quality-control schemes and statistical techniques vary greatly with the nature and volume of calibration or testing. Statistical quality-control charts or equivalent tabulations for monitoring accuracy and precision should be maintained for quality-control test items such as reference test materials/standards and replicate tests from the same material source as is practicable. The use of reference materials/standards provides for the monitoring of accuracy. Replicate testing of duplicate test items and repeated measurements provides for the monitoring of precision. The retention and re-test of test items may be specified in response to questionable results or complaints. Evaluation of interrelated characteristics of individual test items can aid in detecting errors.*

5.10 Reporting the results

TTLABS Explanatory Note: *TTLABS accreditation entitles an accredited testing laboratory to place the TTLABS symbol on test reports. TTLABS accredited calibration laboratories are required to include the symbol on accredited reports or certificates. TTLABS strongly encourages the use of the symbol by a laboratory when its accredited status contributed to its obtaining the contract for the work. The calibrations or tests reported in this manner must be performed under the terms of its accreditation and be included in the laboratory's scope of accreditation. According to the TTLABS Policy on Laboratory Reference to TTLABS Accredited Status (Part C, Section X of this document), reports including the TTLABS symbol shall include the laboratory's accreditation certificate number. A statement similar to the following should also be included:*

This laboratory is accredited by the Trinidad and Tobago Laboratory Accreditation Service (TTLABS) and the results shown in this test report [or calibration certificate] have been determined in accordance with the laboratory's terms of accreditation unless stated otherwise in the report.

Reports carrying the TTLABS symbol that contain data from calibrations or tests for which a laboratory is not accredited or which have been undertaken by a subcontractor laboratory must state that these data are not covered by the laboratory's TTLABS accreditation.

Accredited laboratories have the responsibility to ensure that their customers receiving reports carrying the TTLABS symbol are aware that products, materials or other items of calibration or test are in no way approved or endorsed by TTLABS. The TTLABS symbol may be used on reports which extend the results on a sample or samples to the properties or qualities of a lot or batch from which the sample was drawn provided that the accredited laboratory's scope of accreditation covers the sampling involved, samples concerned were taken by the Laboratory personnel of the accredited laboratory using an approved sampling procedure (unless provisions of a special program permit otherwise), and the report includes all information required by clause 5.10.3.2.

Refer to the sections X and XI in Part C of this document regarding laboratory reference to TTLABS-accredited status and misuse of the TTLABS symbol for related guidance on advertising and referring to accredited status.

5.10.2 e) Identification of the method used

TTLABS Explanatory Note: *The issue date of the test method should be included in the report.*

5.10.2 f) description, condition, and unambiguous identification of item(s) tested or calibrated;

TTLABS Explanatory Note: *Clause 5.8.3 only requires that abnormalities or departures from normal or specified conditions be recorded. A similar practice should be acceptable in reporting results, i.e. a general statement regarding the acceptable condition of the item should suffice, with more detail given when departures are encountered.*

5.10.2 j) the name(s), function(s) and signature(s) or equivalent identification of person(s) authorizing the test report or calibration certificate;

TTLABS Explanatory Note: *The use of photographic, electronic and mechanical means of reproduction of signatures or names of signers may be acceptable, as long as the user can identify the person taking responsibility for the report and that automated signatures are safeguarded.*

5.10.5 Opinions and interpretations

TTLABS Explanatory Note: *In order for opinions to be included in a test report or calibration certificate endorsed with the TTLABS symbol, the basis for arriving at the opinion must be part of a method or procedure included in the laboratory's scope of accreditation. If the opinions are not based on a process described in an accredited method or procedure, any expression of opinion or statements in amplification of the results may be provided in a separate unendorsed document.*

Bibliography: Documents relating to measurement uncertainty

- [1] *Guide to the Expression of Uncertainty in Measurement*, issued by BIPM, IEC, IFCC, ISO, IUPAC, IUPAP, and OIML. Available through ANSI (212 642 4900).
- [2] NIST Technical Note 1297, "Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results", Taylor & Kuyatt. Ordering information available at www.nist.gov.
- [3] EA-4/03, Expressions of the Uncertainty of Measurements in Calibration (*previously EAL-R2*). Available at www.european-accreditation.org (free).
- [4] EA-4/16, Guidelines on the expression of uncertainty in quantitative testing. Available at www.european-accreditation.org (free).
- [5] EURACHEM/CITAC Guide: Quantifying Uncertainty in Analytical Measurement. Available from TTLABS, or CITAC (Co-operation on International Traceability in Analytical Chemistry), www.vtt.fi/ket/citac (free).
- [6] UKAS M3003, The Expression of Uncertainty and Confidence in Measurement. Available for order from United Kingdom Accreditation Service, 21-47 High Street, Feltham, Middlesex, TW13 4UN. Order form available at www.ukas.com.

