



**General Accreditation Criteria
Inspection**

**ISO/IEC 17020 Standard Application
Document**

January 2018

© Copyright National Association of Testing Authorities, Australia 2015

This publication is protected by copyright under the Commonwealth of Australia Copyright Act 1968.

NATA's accredited facilities or facilities seeking accreditation may use or copy this publication or print or email this publication internally for accreditation purposes.

Individuals may store a copy of this publication for private non-commercial use or copy a reasonable portion of this publication in accordance with the fair dealing provisions in Part III Division 3 of the Copyright Act 1968.

You must include this copyright notice in its complete form if you make a copy of this publication.

Apart from these permitted uses, you must not modify, copy, reproduce, republish, frame, upload to a third party, store in a retrieval system, post, transmit or distribute this content in any way or any form or by any means without express written authority from NATA.

Table of Contents

ISO/IEC 17020 Inspection Standard Application Document	5
Foreword	5
Introduction (Informative)	6
Basis of the Guidance	6
4 General Requirements.....	6
4.1 Impartiality and Independence.....	6
4.2 Confidentiality.....	8
5 Structural Requirements	8
5.1 Administrative requirements	8
5.2 Organisation and management.....	8
6 Resource requirements	9
6.1 Personnel	9
Staff competence	9
Management of Inspector and staff competence	10
Loss of staff.....	11
Corporate accreditations	11
Records.....	11
6.2 Facilities and equipment.....	12
6.3 Subcontracting	15
7 Process Requirements	15
7.1 Inspection methods and procedures.....	15
7.2 Handling inspection items and samples.....	16
7.3 Inspection records	17
Record modification.....	17
Record Retention	18
7.4 Inspection reports and inspection certificates	18
7.4.2 Inspection reports – content	18
Use of NATA Endorsement	19
Opinions.....	20
Use of client’s forms	20
Progress reports.....	20
7.5 Complaints and appeals	20
8 Management system requirements	20
8.1 Options.....	20
8.1.2 Option A	20
8.1.3 Option B	20
8.2 Management system documentation (Option A)	21
8.3 Control of documents (Option A)	21

8.4 Control of records (Option A)	22
8.6 Internal audits (Option A).....	22
Annex A: Independence Requirements.....	23
Annex A1 Requirements for inspection bodies (Type A).....	23
Annex A2 Requirements for inspection bodies (Type B).....	23
Annex A3 Requirements for inspection bodies (Type C).....	23
References	24
Standards.....	24
APLAC Documents	24
ILAC and IAF Documents.....	24
NATA Documents.....	24
Amendment Table.....	26

ISO/IEC 17020 Inspection Standard Application Document

Foreword

The recently published ILAC P15 provides a globally-accepted interpretation of ISO/IEC 17020:2012 when this standard is applied by accreditation bodies. ILAC P15 has been adopted as a mandatory guidance document for access to the ILAC MRA. Thus, to maintain its ILAC Inspection MRA status, NATA must adopt the document and subsequently this ISO/IEC17020 Standard Application Document has been revised to include the mandatory elements of ILAC P15.

This edition of NATA's ISO/IEC17020 Standard Application Document therefore draws from ILAC P15, relevant elements of the June 2013 Standard Application Document, issues identified in implementing ISO/IEC 17020:2012 and, more broadly, experiences in implementing the Inspection Accreditation Program in Australia. This document will be applied as part of the accreditation criteria from 1 October 2015.

In implementing ILAC P15, those provisions mandated by the term 'shall' are indicated in this document, while those provisions qualified by 'should' have been selectively implemented based upon Australian practice.

An Appendix is included outlining possible monitoring practices. Monitoring is understood to encompass those elements of Proficiency Testing that may find relevance to Inspection Bodies.

ISO/IEC 17020:2012 is the first of the ISO/IEC 17000 series of standards to use the PAS text, however ISO/IEC 17024:2004 uses similar text and so the IAF GD 24 document that provides guidance to ISO/IEC 17024 was reviewed for possible guidance relating to the relevant clauses.

Please note that although the term 'requirement' remains applicable to ISO and ISO/IEC standards, NATA uses the term 'criteria' to describe mandatory statements.

Introduction (Informative)

These criteria detail general principles of good inspection practice. Some clauses may not be relevant to particular industry groups or to small (e.g. one-person) operations.

Professional judgement is understood to entail decision making that is supported by a body of rigorous and objective analysis.

Identification of what is inspected and where in the process professional judgement is exercised, enables inspection activities to be discriminated from other activities, such as product approval schemes or personnel licensing systems.

Basis of the Guidance

This section provides interpretation of the application of ISO/IEC 17020 with which applicant and accredited facilities must comply. The clause numbers in this section follow those of ISO/IEC 17020 but, since not all clauses require interpretation, the numbering may not be consecutive.

