1. Introduction

This Technical Requirements Manual defines Apex International Accreditation Center (AIAC) technical policies and minimum requirements applicable to conformity assessment bodies (CABs) seeking or holding accreditation with AIAC. The manual addresses selected ILAC and IAF mandatory and policy documents and provides clear, practical requirements for implementation and assessment. In addition, it includes AIAC specific requirements within it.

This manual is intentionally concise and implementation-focused. It avoids unnecessary theory and is designed to support consistent application by CABs and assessors while maintaining alignment with international expectations.

2. ILAC and IAF requirements

This manual addresses the following ILAC and IAF documents:

- ILAC P8 – ILAC Mutual Recognition Arrangement (MRA): Supplementary Requirements and Guidelines for the Use of Accreditation Symbols and Claims of Accreditation Status
- ILAC P9 – ILAC Policy for Participation in Proficiency Testing Activities
- ILAC P10 – ILAC Policy on Traceability of Measurement Results
- ILAC P14 – ILAC Policy for Measurement Uncertainty in Calibration
- ILAC P15 – ILAC Policy for Uncertainty in Testing

These requirements apply as relevant to testing, calibration, medical, inspection, and other CAB activities accredited by AIAC.

In addition to applicable ILAC Policies and Guidance documents, AIAC applies relevant IAF Mandatory Documents (MDs) as normative requirements where accreditation activities fall under the scope of the IAF MLA. These documents are applied as issued, without modification, and to the extent applicable to the accreditation scheme and conformity assessment activity.

AIAC does not reinterpret or dilute IAF MD requirements. Where an IAF MD is applicable, conformity assessment bodies (CABs) and AIAC assessment teams are required to comply fully with the stated requirements.

The following IAF MDs are considered key and are applied by AIAC where relevant:

IAF MD 1 – Certification of Multiple Sites Based on Sampling: Applied where CABs operate multi-site certification structures. AIAC verifies appropriate sampling methodology, justification, and control of centrally managed activities.

IAF MD 2 – Transfer of Accredited Certification of Management Systems: Applied when CABs accept transferred certifications. AIAC assesses the robustness of transfer processes, including review of prior certification records and risk evaluation.

IAF MD 4 – Use of Information and Communication Technology (ICT) for Auditing/Assessment Purposes: Applied where remote or hybrid assessment techniques are used. AIAC evaluates the suitability, risk assessment, and effectiveness of ICT-based assessment methods.

IAF MD 5 – Determination of Audit Time of Quality, Environmental, and Occupational Health & Safety Management Systems: Applied for management system certification activities to ensure audit time determination is risk-based, justified, and consistently applied.

IAF MD 7 – Application of ISO/IEC 17021-1 for the Certification of Management Systems: Applied particularly in cases involving suspected or proven fraudulent behavior, misuse of certification, or integrity-related concerns.

AIAC ensures that:

- Applicable IAF MDs are communicated to CABs through accreditation requirements, assessment activities, and guidance;
- Assessment teams are competent and briefed on the application of relevant IAF MDs;
- Nonconformities related to IAF MDs are raised, classified, and processed in accordance with AIAC's Accreditation Process Report (APR) and decision-making procedures;
- Updates or revisions to IAF MDs are monitored and implemented within defined transition timelines.

Where both ILAC and IAF documents apply not limited to MDs or P-series, AIAC ensures consistent and coherent application without conflict, giving precedence to the relevant cooperation structure based on the accreditation scope.

3. General Principles

3.1 AIAC applies a risk-based and outcome-focused approach when assessing compliance with technical requirements.

3.2 CABs are responsible for determining appropriate technical controls, frequencies, and methods based on their scope of accreditation, volume of work, risks, and regulatory obligations.

3.3 AIAC sets minimum expectations, while allowing CABs flexibility in how requirements are implemented, provided effectiveness can be demonstrated.

3.4 Non-compliance with the requirements of this manual may result in nonconformities and, where necessary, sanctions in accordance with AIAC sanction procedures.

4. 4. Proficiency Testing and Interlaboratory Comparisons (ILAC P9)

4.1 Policy Statement

Participation in proficiency testing (PT) or, where PT is not available, appropriate interlaboratory comparisons (ILC) or alternative performance evaluation activities is a key element for demonstrating technical competence in accordance with applicable accreditation standards (e.g. ISO/IEC 17025, ISO 15189), and any relevant scheme-specific requirements.

AIAC requires CABs to plan, implement, evaluate, and act upon PT/ILC participation in a manner that supports confidence in the validity of results.

4.2 Responsibility of the CAB

- The CAB shall determine the frequency and extent of PT participation based on risk assessment, technical complexity, and criticality of results.
- The CAB remains responsible for ensuring ongoing technical validity of results, regardless of PT availability.