PART B

CONDITIONS FOR ACCREDITATION (based on ISO/IEC 17011)

[check the application for equivalence and 17011 section 8 obligations to make a few changes.

To attain and maintain accreditation, an applicant must agree to:

- 1) Afford accommodation and cooperation as is necessary to enable TTLABS to verify compliance with the requirements for accreditation including provision for examination of documentation and access to all calibration and testing areas, equipment, records and personnel for the purposes of assessment, surveillance, reassessment and resolution of complaints;
- 2) Comply at all times with the criteria, requirements (including participation in proficiency testing as required), and conditions for accreditation;
- 3) Provide access to those documents that provide insight into the level of independence and impartiality of the CAB from its related bodies, where applicable;
- 4) Arrange the witnessing of its services when requested by the accreditation body.
- 5) Retain all quality records (as defined in ISO/IEC 17025, Clause 4.13.1.1 or ISO 15189 Clause 4.13.1) and technical records supporting reported results (as defined in ISO/IEC 17025, Clause 4.13.2.1, and Clauses 5.10.2 through 5.10.4) throughout the period between TTLABS full assessments bearing in mind that adequate records (e.g. measurement uncertainty estimates, complaint records, etc.) must be available to demonstrate full compliance with the requirements for accreditation;
- 6) Claim that it is accredited only in respect of services for which it has been granted accreditation and which are carried out in accordance with these conditions;
- 7) Pay such fees as shall be determined by TTLABS;
- 8) Not use its accreditation in such a manner as to bring TTLABS into disrepute and not make any statement relevant to its accreditation which may be considered misleading or unauthorized;
- 9) Upon suspension, withdrawal or expiration of its accreditation (however determined) discontinue its use of all advertising matter that contains reference thereto and return any certificates of accreditation to TTLABS;
- 10) Not use its accreditation to imply product approval by TTLABS;
- 11) Endeavour to ensure that no certificate or report, nor any part thereof, is used in a misleading manner;
- 12) In making reference to its accreditation status in communication media such as advertising, brochures, comply with the requirements of TTLABS Advertising Policy LAS-Q003;
- 13) Inform TTLABS headquarters within 30 days and in writing of changes or pending changes in any aspect of the laboratory's status or operation that affects the laboratory's legal, commercial or organizational status; organization, top management (key personnel); main policies; resources and premises; authorized signatories; or such other matters that may affect the laboratory's capability, or

scope of accredited activities, or compliance with the criteria, requirements and conditions for accreditation;

- 14) Carry out any adjustments to its procedures in response to due notice of any intended changes by TTLABS to the criteria, requirements, or conditions for accreditation, in such time as in the opinion of TTLABS is reasonable.

In order to apply, the applicant laboratory's AUTHORIZED REPRESENTATIVE, must agree to the above conditions for accreditation and must attest that all statements made on the application are correct to the best of his/her knowledge and belief. An accredited laboratory's AUTHORIZED REPRESENTATIVE is responsible for ensuring that all of the relevant conditions for accreditation are met as of the date this document is signed. During the on-site assessment, the assessor will determine that the Authorized Representative and a deputy are knowledgeable about the accreditation requirements and will examine records and documentation to verify compliance with these Conditions for Accreditation as of the date it was signed.

PART C

TTLABS ACCREDITATION PROCESS

I. Application

A laboratory applies for accreditation by obtaining the application package from the TTLABS Secretariat and completing appropriate application sheets. All applicants must agree to a set of conditions for accreditation (see Part B of this document), pay the appropriate fees set by TTLABS, and provide detailed supporting information on:

- Scope of testing or calibration in terms of field(s) of testing or calibration, testing or calibration technologies, methods and relevant standards, and measurement uncertainty budgets if applicable (always required for calibration and dimensional inspection testing laboratories);
- Organization structure; and
- Proficiency testing.

Accreditation is available for testing laboratories (tests) and calibration laboratories (calibrations). For tests, the scope of accreditation is normally identified in terms of standard test methods prepared by national, international, and professional standards writing bodies. If a laboratory desires accreditation only for a superseded version of a standard test method, the date of the version used is identified in its scope of accreditation. When the date is not identified in its scope of accreditation, laboratories are expected to be competent in the use of the current version within one year of the date of publication of the standard test method. For calibrations, the scope of accreditation is described typically in terms of the measurement parameter, range of measurement and best attainable uncertainties. In some cases, a laboratory's capability will be described in terms of types of tests, testing technologies, or other descriptive text when it is not appropriate or practical to identify specific tests or calibrations.