4 General Requirements

4.1 Impartiality and Independence

4.1.2

- a) Where an inspection body is a legal entity which is itself part of a larger organisation it should be able to demonstrate that no conflict of interest exists. Relevant information on activities performed by the other parts of the larger organisation should be maintained up-to-date.
- b) Guidance should be provided, indicating to staff expected behaviours in situations where undue pressure is applied.
- c) Records of situations where undue pressure (from any source) has been applied to inspectors should be kept.
- d) Requirements relating to impartiality are also applicable to subcontractors (See clause 6.1.12).

4.1.3

- a) Risks to the impartiality of the inspection body shall be considered whenever events occur which might have a bearing on the impartiality of the inspection body or its personnel. (ILAC P15:06/2014)

Inspection bodies should be able to demonstrate how they manage their business and any other activities so as to eliminate actual conflict of interest and minimise any identified risk to impartiality. This should cover all potential sources of conflict of interest. As risks to impartiality may emerge as a result of changes over time, the review of risks to impartiality is an ongoing activity. A formal review that is performed periodically could be considered in addressing this requirement.

- b) The inspection body should describe any relationships that could affect its impartiality to the extent relevant, using organisational diagrams or other means.

Examples of relationships that could impact impartiality include but are not limited to:

- Relationship with a parent organisation;
- Relationships with departments within the same organisation;
- Relationships with related companies or organisations;
- Relationships with regulators;
- Relationships with clients;
- Relationships of personnel;
- Relationships with other organisations, such as the organisations designing, manufacturing, supplying, installing, purchasing, owning, using or maintaining the items inspected.

c) Application of undue pressure on inspectors is a regrettable but commonplace occurrence, and it is not sufficient merely for inspection bodies to state that undue pressure is not acceptable. It is recommended that inspection bodies anticipate their staff will encounter situations where undue pressure is applied, and establish appropriate responses.

Such responses could include:

- Guidance to staff on acceptable behaviour;
- Creation of systems to record and respond to instances where undue pressure (from any source) has been applied.

d) Inspection bodies should expect assessment of these processes to manage conflict of interest and threats to impartiality during NATA assessment. This may include, where practicable and justified, review of records of the inspection body and any related body for the inspection under consideration. If evidence of failure to maintain impartiality is found, there may be a need to extend the audit trail back into related bodies to provide assurance that control over potential conflicts of interest has been re-established.

4.1.5

a) The inspection body should have a documented statement emphasising its commitment to impartiality in carrying out its inspection activities, managing conflicts of interest and ensuring the objectivity of its inspection activities. Actions emanating from the top management should not contradict this statement.

b) One way for the top management to emphasise its commitment to impartiality is to make relevant statements and policies publicly available.

4.1.6

a) Categorisation of inspection bodies as Type A, B or C is an indication of their independence based upon formal and structural considerations. The traditional measures of independence (being first-, second- and third-party organisations) have been indicated in the standard.

b) Assignment of Type will be made as part of the assessment process. The assigned Type can, however, be amended if the nature of a business changes, provided the inspection body can demonstrate that it meets the criteria of a different inspection body Type.

4.2 Confidentiality

4.2.1

- a) A policy regarding the confidentiality requirements of clients should be documented.
- b) Requirements relating to confidentiality are also applicable to sub-contractors (See 6.1.13).

5 Structural Requirements

5.1 Administrative requirements

5.1.1 Where the inspection body is a part of a larger legal entity, the structure of the entire legal entity may be subject to assessment to pursue specific audit trails and/or review records relating to the inspection body.

5.1.4

- a) The level of provisions should be commensurate with the level and nature of liabilities that may arise from the inspection body's operations. The facility should be able to show the factors taken into consideration when determining the level of provision for liabilities. If it is applicable, any insurance should be shown to cover sub-contracting activities.
- b) Typical factors considered in determining the provision for liabilities might include risk, client demand and regulation. Inspection bodies should seek professional advice on matters relating to insurance and liability provisions.
- c) Types of liability covered by insurance may include employer's liability, public liability and professional indemnity.
- d) Inspection bodies should pay particular attention to provisions such as insurance when undertaking inspections in another country or jurisdiction, since legal requirements associated with liabilities may vary between countries and jurisdictions.

5.1.5 It is acknowledged that often individual contracts are not signed with clients; and that work scopes may be established through reference to other documents such as regulations.

5.2 Organisation and management

5.2.2

- a) The size, structure, composition and management of an inspection body, taken together, shall be suitable for the competent performance of the activities within the scope for which the inspection body is accredited. (ILAC P15:06/2014)
- b) 'To maintain the capability to perform the inspection activities' implies that the inspection body shall take steps to keep it appropriately informed about applicable technical and/or legislative developments concerning its activities. (ILAC P15:06/2014)
- c) Inspection bodies shall maintain their capability and competence to carry out inspection activities performed infrequently (normally with intervals longer than one year). (ILAC P15:06/2014)

5.2.3 The inspection body shall maintain an up-to-date organisational chart or documents clearly indicating the functions and lines of authority for staff within the inspection body. (ILAC P15:06/2014)

5.2.5

a) In order to be considered as 'available', the person shall be either employed or otherwise contracted. (ILAC P15:06/2014)

In determining an appropriate level of 'availability', it is recommended that the inspection body consider a range of factors that include, but are not limited to:

- The nature of the inspection;
- Hours of operation;
- Consequences of inadequate inspections; and
- Consequences of cessation of inspection activities.

b) In order to ensure that the inspection activities are carried out in accordance with ISO/IEC 17020, the technical manager(s) and any deputy(ies), shall have the technical competence necessary to understand all significant issues involved in the performance of inspection activities. (ILAC P15:06/2014)

5.2.6 In organisations where an absence causes the cessation of work, the requirement for having deputies is not applicable.