4.3 Coverage of Scope

- Where PT is available and technically feasible, AIAC requires that the entire accredited scope be covered over two accreditation cycles (i.e. within a maximum of four years).
- PT participation coverage must be planned, representative, and progressive.
- For new accreditations, AIAC normally expects at least one successful PT participation per major technical category where available.
- AIAC may accept as old as 2 years PT results when in case of newly applied scope.

4.4 Availability and Feasibility

A PT is considered available when:

- It is offered by a competent provider;
- It is technically relevant to the CAB's scope;
- Participation is practicable within reasonable timeframes.

Where PT is not available or not feasible, the CAB shall define and implement alternative measures, such as:

- Interlaboratory comparisons;
- Use of certified reference materials;
- Replicate testing or calibration;
- Method comparison or internal performance checks.

4.5 Evaluation and Corrective Action

- PT and ILC results shall be reviewed, evaluated, and documented.
- Unsatisfactory or outlier results shall be investigated and treated as nonconformities where applicable.
- Corrective actions shall be proportionate to the risk and impact on reported results.

4.6 Assessment by AIAC

AIAC assessors will review:

- PT/ILC plans and records;
- Technical relevance and coverage;
- Evaluation of results and corrective actions;
- Justification for alternative measures where PT is unavailable.

Persistent inadequate participation or unresolved poor performance may result in scope restriction, suspension, or withdrawal.

5. Traceability of Measurement Results (ILAC P10)

AIAC requires accredited Conformity Assessment Bodies (CABs) to establish, implement, and maintain metrological traceability of measurement results in accordance with ILAC P10, applicable accreditation standards (e.g. ISO/IEC 17025, ISO 15189), and relevant scheme-specific requirements.

Metrological traceability shall be demonstrated through an unbroken chain of calibrations or comparisons, each contributing to the measurement uncertainty and linking the measurement result to appropriate references, preferably the International System of Units (SI). Where SI traceability is not technically feasible, traceability to certified reference materials (CRMs) or agreed reference methods shall be established and justified.

AIAC assesses metrological traceability using a risk-based and fitness-for-purpose approach, taking into account:

- The intended use of measurement results
- The technical scope and criticality of measurements
- Regulatory, contractual, or scheme-specific requirements

CABs remain primarily responsible for determining appropriate calibration and traceability routes for their activities. AIAC verifies, through assessment, that the selected traceability route is technically valid, justified, documented, and consistently implemented.

Where external calibration or reference materials are used, CABs shall ensure that providers are competent and that traceability routes align with ILAC P10 preferences. Deviations from preferred traceability routes shall be technically justified and supported by objective evidence.

5.1 Accepted Routes for Metrological Traceability (Reference Table)

The following table summarizes acceptable routes for establishing metrological traceability, aligned with ILAC P10. This table is provided for guidance and quick reference during assessment.

Ref.	Traceability Route	Acceptability under AIAC
1	Calibration services provided by a National Metrology Institute (NMI) whose services are suitable for the intended need and covered by the CIPM MRA	Preferred
2	Calibration services provided by an accredited calibration laboratory whose accreditation is granted by an AB that is a signatory to the ILAC MRA for calibration	Preferred
3a	Calibration services provided by an NMI whose services are suitable for the intended need but not covered by the CIPM MRA	Conditionally acceptable with technical justification
3b	Calibration services provided by a non-accredited calibration laboratory whose services are suitable for the intended need	Conditionally acceptable with documented risk assessment and justification
4	Certified Reference Materials (CRMs) produced by NMIs using services included in the BIPM Key Comparison Database (KCDB)	Preferred
5	CRMs produced by an accredited Reference Material Producer (RMP) under ISO 17034, accredited by an AB that is an ILAC MRA signatory	Preferred

6	Certified values assigned to CRMs covered by entries in the Joint Committee for Traceability in Laboratory Medicine (JCTLM) database	Preferred (medical/clinical scope)
7	Use of certified values of CRMs provided by a competent producer where SI traceability is not technically feasible	Acceptable with justification

Notes:

- *The preference order above reflects ILAC P10 guidance; however, the most appropriate route depends on the technical context and intended use of results.*
- *Where preferred routes are not available, CABs shall document the rationale for alternative traceability routes and demonstrate control of associated risks.*
- *AIAC assessors verify traceability on a sample basis, focusing on critical measurements and high-risk activities within scope.*

6. Measurement Uncertainty – General Policy (ILAC P14)

AIAC requires accredited Conformity Assessment Bodies (CABs) to identify, evaluate, apply, and where applicable report measurement uncertainty in a manner consistent with ISO/IEC 17025, ISO 15189, ISO/IEC 17020, and **ILAC P14**.

