Specific Accreditation Guidance

Inspection

Monitoring inspectors and assuring the quality of inspections

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Monitoring inspectors and assuring the quality of inspections

Introduction

ISO/IEC 17020:2012 introduces a requirement for “monitoring” of inspectors in clauses 6.1.8 and 6.1.9. Monitoring was previously understood to be an element of “effective supervision” and was dealt with under ISO/IEC 17020:1998 Clause 6.4 and the IAF/ILAC Guidance to that clause. Effective supervision and monitoring assist in assuring the quality of inspections and thus perform the role fulfilled by proficiency testing and quality control in the context of laboratories.

This guidance identifies a range of practices that provide effective means of monitoring.

Proficiency testing and inspection bodies

ILAC P9 states that:

> *Proficiency testing may be used in some types of inspection where available and justified by the inclusion of testing activities that directly affect and determine the inspection result or when required by law or by regulators. It is, however, recognized that proficiency testing is not a usual and expected element in the accreditation of most types of inspections.*

and NATA’s Proficiency Testing Policy states that

> *NATA requires applicant and accredited facilities (including inspection bodies if relevant) to formulate PT participation plans covering the activities they offer (for each major area as noted above), unless participation is already covered by regulation or other specifications.*

Where credible and relevant proficiency testing programs are available it is a requirement of accreditation that applicant and NATA-accredited inspection bodies will participate.

Facilities are responsible for checking the availability of externally available PT programs, evaluating their appropriateness and participating in programs, when available and appropriate.

Recognising that credible and relevant externally-sourced proficiency testing may not be available for many inspection bodies, and that applicant and NATA-accredited inspection bodies are required by ISO/IEC 17020:2012 to implement systems for the monitoring of inspectors, the options identified in the following section are offered as some (but not an exhaustive list of) acceptable means of performing such monitoring.

Quality assurance activities for inspection bodies

The quality of inspection activities may be established in a number of ways. These include, but are not limited to:

a. Comparison of findings

Several inspectors (drawn from one or several inspection bodies) may inspect an item (either concurrently or over a time interval such that the stability of the inspected item is assured) and the findings are then compared. Comparisons may be numerical or qualitative and a statistical analysis of outcomes may highlight whether the findings from each inspector are satisfactory. Comparison is against the consensus of the group.

b. Measurement audits

An object of inspection with known reference values or qualities may be used in a manner similar to that described in a) above. The extent of variance between the reported results from the inspector and the reference value / quality may be used as a performance evaluation tool.

c. Technical witnessing

An inspector may observe another inspector in the course of an inspection, to confirm the coverage and application of judgment. This technique is frequently used as a measure of the effectiveness of training. ISO/IEC 17020:2012 6.1.9 requires that the monitoring of performance of inspections includes on-site witnessing of inspections by technically competent personnel and cover a representative sample of inspections, unless there is sufficient supporting evidence that the inspector is continuing to perform competently.

d. Known value schemes

These schemes involve the preparation of items with known issues, such as a standard set of data for analysis. Known value schemes are commonly used as checks on the validity of calculating systems such as spreadsheets and finite element analysis programs.

e. Partial-process schemes

These schemes involve the evaluation of the ability to perform parts of the overall process. Examples may include:

- calculating from a given set of data (rather than conducting the actual inspection);
- performing an inspection in a controlled environment rather than at client premises;
- repeat inspections performed by another inspector (either concurrently or over a time interval such that the stability of the inspected item is assured).

f. Review of records and supporting materials

In some cases the records of inspection will be sufficient to establish whether the inspection was conducted properly and it is therefore possible

for a high degree of assurance to be established through review of a comprehensive set of records. An example could include structural and condition inspections where these are supported by extensive photographic records, original observations, notes, drawings, etc.

g. Contact with client

Client interaction is often a key element of the inspection process. Appropriately structured interviews with clients can provide information regarding the inspector's approach, behaviour, performance and even coverage of the objects of inspection. Telephone surveys or interview visits by another representative of the inspection body can elicit information regarding inspection performance that may not be available from other means.

h. Review of reports

Often reports are generated from templates that force an inspector's thinking and the recount of inspection into a structured and artificial format. Review of reports may take a check-list approach to confirm that all sections are completed; however a report reviewer may also consider whether the report is a true reflection of the effort and coverage of the inspection. Particular attention should be paid to the specification of inspection, identification of work not done and limitations of the inspection, client variations, linkages to supporting information (testing results and photographs) and the final outcomes of the inspection (declaration of conformity and recommendations).

i. Post inspection confirmation

In some applications, data arising in the course of a project and following the completion of the project can provide confirmation that the measures taken in performing the inspection were appropriate, offer some assurance of inspector probity and build client confidence.

The above activities are able to discriminate between varying levels of performance on the part of the inspector, across the diverse dimensions of the service delivery. Other means may be suitable. Inspection bodies should draw upon all such means available to them as appropriate to their industry, the environment, the processes of service delivery and the inspection task.

Implications for inspection bodies

Inspection bodies are required to participate in appropriate quality assurance activities as a condition of accreditation.

Inspection bodies should identify their approach to assuring the quality of inspection services, by including a statement, policy or procedure in their management system.

Where possible, an inspection body should have a plan on their intended participation in relevant proficiency testing activities, to cover the major technical areas included in its scope of accreditation.

At assessment these matters will be discussed and comments recorded as findings (conditions / observations as relevant) under clause 6.1.9 of ISO/IEC 17020:2012.

References

This section lists publications referenced in this document. The year of publication is not included as it is expected that only current versions of the references shall be used.

Standards

ISO/IEC 17020	*Conformity assessment – Requirements for the operation of various types of bodies performing inspection*

ILAC Documents

ILAC-P9:06/2014	*ILAC Policy for Participation in Proficiency Testing Activities*

NATA Documents

General Accreditation Criteria Proficiency Testing Policy

Guidance documents covering the implementation of specific accreditation requirements are available from the ILAC (www.ilac.org), IAF (www.iaf.nu) and APAC (www.apac-accreditation.org) websites.

Amendment Table

The table below provides a summary of changes made to the document with this issue.

AMENDMENT TABLE	
Section or Title	**Amendment**
Whole document	The document has been reviewed and updated to reflect the changes to the ILAC Policy P15 and references to APAC (previously known as APLAC) and other ILAC documentation have also been updated. Addition of Security Classification Label