6 Resource requirements

6.1 Personnel

6.1.1

a) Where appropriate, inspection bodies shall define and document competence requirements for each inspection activity, as described in 5.1.3a. (ILAC P15:06/2014)

b) When professional judgement is needed to determine conformity, this shall be considered when defining competence requirements. (ILAC P15:06/2014)

6.1.3

a) The competence of inspectors is critical to the validity of inspection findings. Competence is understood to encompass both theoretical knowledge and practical ability. Depending upon the industry group, competence may demand familiarity with relevant regulations, technologies, processes, standards, codes, materials, failure modes and industry practice. Competent outcomes may also be influenced by the personnel's knowledge of the inspection body's management system and ability to implement administrative as well as technical procedures applicable to the activities performed.

b) Competence requirements apply equally for both employed and contracted personnel.

Staff competence

Where relevant, inspection body staff must have:

- relevant qualifications and/or be assessed as competent within the National Training Framework;

- completed relevant in-house training;
- familiarity with the principles of the inspections they perform or supervise including relevant practical experience;
- familiarity with inspection equipment, including its performance, use and calibration;
- knowledge of the standards or specifications used;
- knowledge of the organisation's management system;
- ability to record inspection findings and write clear and appropriate reports and/or certificates;
- an understanding of the legal significance of approving and issuing reports;
- knowledge of ISO/IEC 17020, NATA Rules, this document, and relevant accreditation criteria; and
- they must participate in continuing professional development.

Management of Inspector and staff competence

The management of an inspection body may appoint and authorise staff in support of the inspection activities. Such appointments shall be in accordance with a documented policy and procedure. This system must cover all inspection staff having an effect upon inspection outcomes, including inspectors, clerical, ancillary and service personnel as appropriate. Appointment and authorisation may cover all, or be limited to specifically identified, technical elements or process steps associated with the inspection. Where administrative personnel are authorised to issue documents the inspection body shall be able to demonstrate that reports are subjected to an appropriate level of technical review prior to issue.

The following matters are required to be addressed:

1. The inspection body must identify the minimum levels of qualification and experience necessary for people to perform relevant tasks.
2. A system to manage the development and appointment of staff must be developed and associated procedures must be documented. It may be possible for a graded system to be developed, allowing for personnel development, enabling recognition of experience while limiting the risks associated with using less experienced staff.
3. The inspection body must develop and implement competency assessment criteria for staff outlining their responsibilities, and the expectations of the inspection body regarding the conduct of work including field activities and interpretation of codes.
4. Where relevant, staff must participate in professional development (for example, through attendance at exhibitions, industry meetings and ongoing training).
5. Records of qualification, professional development, experience and participation in in-house training must be kept for each staff member.
6. A record of the appointment dates and extent of each approval must be retained. At cessation of engagement (for example upon staff leaving the

organisation) a record of the withdrawal including the date of withdrawal must be kept.

7. A system to assure confidence in inspections conducted by different inspectors must be developed. NATA's *Monitoring inspectors and assuring the quality of inspections* offers possible models for implementation. The use of this system must continue at appropriate intervals throughout the employment of the inspector. Records of outcomes and any associated corrective actions must be retained.

Loss of staff

If a facility does not have staff with relevant competencies for one or more technical elements of its Scope of Accreditation, the inspection body is unable to perform inspection work involving this technical element. NATA must be advised of the situation and the affected part of the accreditation will be suspended pending the organisation gaining the necessary resources to competently deliver the relevant services.

It may be possible for work to be subcontracted to another inspection body during the absence of suitable staff (see 6.3.1).

Corporate accreditations

Inspection staff appointed by facilities with corporate accreditation may fulfil their appointed role across different sites, providing they are familiar with each site's operations, and have access to relevant records e.g. training, calibration, quality control.

Records

Facilities should hold a current listing of staff authorised to issue reports, including as appropriate the range of activities for which they are approved.

6.1.5 Trainee inspectors, contract staff and other staff may assist with inspection work while under effective supervision. Their duties should be commensurate with their knowledge and experience. There should also be adequate direction via provision of detailed procedures, checklists and/or work instructions.

Training records must at all times be able to confirm the competency level of an individual for a given task.