Accreditation of non-standard tests and calibrations that the assessor is permitted to examine in detail may be granted, and shall be referenced in the scope by unambiguous identification. TTLABS reserves the right to refuse to consider accreditation for proprietary tests or calibrations, without prejudice, if there is not sufficient accessibility to the method.

If a laboratory wishes accreditation for the use of its own methods, then it must provide the following information to the assessor(s) before assessment:

- Origin of method;
- Comparison with the standard methods they replace including any departures from the standard (if applicable);
- Reasons for and effects of departures;
- Validation data (per Section 5.4.5 of ISO/IEC 17025).

II. On-site Assessment

Once the application information is completed and the appropriate fees are paid, the TTLABS Secretariat identifies and tentatively assigns one or more assessors to conduct an on-site assessment. Assessors are selected on the basis of their testing or calibration expertise so as to be better able to provide guidance to the laboratories. They do not represent their employers (if so affiliated) while conducting assessments for TTLABS. The laboratory has the right to ask for another assessor if it objects to the original assignment. TTLABS assessors are drawn from the ranks of the recently retired, consultants, industry, academia, government agencies, and from the laboratory community. Assessors work under contract to TTLABS. Assessments may last from one to several days. More than one assessor may be required.

Assessors are given an assessor guide and checklists to follow in performing an assessment. These documents are intended to ensure that assessments are conducted as uniformly and completely as possible among the assessors and from laboratory to laboratory.

Before the assessment is conducted, the assessor team requests copies of the quality manual and related documentation (i.e., SOPs related to ISO/IEC 17025 requirements) in order to prepare for the assessment. The quality manual and related documentation must be reviewed by the assessor team before the on-site assessment can begin. This review is done ideally before the assessment is scheduled. Upon review of submitted documentation, the assessor(s) may ask the laboratory to implement corrective action to fill any documentation gaps required by ISO/IEC 17025 before scheduling the assessment. A pre-assessment visit may be requested by the laboratory as an option at this point to enhance the success of the full assessment.

Prior to scheduling the full assessment, the assessor reviews the draft scope(s) to determine the tests to possibly witness, and checks on the availability of the technical personnel who perform the tests. An assessment agenda is provided by the assessor. The full assessment generally involves:

- Entry briefing with laboratory management;
- Interviews with technical laboratory personnel;
- Demonstration of selected tests or calibrations including, as applicable, tests or calibrations at representative field locations;
- Examination of equipment and calibration records;
- Audit of the management system to verify that it is fully operational and that it conforms to all sections of ISO/IEC 17025, including documentation;
- Written report of assessor findings; and
- Exit briefing including the specific written identification of any nonconformity.

During the full assessment, the assessor has the authority to stop the process at any time and consult with laboratory personnel and the laboratory's management to determine if the assessment should proceed. In cases where the number of significant nonconformities affects the ability to successfully complete a full assessment, the visit may be converted to a pre-assessment. The full assessment is then rescheduled when the laboratory and assessor feel it is appropriate to proceed.

The objective of an assessment is to establish whether or not a laboratory conforms with the TTLABS requirements for accreditation and can competently perform the types of tests or calibrations for which accreditation is sought. However, when accreditation is required to demonstrate conformity with additional criteria that may be imposed by other authorities, the TTLABS assessment shall include these additional criteria. Assessors may also provide advice, based on observations or in response to questions, in order to help the laboratory improve its performance.

III. Nonconformities

During the assessment, assessors may observe nonconformities. A nonconformity is a nonfulfilment of an accreditation requirement including:

- a laboratory's inability to perform a test or type of test for which it seeks accreditation;
- a laboratory's management system does not conform to a clause or section of ISO/IEC 17025, is not adequately documented, or is not completely operational; or
- a laboratory does not conform to any additional requirements of TTLABS or specific fields of testing or programs necessary to meet particular needs.

At the conclusion of an assessment, the assessor prepares a report of findings, identifying nonconformities that, in the assessor's judgment, the laboratory must resolve in order to be accredited. The assessor holds an exit

briefing with top management of the laboratory, going over the findings and presenting the list of nonconformities (nonconformity report). The authorized representative of the laboratory (or designee) is asked to sign the nonconformity report to attest that the nonconformity report has been reviewed with the assessor. The signature does not imply that the laboratory representative concurs that the individual item(s) constitute nonconformity. The laboratory is requested to respond within one month after the date of the exit briefing detailing either its corrective action or why it does not believe that nonconformity exists. The corrective action response must include a copy of any objective evidence (e.g., calibration certificates, lab procedures, paid invoices, packaging slips and training records) to indicate that the corrective actions have been implemented/completed. It is possible that the assessor's review of the corrective action response may be needed to determine if the response is satisfactory. If this review is expected to take more than one hour's time, TTLABS may invoice the laboratory for this time at the prevailing assessor rate. The assessor will discuss the possibility of this review with the laboratory during the exit briefing and obtain the laboratory's concurrence.