Measurement uncertainty shall be:

- Technically valid and fit for purpose;
- Appropriate to the method, measurand, and intended use of results;
- Considered in conformity assessment decisions where applicable.

The level of detail and complexity of uncertainty evaluation shall be commensurate with the risk associated with the activity, regulatory requirements, and customer expectations.

AIAC assesses conformity through document review, witnessing, interviews, and evaluation of records.

6.1 Measurement Uncertainty – Calibration Laboratories *(ISO/IEC 17025, ILAC P14)*

Calibration laboratories shall:

- Establish documented uncertainty budgets for all accredited calibration activities;
- Identify all significant sources of uncertainty relevant to the calibration process;
- Evaluate uncertainty using internationally accepted methods (e.g. GUM-based approaches);
- Express expanded uncertainty with a stated coverage factor (normally k = 2);
- Ensure reported uncertainties on calibration certificates are consistent with accredited CMCs;
- Ensure that uncertainties stated in certificates are not smaller than the laboratory’s accredited capabilities.

6.1.1 Calibration and Measurement Capabilities (CMCs)

Calibration laboratories shall define and maintain CMCs in accordance with ILAC P14, including:

- Measurand and calibration method;
- Measurement range;
- Best achievable expanded uncertainty under normal conditions.

AIAC verifies CMCs through review of uncertainty budgets, calibration procedures, and supporting technical evidence.

6.2 Measurement Uncertainty – Testing and Medical Laboratories *(ISO/IEC 17025, ISO 15189, ILAC P14)*

Testing and medical laboratories shall:

- Identify activities where measurement uncertainty is relevant to the validity of results;
- Apply suitable methods for estimating uncertainty using:
    - Method validation data,
    - Internal quality control results,
    - Proficiency testing data,
    - Replicate testing or statistical analysis;
- Where standardized methods specify uncertainty treatment, apply the method as written;
- Where uncertainty is implicitly included in reported results, document and justify this approach.

Laboratories shall review and update uncertainty estimates when significant changes occur (e.g. method changes, equipment replacement, environmental conditions, staffing).

6.3 Use of Measurement Uncertainty in Conformity Decisions *(ILAC P14, ILAC G8)*

Where conformity statements are issued, CABs shall:

- Define and document decision rules;
- Consider measurement uncertainty when determining conformity;
- Ensure decision rules are applied consistently and transparently;
- Communicate decision rules to customers where required.

AIAC evaluates the appropriateness of decision rules during assessments, including their alignment with uncertainty estimates and applicable regulatory or scheme requirements.

6.4 Measurement Uncertainty for Inspection Bodies *(ISO/IEC 17020, ILAC P15)*

Inspection Bodies (IBs) shall:

- Identify inspection activities involving measurements or quantitative determinations;
- Evaluate whether measurement uncertainty may affect inspection outcomes or conformity decisions;
- Apply uncertainty considerations proportionate to:
    - Inspection type (A, B, or C),
    - Inspection method,
    - Regulatory or contractual requirements.

Where inspection activities rely on measurements performed by external laboratories, the IB shall ensure that:

- Measurements are traceable and technically valid;
- Relevant uncertainty information is available and considered where applicable.

AIAC does not require full uncertainty budgets for all inspection activities; however, IBs shall demonstrate that uncertainty has been considered where it may influence inspection conclusions.

7. Use of AIAC Accreditation Symbol, Endorsement and Reference to Accreditation

This section defines the technical and procedural requirements governing the use of the AIAC accreditation symbol, references to accreditation status, and the use of combined ILAC MRA and/or IAF MLA marks, where applicable.

The objective is to ensure correct, consistent, and credible use of accreditation claims, protecting the integrity and international recognition of AIAC accreditation.

- Accreditation symbols and claims shall only reflect the scope, location, and activities for which accreditation has been granted.
- Use of the accreditation symbol shall not imply that AIAC:
    - Approves products, services, systems, or personnel
    - Takes responsibility for conformity assessment results
- The integrity of accreditation is a shared responsibility between AIAC and its accredited CABs, in line with ILAC P8.