6.1.8 NATA's *Monitoring inspectors and assuring the quality of inspections* identifies some systematic means of assuring the quality of inspection activities, and includes a variety of techniques that are also used in proficiency testing activities.

6.1.9

a) An effective program for the on-site observation of inspectors may contribute to fulfil the requirements in clauses 5.2.2 and 6.1.3. The program should be designed considering;

- the risks and complexities of the inspections;
- results of previous monitoring activities; and
- technical, procedural or legislative developments relevant to the inspections.

b) The frequency of on-site observations depends on the issues listed above, but should be at least once during the accreditation re-assessment cycle, however see application note 6.1.9a. If the levels of risks or complexities, or the results from previous observations, so indicate, or if technical, procedural or legislative changes have occurred, then a higher frequency should be considered. Depending on the fields, types and ranges of inspection covered by the inspector's authorisations, there may be more than one observation per inspector necessary to adequately cover the whole range of required competencies. Also, more frequent on-site observations may be necessary if there is lack of evidence of continuing satisfactory performance.

c) In inspection areas where the inspection body has only one technically competent person the internal observation on-site cannot take place. In such cases the inspection body shall have arrangements in place for external observations on-site, unless other sufficient supporting evidence that the inspector is continuing to perform competently is available. (ILAC P15:06/2014)

6.1.10 Copies of relevant health records (for example, records of eyesight or hearing tests) and specialist licences must be maintained as part of the individual's qualification list. If appropriate, systems should exist to prompt when checks or re-certifications fall due.

6.1.11

a) In many inspection bodies there is often a direct connection between the number of inspections performed and the income of the organisation (and hence its staff). In such cases it is recommended that records be kept of the time taken for each inspection.

b) The inspection body should consider issues such as work ethics, impartiality, customer relations, presentation, safety, environmental and heritage protection, response to undue pressure (see Clause 4.1 paragraph 2) etc. Guidance can be provided in the form of a code of conduct. Records of training covering these issues should be maintained.

6.2 Facilities and equipment

6.2.1 In this clause 'facilities' refers to materiel necessary for the conduct of an inspection. This can include items necessary for access, safety, recording or interpretation of findings as well as items directly used in the inspection task.

Inspection bodies are guided to the information of HB 86.1 when addressing matters of equipment selection, care, calibration and checking.

6.2.3 If controlled environmental conditions are needed, e.g. for the correct performance of the inspection, the inspection body shall monitor these and record the results. If conditions were outside acceptable limits for the inspection to be performed, the inspection body shall record what action was taken. See also clause 8.7. (ILAC P15:06/2014)

6.2.4

a) Even where the equipment is not owned by the inspection body, records must be able to clearly identify what piece of equipment was used in the process and its suitability for use, if relevant. Where verification of suitability for use cannot be achieved, this fact shall be prominently stated in the inspection report and the client shall be informed of it.

b) When appropriate (normally for the equipment covered by clause 6.2.6) the definition shall include the required accuracy and measurement range. (ILAC P15:06/2014)

6.2.6 Metrologically traceable calibrations are appropriate where:

- Measurements play a significant part in the inspection findings; or
- A measurement is required with a clearly defined accuracy.

The need for accuracy may be implicit in statements such as 'good engineering practice'. Under such expectations measuring equipment used must meet the requirements of NATA's *Metrological Traceability*.

6.2.7 Calibration information covering the technical process, frequency and means of achieving traceability may be sourced from:

- Experience with use and operation of equipment;
- Equipment manuals and suppliers;
- Calibration providers;
- NATA's *Reference Equipment Table* and *General Equipment Table* which are available from the NATA website (www.nata.com.au);
- Other NATA documents

6.2.8 Refer to NATA's *Metrological Traceability* for NATA's policy on metrological traceability when performing calibrations, test and measurements.

Also refer to NATA's *Equipment assurance, in-house calibration and equipment verification* for NATA's policy on in-house calibrations.

6.2.9 The frequency of in-service checks should be established by the inspection body. Guidance on check intervals for many items of equipment is provided in NATA's *Reference Equipment Table* and *General Equipment Table* which are available from the NATA website (www.nata.com.au). Where no check interval is offered, the inspection body should establish its own schedule of equipment checks, reviewing these at suitable intervals to ensure that the check interval is appropriate.

6.2.10 Refer to NATA's *Metrological Traceability* for NATA's policy on traceability obtained through a reference material or certified reference material.

Providers of reference materials should operate to ISO Guide 34 *General requirements for the competence of reference material producers* and, where possible, hold accreditation for the production of reference materials.

6.2.11 When the inspection body engages suppliers to perform activities which do not include the performance of part of the inspection, but which are relevant for the outcome of inspection activities, e.g. order registration, archiving, delivery of auxiliary services during an inspection, the editing of inspection reports or calibration services, such activities are covered by the term 'services' used in this clause.