It is entirely possible that the laboratory will disagree with the findings that one or more items are nonconformities. In that case, the laboratory is requested to explain in its response why it disagrees with the assessor.

If the laboratory fails to respond in writing within four months after the date of the exit briefing, it may be treated as a new applicant subject to new fees and reassessment should it wish to pursue accreditation after that time.

A laboratory that fails to respond to all its nonconformities within six months of being assessed shall be subject to being reassessed at its expense. Even if the laboratory responds within six months, TTLABS Secretariat has the option to ask for reassessment of a laboratory before an initial accreditation vote is taken based on the number, extent and nature of the nonconformities. The Laboratory Accreditation Committee panel also has the option to require reassessment of a laboratory before an affirmative accreditation decision can be rendered.

IV. Accreditation Anniversary Date

The anniversary date of a laboratory's accreditation is established 105 to 135 days after the last day of the final on-site assessment before an initial accreditation decision, regardless of the length of time required to correct nonconformities. This date normally remains the same throughout the laboratory's enrollment.

Any extensions to an accreditation beyond the anniversary date must be requested and justified in writing by the laboratory. TTLABS does not automatically grant extensions of accreditation. Extensions beyond 90 days are not normally granted. When fundamental nonconformities are identified during an assessment, extensions of accreditation are not considered until the laboratory submits objective evidence demonstrating that the nonconformities have been resolved. Likewise, extensions are not granted when delays are due to the laboratory's failure to respond to requests within established deadlines. When a laboratory is granted an extension, a revised Scope of Accreditation is issued which reflects the extended anniversary date. Because the Scope of Accreditation is the document used to provide evidence of accreditation (see Section X, Item 4 below), the Certificate of Accreditation is not normally reissued for an extension. Upon completion of the renewal process, both documents are reissued, reflecting the renewed anniversary date.

V. Proficiency Testing

Proficiency testing is a process for checking actual laboratory performance (usually by means of interlaboratory data comparisons) and is a requirement for accreditation to ISO/IEC Guide 25(1990) and ISO/IEC 17025 (2005). Results from proficiency testing are an indication of a laboratory's competence and are an integral part of the assessment and accreditation process. For this reason, proficiency testing samples may *not* be subcontracted to another laboratory for analysis. Proficiency testing programs may take many forms and

standards for satisfactory performance vary depending on the field. It is only necessary to participate in proficiency testing for the test methods or test technologies, for which accreditation is held.

Unless specified differently, all accredited laboratories must participate in relevant and available proficiency testing at a frequency sufficient to ensure that all methods, analytes and technologies on the scope of accreditation are covered over a four-year period. When proficiency testing programs are not available for a specific method, laboratories are required to demonstrate proficiency with internal performance-based data in conformity with ISO/IEC 17025, section 5.9.

Applicant laboratories for TTLABS accreditation must be able to demonstrate successful participation in relevant and available proficiency testing prior to receiving accreditation. If proficiency testing results are not available through commercial proficiency testing programs, internal performance-based data can substitute for the purpose of achieving initial accreditation.

VI. Accreditation Decisions

Before an accreditation decision ballot is sent to the Laboratory Accreditation Committee panel, the TTLABS Secretariat shall review the response to each nonconformity, including, objective evidence of completed corrective action, for adequacy and completeness. If the TTLABS Secretariat has any doubt about the adequacy or completeness of any part of the nonconformity response, the response is submitted to the assessor(s). Since all nonconformities must be resolved before accreditation can be granted, the TTLABS Secretariat shall ask the laboratory for further written response in those cases where the TTLABS Secretariat recognizes that an affirmative vote is not likely because of incomplete corrective action in response to nonconformities or obvious lack of supporting evidence that corrective action has been completely implemented.

The TTLABS Secretariat selects a "Panel of Three" from the Laboratory Accreditation Committee members for voting. The "Panel of Three" selection takes into account as much as possible each member's technical expertise with the laboratory testing or calibration to be evaluated. The laboratory is consulted about any potential conflicts of interest with the Laboratory Accreditation Committee membership prior to sending their package to the Laboratory Accreditation Committee. At least two affirmative ballots (with no unresolved negative ballots) of the three ballots distributed must be received before accreditation can be granted.