The following documents are normative and shall be applied as issued and as applicable, without modification:

- ISO/IEC 17011
- ILAC P8 – ILAC MRA: Supplementary Requirements and Guidelines for the Use of Accreditation Symbols

- ILAC R7 – Rules for the Use of the ILAC MRA Mark
- IAF ML-2 – General Principles on the Use of the IAF MLA Mark
- Relevant ILAC/IAF resolutions and communiqués
- AIAC procedures on sanctions and accreditation status management

7.1 AIAC Organizational Logo vs Accreditation Symbol

- The AIAC organizational logo is for exclusive use by AIAC.
- Accredited CABs shall not use the AIAC logo.
- Accredited CABs may use:
    - The AIAC Accreditation Symbol, and/or
    - A textual reference to AIAC accreditation

Use of any AIAC branding by accredited CABs is limited strictly to what is authorized under this manual.

7.2 Authorization to Use the AIAC Accreditation Symbol

1. Only CABs holding valid AIAC accreditation may use the AIAC accreditation symbol.
2. Symbols shall be used only after formal authorization by AIAC.
3. Accredited CABs shall use only the official symbol files issued by AIAC.
4. Authorization to use the symbol is:

    - Non-exclusive
    - Non-transferable
    - Automatically suspended or withdrawn when accreditation status changes

7.3 Conditions for Making Accreditation Claims

Accreditation claims and use of the symbol shall be made only when all of the following are met:

- The CAB name matches the accredited legal entity
- The activity falls within the granted scope of accreditation
- The accredited location is clearly identifiable
- The AIAC accreditation number is included, where applicable

Accreditation claims shall not be made:

- By applicants (prior to accreditation)
- For activities outside the scope
- In a misleading or exaggerated manner
- In a way that implies certification, approval, or endorsement of products or services

7.4 Use on Reports, Certificates and Statements

1. Accreditation symbols may appear on reports or certificates only for accredited activities.
2. Where both accredited and non-accredited results are included:
    - Accredited work shall be clearly distinguished
3. Opinions or interpretations outside the accredited scope shall be:
    - Clearly identified, or
    - Accompanied by an appropriate disclaimer

7.5 Use in Advertising, Publicity and Promotional Materials

Accredited CABs may reference their AIAC accreditation in marketing and publicity materials provided that:

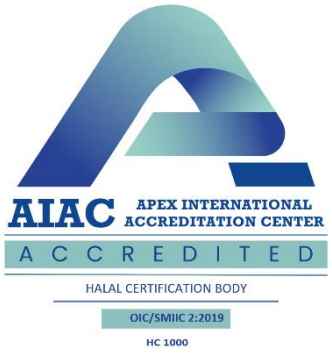
- Claims are accurate and verifiable
- Accreditation is not overstated
- The use does not bring AIAC or accreditation into disrepute

Accreditation symbols shall **not** be used in a way that implies:

- Product certification
- Regulatory approval
- Personal certification

7.6 Use on Labels and Marks

1. Accreditation symbols shall not be affixed to products or packaging.
2. Calibration or inspection labels may include the accreditation symbol only when:
    - The activity is within scope
    - The CAB assumes full responsibility
    - The label does not imply approval of the item



Above are the examples of the AIAC Accreditation Symbol.

8 Use of Combined ILAC MRA and IAF MLA Marks

8.1 General

Use of combined marks is permitted only where AIAC is a signatory to the relevant arrangement and where the CAB's scope is covered.

8.2ILAC MRA Mark

Accredited CABs may use the AIAC–ILAC MRA combined mark only when:

- A formal mark use agreement is signed
- All ILAC R7 and ILAC P8 requirements are met
- The mark is used strictly in relation to accredited activities

8.3 IAF MLA Mark

Accredited CABs may use the AIAC–IAF MLA combined mark only when:

- Authorized under IAF ML-2
- The CAB holds accreditation under an IAF MLA scope
- The mark is always used together with the AIAC accreditation symbol

8.4 Change in Accreditation Status

When accreditation is:

- Suspended
- Reduced
- Withdrawn
- Expired

the CAB shall immediately:

- Cease use of the accreditation symbol
- Remove references to accreditation from all applicable materials
- Comply with AIAC instructions on public communication

Partial suspensions shall be clearly reflected in issued reports and certificates.

8.5 Monitoring and Control

AIAC monitors use of accreditation symbols and claims through:

- Assessments and surveillance activities
- Review of reports and certificates
- Review of websites, promotional materials and public statements
- Complaints and third-party notifications

Misuse may result in corrective action, sanctions, suspension, withdrawal, or legal action in accordance with AIAC procedures.

8.6 Misuse and Sanctions

Any misuse, misrepresentation, or unauthorized use of accreditation symbols or claims shall be treated as a nonconformity and managed in accordance with AIAC sanctions procedures.

9.0 Amendment Table

Section	Revision	Summary Of Changes	Edited /Reviewed by	Approved by
All	00	First Issued: 30-11-2025	Quality function	General Manager
All	01	Addition of the Amendment Table	Quality Manager	General Manager