6.2.13

a) Records of validation and subsequent checks on its integrity must be retained. Checks on software updates should be carried out before the updates are implemented. At all times, the organisation must be able to identify which version of software was or is in use and be able to confirm the current

status of software used by staff in portable electronic equipment. Interested parties may refer to the validation and verification requirements outlined in NATA's *Application to Modelling* Clause 7.1.

b) Computers, software and electronic automated equipment should be treated as another item of equipment in the equipment register and calibration/validation system and scheduled for service, review and/or update as required. Electronic data security should be considered routinely as part of the record integrity system.

c) Factors that may be considered in protecting the integrity and security of data include (but are not limited to):

- backup practices and frequencies;
- effectiveness in restoring data from backup;
- virus protection;
- password protection.

6.2.15 Information recorded should, where appropriate, include:

- a) the name of the equipment and its identification;
- b) manufacturer's name;
- c) manufacturer's equipment identification such as serial number;
- d) date received and placed in service;
- e) condition when received;
- f) maintenance instructions;
- g) history of maintenance and calibration;
- h) calibration records;
- i) current location or who the equipment has been assigned to;
- j) calibration procedures used.

All equipment checks and calibrations should record the following information:

- a) Name of equipment;
- b) Identification of equipment (for example, a serial number, etc.);
- c) Location of equipment if relevant;
- d) Specification (including year) where appropriate;
- e) Indication of the acceptance criteria used on the records;
- f) Identification of personnel carrying out the work;
- g) Identification of reference equipment used (for example, vernier callipers 36101, reference thermometer A227, etc.);
- h) Procedure used or reference to documented procedure;
- i) Date the check was performed;
- j) Results obtained;
- k) Statement of acceptability or otherwise of the check;
- l) Any follow-up action required to correct deficiencies.

Where performance checks on critical equipment are conducted by an external provider, these checks must be undertaken by a laboratory accredited to perform that check, and can provide a NATA endorsed report for that check. Organisations performing equipment checks in-house must document the procedures used. Alternatively, they may use proforma worksheets provided it is clear as to the procedure to be performed.

6.3 Subcontracting

6.3.1 The sub-contracting body should hold the relevant inspection (ISO/IEC 17020) or laboratory (ISO/IEC 17025) accreditation for the work it will be conducting on behalf of the inspection body.

6.3.4

- a) If the evaluation of the competence of the subcontractor is based partly or in full on its accreditation, the inspection body shall ensure that the scope of the subcontractor's accreditation covers the activities to be sub-contracted. (ILAC P15:06/2014)
- b) Inspection bodies are reminded however that their service needs may go beyond technical competence and these additional service needs should be considered in identifying suitable providers of sub-contracted services.

7 Process Requirements

7.1 Inspection methods and procedures

7.1.2

- a) Inspection bodies often perform sampling as part of their services. Such samples may be retained for reference purposes or tested.
- b) In some cases appropriate sampling activities demand the development of job-specific sampling plans and/or the use of professional judgement. Sampling may also be performed as part of a wider inspection activity. Accreditation for these activities is possible under NATA's Inspection Accreditation Program. Interested organisations are invited to contact NATA to discuss accreditation of these sampling activities.
- c) Facilities are reminded of the risks associated with extending results from a sample to a wider population of items. While it is the practice in some industries to base an evaluation upon limited sample sizes, facilities are reminded of the existence of Australian standards for sampling. Where assumptions of homogeneity have been made, these must be brought to the attention of the client.

7.1.3 Clear in-house instructions on inspection procedure and technique may be required to support inspections conducted against defined product specifications. The effectiveness of these procedures should be validated and the validation documented.

In many instances it may be more appropriate for accreditation to be held for a technically valid, in-house inspection procedure referencing all applicable specifications against which items are to be evaluated rather than for the Scope of Accreditation to detail individual specifications. This will vary from industry to industry and should be discussed with your NATA Lead Assessor.

7.1.4 Where acceptance/rejection criteria are nominated in contracts or specification documents, the criteria should be included, as appropriate, in the worksheets and/or checklists used by the inspection body.

7.1.5

- a) Inspection records must include any amendments to the work order requested by the client. Documented client approval should be obtained for any changes to the work order issued.
- b) Verbally established agreements, requests and changes to the scope of works are considered a form of contract and shall be recorded (ILAC P15:06/2014), included in contract review processes and confirmed in writing with the client. Where appropriate, the relevant dates and the identity of the clients' representative should be recorded.
- c) For routine or repeat work, contract review may be limited to consideration of resource availability.

7.1.6 The information referred to in this clause is not information provided by a subcontractor, but information received from other parties, e.g. a regulating authority or the client of the inspection body. The information may include background data for the inspection activity, but not results of the inspection activity.

7.1.7

- a) All primary records must be made as soon as is practicable.
- b) Where inspection includes the manipulation of electronic records to enhance inspection practices or reporting a copy of the unchanged data and details of the processes used in enhancement should be retained.

7.1.8 The policy and system for checking calculations and data transfers must be documented. Corrections to original inspection records shall be initialled and dated by the amending officer.