It is the primary responsibility of assessors to judge whether the observed evidence is serious enough to warrant nonconformity. However, the panel members that are asked to vote on an accreditation decision are required to make a judgment whether or not nonconformities still exist based on information contained in the ballot package. Accordingly, panel members can differ with assessor judgments, based upon their interpretation of the criteria for the specific case under question and the supporting evidence available whether nonconformity does or does not exist. TTLABS Secretariat attempts to resolve these differences as they arise, but it remains for the panel to make the initial decision.

TTLABS Secretariat shall notify the laboratory asking for further written response based on the specific justification for one or more negative votes received from the panel. If further written response still does not satisfy the negative voter(s), a reassessment may be proposed or required. If a reassessment is requested by more than one voter, the laboratory is asked to accept a reassessment. If the laboratory refuses the proposed reassessment, a six-member Laboratory Accreditation Committee appeals panel is balloted (see sections on XII. Adverse Accreditation Decisions and XV. Appeals Procedures below). If two-thirds of those voting agree to a reassessment, accreditation is denied until a reassessment and satisfactory laboratory responses to all nonconformities are completed.

If accreditation is granted, the TTLABS Secretariat prepares and forwards a certificate and scope of accreditation to the laboratory for each enrolled field of testing. The laboratory should keep its scope of accreditation available to show customers or potential customers the testing technologies and test methods for

which it is accredited. The TTLABS Secretariat also uses the scopes of accreditation to respond to inquiries and to prepare the TTLABS Directory.

VII. Annual Review and Surveillance

Accreditation is granted for three years. However, after the first year of accreditation, each laboratory must pay annual fees and assessor fees and undergo usually a one-day surveillance visit by an assessor. This surveillance visit is performed to confirm that the laboratory's management system and technical capabilities remain in conformity with the accreditation requirements. At least two surveillance visits occur within the three-year accreditation period before a full renewal assessment is scheduled.

VIII. Reassessment and Renewal of Accreditation

TTLABS conducts a full on-site reassessment of all accredited laboratories at least every three years. Reassessments are also conducted when evaluations and submissions from the laboratory or its customers indicate significant technical changes in the capability of the laboratory have occurred.

Each accredited laboratory is sent a renewal questionnaire, well in advance of the expiration date of its accreditation, to allow sufficient time to complete the renewal process. A successful on-site reassessment must be completed before accreditation is extended for another three years.

If nonconformities are noted during the renewal assessment, the laboratory is asked to write to the TTLABS Secretariat within 30 days after the assessment stating the corrective action taken. All nonconformities must be resolved before accreditation is renewed for another three years.

The renewal decision process is similar to the initial decision process (see section VI. Accreditation Decisions), except as follows:

- 1) If there are no nonconformities, renewal is automatically processed without a Laboratory Accreditation Committee panel vote.
- 2) If there are only a few nonconformities of a minor nature (i.e., the nonconformities do not directly affect the integrity of calibration or test results) and there is sufficient objective evidence that the nonconformities have been resolved, the Manager, TTLABS may elect to renew accreditation without a Laboratory Accreditation Committee panel vote.
- 3) If there are major nonconformities (i.e., the nonconformities directly affect the integrity of calibration or test results), the TTLABS Secretariat advises the laboratory of the required time-frame (normally 30 days) in which to resolve all nonconformities or be subject to further actions leading to suspension or withdrawal of accreditation (see sections XII. Adverse Accreditation Decisions, XIII. Suspension of Accreditation, and XIV. Withdrawal of Accreditation). Several related minor nonconformities or repeat nonconformities from previous assessments may also be considered a major nonconformity. In these cases, a ballot of the Laboratory Accreditation Committee panel is conducted using the same voting procedure as for initial accreditation decisions.

In cases where significant nonconformities are identified in a renewal assessment, the laboratory may be required to undergo follow-up visit to verify effective implementation of corrective actions (see section VII above).

IX. Adding to the Scope of Accreditation

A laboratory may request an expansion to its scope of accreditation at any time. Such a request must be submitted in writing to the TTLABS Secretariat. Each request is handled on a case-by-case basis. Unless the previous assessor can verify the competence of the laboratory to perform the additional tests or calibrations, another on-site assessment is normally required. If the assessor can recommend a scope addition without an assessment, but this recommendation requires extensive review of supporting documentation requiring more than one hour's time, TTLABS may invoice the laboratory for this review time at the prevailing assessor rate. If the additional tests or calibrations require a new technology, another assessment is definitely required. Similarly, if a laboratory relocates, a follow-up assessment is warranted.

X. Laboratory Reference to TTLABS Accredited Status

TTLABS provides guidance to laboratories attaining accreditation for proper control on the use of its accreditation symbol (See TTLABS Guidelines on Referencing Accredited Status).