7.1.9

- a) The safety of inspection personnel should be considered at all times when conducting inspections, as should protection of the surrounding environment. Safety issues of concern noted by an inspector should be recorded and reported to the site management and the client or those responsible for rectification of the situation.
- b) NATA does not define mandatory safety measures but does draw attention to any unsafe work practices that are observed in the course of an assessment. When clauses covering safety are written into standard inspection codes, methods or specifications covered by the scope of accreditation these must be observed by the inspection body. Inspection bodies visiting clients and other organisations must also observe site specific safety requirements.

7.2 Handing inspection items and samples

7.2.3 Inspection records should detail the decisions made by the client regarding the issue.

7.2.4 Any relevant client instructions covering the retention, bonded storage, return or disposal, etc. of inspection items should be observed.

7.3 Inspection records

7.3.1 As ISO/IEC 17020 is not prescriptive with respect to what constitutes inspection records, the following must, where appropriate and/or relevant, be considered as inspection records:

- a) contract review negotiations;
- b) client/work instructions (preferably written, with all verbal instructions from the client to be recorded);
- c) all original notes and calculations taken by the inspector and/or other staff during an inspection;
- d) original copies or negatives of photographs (including electronic retention of original digital photographic data);
- e) the identity of the staff undertaking part(s) or the whole of the inspection;
- f) computer data files and/or software programs;
- g) reports on sampling, tests and measurements including copies of reports on sub-contracted inspection, sampling and/or testing work conducted;
- h) those items of equipment, having a significant influence on the result of the inspection, used for each inspection activity.
- i) a copy of the inspection report and a record of its distribution;
- j) records of all discussions with clients during or after the inspection relevant to the preparation of the inspection report;
- k) date and time of inspection.

Electronic records involve capture, digitisation, storage and output. Systems to manage electronic records must consider the ability of each step to accurately reproduce the information of interest.

Record modification

Electronic records (both images and sound) are liable to alteration, clarification or enhancement. While such processing offers a number of benefits to the inspection body, it must be used with care. As ISO/IEC 17020 is not prescriptive with respect to post-capture processing upon digital records, the following must be considered where relevant:

- a) An original record must be maintained and ultimately archived;
- b) The original record must not be subjected to processes that cause permanent alteration. Where processing and/or analysis is required a working copy is needed;
- c) The purpose and requirements of the end product drive the selection of enhancement. Therefore, the final use of the record should determine the choice of enhancement;
- d) All instances of electronic enhancement of records shall be recorded;
- e) Details of the processes used in enhancement must be recorded. This should include all the steps performed in the enhancement operation and the level to which these enhancements were applied. The level of detail required is such as to enable another operator to validate the original enhancement process if required.

Record Retention

Unless otherwise prescribed by legislation or contractual obligation, record retention times shall not be less than the accreditation period detailed in the sixth schedule of the NATA Rules, being 4 years for inspection bodies.

7.4 Inspection reports and inspection certificates

7.4.1 The fact that a client does not require a detailed report does not remove the requirement for detailed inspection records to be kept.

Where electronic means are used to approve an inspection report, access to the electronic storage medium must be controlled.

7.4.2 Inspection reports – content

Inspection reports may be simple or complex. ISO/IEC 17020 Clause 7.4.2 mandates some elements, and offers Annex B which identifies optional elements; NATA's Rules include requirements relating to endorsement. Additional reporting requirements may be imposed by the context of the inspection. The text below identifies the source of the element.

- a) designation of the document, i.e. as an inspection report or an inspection certificate, as appropriate (Optional Annex B, a));
- b) identification of the issuing body (Requirement 7.4.2 a));

Identification of the issuing facility may be by:

- the name in which the accreditation is held or,
- the accreditation number, or
- the street address.

As required, other unique organisation identification may be used.

[Endorsed] reports of results covered by the scope of accreditation must include the name in which accreditation is held and the accreditation number.

- c) unique identification of the report (Requirement 7.4.2 b));

The report must carry this unique identification on each page

- d) indication of the total number of pages, each page being numbered for multi-page reports (Clarity requirement of 7.4.4);
- e) identification of the client (Optional Annex B, b));
(Note the owner of the inspected item can be mentioned in the report or certificate if the owner is not the client)
- f) description of the inspection work ordered (Optional Annex B c));
- g) date(s) of inspection (Requirement 7.4.2 c));
- h) information on where the inspection was carried out (Optional Annex B, h));
- i) identification or brief description of the inspection method(s) and procedure(s) mentioning deviations from, additions to or exclusions from the agreed methods and procedures (Optional Annex B e));

- j) reference to the use of sub-contractors (where appropriate) including identification of the sub-contracted inspection and/or testing results (Subcontractor requirement 7.4.4);
- k) identification of the items inspected (Requirement 7.4.2 d));
- l) Identification of equipment used for measuring / testing (Optional Annex B d));
- m) where applicable, and if not specified in the inspection method or procedure, reference to or description of the sampling methods and information on where, when, how and by whom the samples were taken (Optional Annex B g));
- n) information on environmental conditions during the inspection, if relevant (Optional Annex B, i));
- o) inspection results except where detailed in accordance with clause 7.4.3 (Requirement 7.4.2 g));
Results may include reference to specifications, defects or other non-compliances identified;
- p) a statement of conformity where applicable (Requirement 7.4.2 f));
- q) statement that the inspection results relate exclusively to the work ordered or to the items or lot inspected (Optional Annex B, j));
- r) information on what has been omitted from the original scope of work (Optional Annex B d));
- s) the inspector's mark or seal (Optional Annex B, l));
- t) names (or unique identification) of the personnel members who have performed the inspection and in cases when secure electronic authentication is not undertaken, their signature (See also 7.4.2);
- u) signature or other indication of approval, by authorised personnel (Requirement 7.4.2 e));
- v) date of issue of the report (Requirement 7.4.2 b));
- w) the correct NATA endorsement (see NATA Rules,) including conditions under which the report may be reproduced;
- x) any other information required by the client;
- y) caveats and assumptions made by the facility, and the basis for these (where applicable) (Requirement clarity - 7.4.4);
- z) reference to sub-contractor's attached reports (where appropriate - see Note below);
- aa) clear identification of inspection and test data from non-accredited sources that has been utilised in the inspection (where appropriate) (Requirement P15 7.4.2).

Use of NATA Endorsement

Reports on results covered by the scope of accreditation must include the name in which accreditation is held and the accreditation number.

Opinions

Reporting professional judgement including inspector's notes and calculations based upon published formulae applied in reporting the current status of an inspected item is considered normal inspection reporting practice.

Use of client's forms

Regulatory authorities or clients may place additional reporting requirements on the reporting of inspection results and these must be addressed. Where client report forms are used, the issuing NATA-accredited facility must be clearly identified on the report. Where such forms do not require the information detailed above, the facility must retain information sufficient to provide that information if requested. A note to the effect that the client specified the use of these forms must be retained.

Progress reports

Progress reports issued over an extended period in relation to fabrication, installation, commissioning and/or any other time-dependant inspection activities must each comply with the reporting requirements detailed above. The final inspection report/certificate must reference all progress reports issued.

Reports may be handwritten and presented at the inspection site, or typed, checked and formally presented. Site reports and associated work covered by the Scope of Accreditation must meet all the criteria for accreditation.

7.4.5 Procedures must be documented covering the withdrawal and re-issue of inspection reports when it is required.

7.5 Complaints and appeals

7.5.1 The procedures should cover the authentication, investigation and resolution processes.

An appeals resolution system is not required unless the inspection is carried out under legally delegated authority, e.g. when exercising responsibility as a Designated Authority.

Records (See 8.4) must include the authentication, investigation and resolution of complaints.

8 Management system requirements

8.1 Options

8.1.2 Option A

For comments relating to this clause please see the commentary relating to the individually referenced clauses detailed below.

8.1.3 Option B

Option B is included to enable an inspection body which operates a management system in accordance with ISO 9001 to use that system to demonstrate fulfilment of the management system requirements in 8.2 to 8.8 of ISO/IEC 17020. Option B does not require that the inspection body's management system is certified to ISO 9001.

Where the ISO 9001 management system is established for an entity that includes activities other than inspection, for Option B to be applicable the system shall appropriately cover the activities of the inspection body. (ILAC P15:06/2014)

Inspection bodies seeking accreditation to ISO/IEC 17020:2012 may exercise option B in clause 8.1.1 (i.e. reliance upon an ISO 9001 management system) and so not have their systems subjected to full assessment by NATA subject to:

- The quality management system being certified by a certification body recognised by JAS-ANZ or another signatory to the IAF MRA; and
- The scope of certification to include activities relevant to the scope of accreditation sought with NATA; and
- Copies of the most recent relevant certification audit reports being made available to the NATA assessment team for review; and
- demonstrable application, relevance and use of the certified management system in matters relating to:
 - document control;
 - records management;
 - management review;
 - internal audits;
 - corrective action;
 - preventive action;

with regard to the assessed operation of the systems of the inspection body.

The required extent of verification will depend on the evidence provided. If the management system is certified by an accredited certification body, NATA will still need to verify compliance with 8.1.3, but may choose not to assess (or audit) against clauses 8.2 to 8.8 of the standard. When the verification results in the identification of nonconformities, these will be reported against clause 8.1.3.

Inspection bodies exercising Option B should note that complaints and appeals have distinct requirements set out in clauses ISO/IEC 17020 7.5 and 7.6 and that an ISO 9001-compliant management system may not meet the specific requirements of these clauses.

8.2 Management system documentation (Option A)

8.2.4 Organisations are free to choose their own format and style of collating and presenting policy, procedure and information in documents. This information may be collated in a form other than as a single document called 'Quality Manual'.

Quality documentation must include or reference the scope of accreditation and the policy on the use of the NATA endorsement.