Every circumstance where the principle of accurate representation applies cannot be anticipated and dealt with in this document. Therefore, it is the responsibility of the accredited laboratory not to misrepresent its accredited status under any circumstances. If there are questions, the laboratory should submit intended uses of the symbol, draft advertisements, and/or any other accreditation claims to TTLABS for advance review.

XI. Misuse of the TTLABS Accreditation Symbol

Incorrect references to TTLABS or misleading use of the accreditation symbol found in advertisement, catalogs, etc. shall be dealt with by suitable actions that could include legal or corrective action or publication of the transgression.

In cases of misuse of the accreditation symbol by laboratories, TTLABS shall take appropriate corrective action, which may include suspension of accreditation.

XII. Accreditation Status and Adverse Accreditation Decisions

There are various levels of status that may be assigned to laboratories that cannot uphold the requirements for initial or continued accreditation:

Voluntary Withdrawal – An applicant laboratory not yet accredited, or a renewal laboratory, can decide to terminate further accreditation action and voluntarily withdraw from the accreditation program. The laboratory's authorized representative must inform TTLABS in writing of this request. TTLABS does not publicize the fact that a new laboratory had applied and then withdrawn; a list of previously accredited laboratories that have withdrawn is published.

Delinquent - A laboratory (newly enrolled or renewal) is classified as delinquent when it has not completed the necessary assessment actions within an acceptable time frame. A laboratory's delinquent status is not publicized. The laboratory must undergo a full reassessment, paying only the assessor fees and expenses, before any further accreditation actions can be taken. A new laboratory's anniversary date is based on the date of this full reassessment (see section IV above). A renewal laboratory's anniversary date remains unchanged.

If a significant portion of a renewal laboratory's three-year accreditation term has already elapsed during which time it was not accredited, the laboratory is strongly encouraged to reapply as a new laboratory, paying new laboratory fees in addition to the assessor fees and expenses. By doing so, it would be assigned a new anniversary date based on the date of the new assessment (see section IV above).

Inactive - A laboratory is designated as inactive when it has specifically requested in writing that its

accreditation be allowed to temporarily expire due to unforeseen circumstances that prevent it from adhering to the TTLABS Conditions for Accreditation. To regain its accredited status, the Inactive lab must notify TTLABS in writing of this desire, agree to undergo a full reassessment, paying all renewal fees and reassessment costs.

The Inactive status can be given to a laboratory for no longer than one year, after which time the laboratory is removed from TTLABS records and designated as withdrawn.

Any decision from an appeals vote that would deny, or withdraw a laboratory's complete accreditation, must be agreed upon by a two-thirds vote of those voting from the six-member appeals panel of the Laboratory Accreditation Committee.

Suspension of all or part of a laboratory's accreditation may be a decision made by either, the Manager, TTLABS or Laboratory Accreditation Committee panel. Suspension actions by the Manager, TTLABS are generally taken based on failure to comply with the conditions for accreditation (e.g., failure to pay required fees, failure to participate in required proficiency testing, etc.).

Failure to meet with the criteria for acceptable proficiency test results can result in automatic enforced withdrawal of accreditation for the test(s) under question.

See the following sections on XIII. Suspension of Accreditation, XIV. Withdrawal of Accreditation and XV. Appeals Procedures for further details.

XIII. Suspension of Accreditation

The accreditation applicable to a specific laboratory may be suspended upon adequate evidence of:

- nonconformity with the requirements of a nature not requiring immediate withdrawal;
- improper use of the accreditation symbol (e.g., misleading prints or advertisements are not solved by suitable retractions and appropriate remedial measures by the laboratory); and
- other deviations from the requirements of the TTLABS accreditation program (e.g., failure to pay the required fee or to submit annual review information within 60 calendar days after it is due).

When an accredited laboratory is suspended, TTLABS shall confirm an official suspension in a certified letter, return receipt requested (or equivalent means) to the laboratory's authorized representative, stating:

- the cause;
- the conditions under which the suspension will be lifted;
- how the suspension will be publicized;
- that the suspension is for a temporary period to be determined by the time needed to take corrective action;
- that, within thirty (30) days of receipt of the notice, the laboratory may submit in writing information in opposition to the suspension, including any additional information that raises a genuine dispute over material facts;
- that a further review will be conducted to consider such information and a further written notification will be sent to the laboratory by certified mail, return receipt requested (or equivalent means),

indicating whether the suspension has been terminated, modified, left in force or converted to a withdrawal of accreditation.