8.3 Control of documents (Option A)

8.3.2 For staff operating out in the field away from the office environment, extra care should be taken to ensure that they are kept up-to-date with

documentation changes. In particular, field notebook computers must be updated regularly and included in the internal audit program for content review.

8.4 Control of records (Option A)

8.4.1 In cases where electronic seals or authorisations are used for approvals, access to the electronic media or seal should be secure and controlled.

8.4.2 All records must be retained by the facility for a minimum of four years from the date of issue of the inspection report. Statutory and contractual obligations may specify longer record retention periods. The inspection body should also be aware of any client requirements regarding records storage.

8.6 Internal audits (Option A)

8.6.4

a) The inspection body shall ensure that all requirements of ISO/IEC 17020 are covered by the internal audit program within the accreditation reassessment cycle. The requirements to be covered shall be considered for all fields of inspection and for all premises where key activities are performed (see IAF/ILAC A5). (ILAC P15:06/2014)

b) The inspection body shall justify the choice of audit frequency for different types of requirements, fields of inspection and premises where key activities are performed. (ILAC P15:06/2014) The justification may be based on considerations such as:

- criticality;
- maturity;
- previous performance;
- organisational changes;
- procedural changes; and
- efficiency of the system for transfer of experience between different operational sites and between different fields of operation.

c) The internal audit procedure should be flexible enough to include unscheduled internal audits as well as planned audits and identify the conditions under which an unscheduled audit is appropriate.

Audits should be appropriate to the scale, activities and risks of the inspection body. As appropriate a sampling or risk-biased approach may be applied.

8.6.5

Competent externally contracted personnel may carry out internal audits.

Annex A: Independence Requirements

Annex A1 Requirements for inspection bodies (Type A)

Under bullet point d) reference is made to linkages to separate legal entities engaged in the design, manufacture, supply, installation, purchase, ownership, use or maintenance of the items inspected. Such linkages include common owners and common owners' appointees on boards or equivalent. These linkages are acceptable if persons involved do not have the possibility to influence the outcome of an inspection.

In particular there exists a possibility to influence the outcome of an inspection if the person has the ability to:

- influence the selection of inspectors for specific assignments or customers; or
- influence decisions on conformity in specific inspection assignments; or
- influence remuneration for individual inspectors; or
- influence remuneration for specific assignments or customers; or
- initiate the use of alternative work practices for specific assignments.

Annex A2 Requirements for inspection bodies (Type B)

A Type B inspection body may form part of a user organisation or a supplier organisation.

Annex A3 Requirements for inspection bodies (Type C)

Type C inspection bodies are distinct from Type B inspection bodies because they are not required to be a separate but identifiable part of the parent organisation. They may also offer their inspection services on the open market.

'Explicitly' is understood to mean 'clearly'. Often Australian regulations do not identify independence requirements for inspection activities. In situations where the same person may inspect and be asked to put right, make safe or oversee the rectification of any deficiencies that are identified, the client should be advised of and accept the proposed arrangements. The inspection body must have in place safeguards to protect against possible future charges of bias or over-servicing. Such safeguards could include photographic records, client acceptance of findings, retention of replacement items etc.

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 9000	<i>Quality management – Fundamentals and vocabulary</i>
ISO 9001	<i>Quality management systems - Requirements</i>
ISO 9004	<i>Quality management systems - Guidelines for performance improvement</i>
ISO/IEC 17000	<i>Conformity assessment -- Vocabulary and general principles</i>
ISO/IEC 17020	<i>Conformity assessment – Requirements for the operation of various types of bodies performing inspection</i>
ISO/IEC 17024	<i>Conformity assessment -- General requirements for bodies operating certification of persons</i>
ISO/IEC 17025	<i>General requirements for the competence of testing and calibration laboratories</i>
ISO Guide 34	<i>General requirements for the competence of reference materials producers</i>
SAA/SNZ HB 86	<i>A guide to the selection, care, calibration and checking of measuring instruments in industry</i> <i>1 General principles</i>

APLAC Documents

APLAC TC 006	<i>Guidance Notes on ISO/IEC 17020</i>
APLAC MR-001	<i>Procedures for establishing and maintaining the APLAC mutual recognition arrangement among accreditation bodies</i>

ILAC and IAF Documents

ILAC P10	<i>ILAC Policy on Traceability of Measurement Results</i>
ILAC P15	<i>Application of ISO/IEC 17020:2012 for the Accreditation of Inspection Bodies</i>
IAF GD 24	<i>Guidance on the Application of ISO/IEC 17024:2003</i>

NATA Documents

NATA Rules	
General Accreditation Criteria	<i>Metrological Traceability</i>

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

Amendment Table

The following amendments were made to this issue.

Section	Amendment
Entire Document	This document replaces the ISO/IEC 17020 Standard Application Document (excluding Appendix B and Appendix C). The document has been reviewed and updated to reflect the new accreditation criteria documentation structure.