XIV. Withdrawal of Accreditation

TTLABS shall withdraw accreditation for any of the following causes:

- Relevant provisions for suspension of accreditation are carried out;
- Surveillance indicates that nonconformities are of a serious nature as judged by the Laboratory Accreditation Committee panel;
- Complaints are received relating to one or more of the laboratory's test reports and investigation reveals serious nonconformities in the management system and/or competence in conducting the specific tests;
- System rules are changed and the laboratory either will not or cannot ensure conformity with the new requirements;
- Other grounds specifically provided for under these program requirements or formally agreed between TTLABS and the laboratory;
- Action is necessary to protect the reputation of TTLABS; and
- Formal request of the laboratory.

When it is proposed to withdraw accreditation, the TTLABS Secretariat shall issue a written notice by certified mail, return receipt requested (or equivalent means):

- Stating that withdrawal is being considered and the reason(s) for the proposed withdrawal sufficient to put the laboratory on notice of the cause;
- Requesting that within thirty (30) days of receipt of the notice, the laboratory submit in writing, information in opposition to the withdrawal, including any additional information that raises a genuine dispute over material facts; and
- Indicating the effect of the proposed withdrawal, including removing the laboratory's name from the TTLABS Directory and publicizing the action.

A laboratory may appeal to the TTLABS Secretariat against a decision to withdraw or not to award accreditation.

XV. Appeals Procedure

There are two possible levels that an appeal can reach before being resolved:

- 1) Laboratory Accreditation Committee (six-member appeals panel);
- 2) TTBS Board of Management.

The TTLABS Secretariat shall advise the applicant in writing of its right to challenge an adverse accreditation decision by the Manager, TTLABS or the Laboratory Accreditation Committee panel. The appeals policy, including an applicant's right to a hearing, is contained in the TTLABS Bylaws.

An appeal shall be lodged no later than thirty (30) days after notification of the decision by forwarding a certified letter to TTLABS for timely consideration by the appeals panel of the Laboratory Accreditation Committee.

The decision of the Laboratory Accreditation Committee's appeals group is communicated in writing to the appellant.

If the decision is not favorable to the appellant, the appellant may lodge a further appeal within thirty (30) days of notification by forwarding a certified letter to TTLABS for timely consideration by the TTBS Board of Management. This letter shall include appropriate substantiation for the appeal. This letter will be promptly transmitted to the members of the TTBS Board of Management appeals group, the composition of which to be determined taking into account any conflict-of-interest considerations.

The decision of the TTBS Board of Management shall be final and is communicated in writing to the appellant.

XVI. Confidentiality Policy

All information provided by applicants in connection with a request for an application package, an application for accreditation, an assessment or proficiency test is confidential. Such information is examined by the TTLABS Secretariat, assessors, and Laboratory Accreditation Committee and external bodies as needed for recognition of the program. All are made aware of its confidentiality. Such information shall not be released unless the applicant provides TTLABS permission in writing to do so.

Documents necessary to convey information about accredited laboratories and their scopes of accreditation are not confidential.

In response to a question about whether or not a particular laboratory has applied for accreditation, TTLABS simply responds by saying that the laboratory is not accredited. The TTLABS Secretariat shall neither confirm nor deny whether a laboratory has ever applied for accreditation. If the laboratory itself is saying that it has applied for accreditation, it is the laboratory's responsibility to release the information regarding its applicant status. If the caller says that the laboratory claims it applied, the TTLABS Secretariat shall take the name, address and phone number of the laboratory to check to see if the laboratory is misleading the customer but the TTLABS Secretariat still will not verify the laboratory's application. Should an applicant laboratory require that TTLABS Secretariat verify for a potential customer that it has applied to TTLABS, the TTLABS Secretariat shall indicate that it has applied only if the applicant makes such a request to TTLABS in writing or designates on the application for accreditation that TTLABS is authorized to release information regarding the applicant's status.

If an inquiry is made about a laboratory whose accreditation has lapsed but is in the renewal process, the TTLABS Secretariat can indicate that the laboratory is not now accredited but is in the process of renewal, if that is the case. If the renewal laboratory's accreditation has lapsed with no indication (return of renewal forms or payment) of pursuit of renewal, the TTLABS Secretariat shall indicate simply that the laboratory is not accredited.

If the TTLABS Secretariat finds that a laboratory is misrepresenting its applicant or accredited status, the TTLABS Secretariat shall treat such information like a complaint. The Manager, TTLABS shall determine the appropriate action, which would usually involve contacting the laboratory directly about the alleged misrepresentation.

XVII. Conflict of Interest Policy

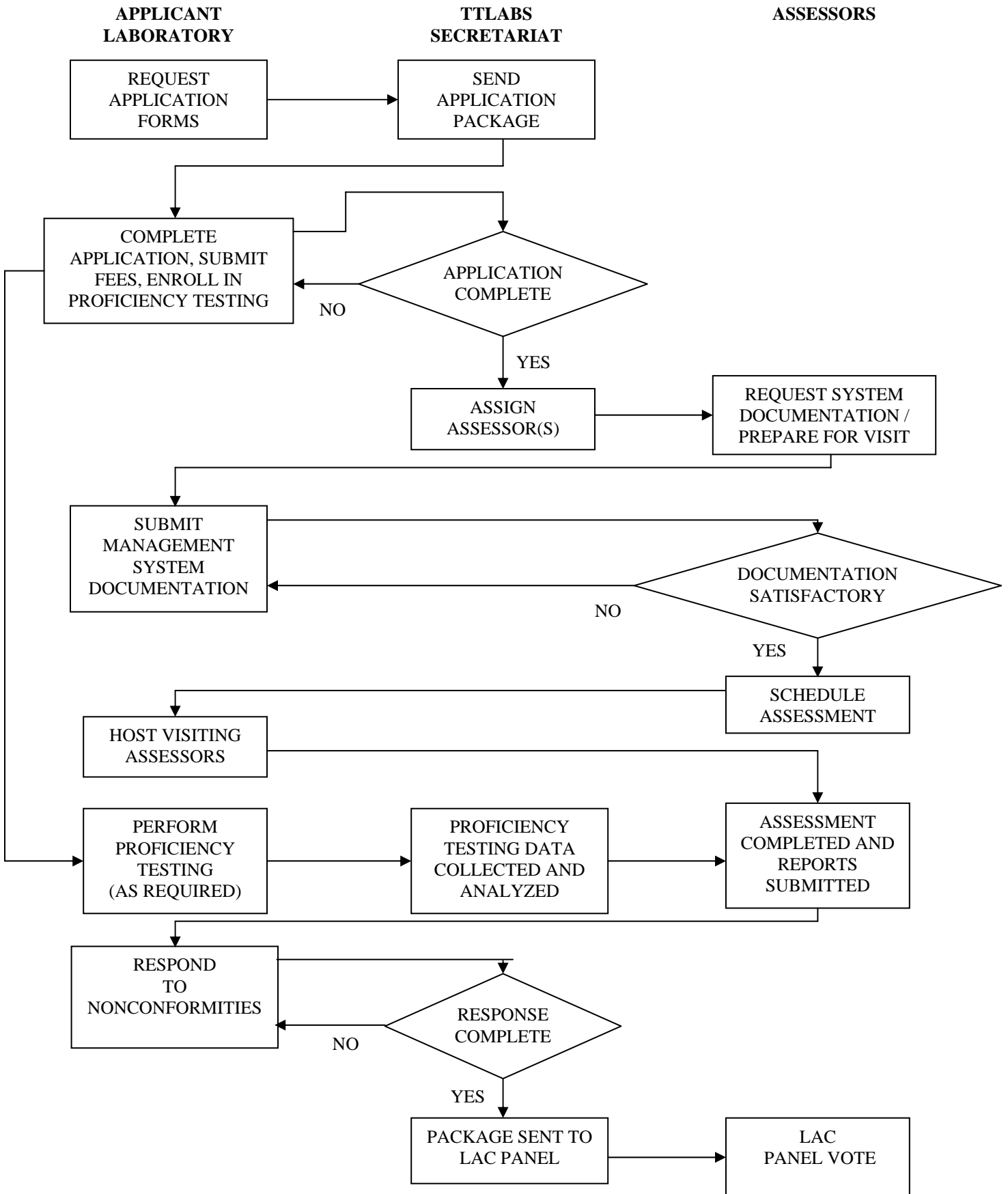
Since its inception, TTLABS has had a policy that actual or apparent conflicts of interest must be avoided as mandated by normal business ethics. "Conflict of interest" means that condition or circumstance wherein a person is unable or is potentially unable to render impartial services, assistance, advice, assessment, evaluation or decision for TTLABS because of other activities or relationships with other persons, or wherein a person has or may be able to obtain an unfair competitive advantage.

Consistent with the principles set forth in international standards, TTLABS believes that it is vital that its accreditation services be impartial and objective, uninfluenced by the private interests of individuals acting for TTLABS. Accordingly, any person directly involved in actions relating to the TTLABS accreditation process shall avoid direct participation in TTLABS actions that may involve an actual or apparent conflict of interest.

The Manager, TTLABS or TTBS Director shall, as promptly as possible, take all possible means to prevent or overcome any such actions that may conceivably be in violation of this policy.

Diagrams of the TTLABS accreditation process and appeals process are provided on the next two pages.

TTLABS ACCREDITATION PROCESS



TTLABS APPEALS PROCESS DIAGRAM

