

# **ACCREDITATION SCHEME FOR INSPECTION BODIES**

# **IB 01**ACCREDITATION PROCESS

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#### 1. The Scheme

- 1.1 The Accreditation Scheme for Inspection Bodies is one of the accreditation schemes of the **Singapore Accreditation Council (SAC)** which is managed by Enterprise Singapore. The said scheme will be referred to as "**IB Scheme**".
- 1.2 The primary objectives of the IB Scheme are as follows:
  - To operate the accreditation of inspection bodies in accordance to international criteria, such as ISO/IEC 17011, and requirements for mutual recognition arrangements.
  - b) To provide, by means of assessment, the assurance that the professional practice by accredited inspection bodies are in accordance to international standards and guidelines, such as ISO/IEC 17020.
  - c) To ensure that the accreditation processes are carried out with professionalism and integrity.
  - d) To strengthen and develop new accreditation fields to meet the needs of stakeholders.
  - e) To facilitate trade and market access by establishing and maintaining mutual recognition arrangements with overseas and regional / international bodies, such as the Asia Pacific Accreditation Cooperation (APAC) and the International Laboratory Accreditation Cooperation (ILAC).
- 1.3 The IB Scheme gives formal recognition to inspection bodies that have been independently assessed and found to comply with the criteria established by SAC. Accreditation is granted for specific inspection activities of an inspection body, and is not a blanket approval for its total operations.
- 1.4 SAC accredits inspection bodies which can demonstrate that they comply with the requirements of ISO/IEC 17020 and specific technical requirements that apply to various fields of inspection.
- 1.5 This document should be read in conjunction with SAC 01 Terms and Conditions for Accreditation, SAC 02 Rules for Use of SAC Marks and Mutual Recognition Arrangement (MRA) Marks, ISO/IEC 17020 and any specific requirements that may be published as Technical Notes relating to the inspection activities.

#### 2. Definitions

#### 2.1 Accreditation Criteria:

The set of requirements an inspection body must meet to be accredited under the IB Scheme. Such requirements are specified in the documents as stipulated in Annex 1.

# 2.2 Accredited Inspection Body:

An inspection body to which SAC Accreditation has been granted.

#### 2.3 Approved signatory:

A person recognised under the IB Scheme to sign accredited inspection reports / certificates issued by an accredited inspection body.

#### 2.4 Assessment:

Examination for competency and compliance with predetermined regulations and requirements by independent experts under SAC.

## 2.5 Assessor / Expert:

An individual who carries out some or all functions related to inspection body accreditation assessment under SAC.

#### 2.6 Branch Office:

A facility at a different location from the parent accredited inspection body established permanently with the same management system as parent accredited inspection body to perform inspections.

#### 2.7 Calibration:

The set of operations that establish, under specified conditions, the relationship between values of quantities indicated by a measuring instrument or measuring system, or values represented by a material measure or a reference material, and the corresponding values realised by standards.

### 2.8 Field of Inspection:

A broad sphere of science, engineering or technology used to describe a general area of inspection for classification purposes. In addition, for accreditation purposes, fields of inspection are subdivided into specific inspections, groups of inspections or product areas.

## 2.9 Inspection:

Examination of a product, process, service or installation or their design and determination of its conformity with specific requirements or, on the basis of professional judgement, with general requirements.

#### 2.10 Inspection Body:

Body that performs inspection.

#### 2.11 Management Representative:

A person nominated by an inspection body to represent it in all matters relating to SAC accreditation (see clause 5).

#### 2.12 Non-conformity:

Non-fulfilment of a requirement.

# 2.13 Critical Non-conformity:

A *critical* non-conformity which seriously threatens the credibility of the inspection body accreditation scheme. Gross lack of technical competence, persistent violation of SAC Terms & Conditions, gross lack of commitment of the organisation to quality or compliance with accreditation criteria and existence of serious doubt on the integrity and impartiality of the organisation. A management system breakdown, as indicated by a series of *significant* non-conformities which seriously threaten the quality of all activities under the system, warrants a *critical* non-conformity.

#### Note:

Gross lack of competence may arise from lack of competent staff for key activities, inappropriate environment for key activities, lack of critical equipment, lack of traceability, totally invalid test, calibration or inspection method, total breakdown of the record or documentation system, lack of or totally ineffective quality assurance procedures or other causes.

# 2.14 Significant Non-conformity:

A *significant* non-conformity has serious adverse effect on the validity of an activity, its results or the competence of the organisation or a violation of SAC Terms & Conditions for accreditation.

The existence of a serious doubt on the technical validity of an activity or its results, as indicated by a series of related *minor* non-conformities is a *significant* non-conformity. Furthermore, persistence of a *minor* non-conformity for an extended period of time and without any plausible explanation may be a violation of SAC Terms & Conditions for accreditation, warrants a *significant* non-conformity.

#### 2.15 Minor Non-conformity:

A minor non-conformity has no serious adverse effect on the validity of the activity, its results or the competence of the organisation.

#### Note:

Minor non-conformities have a tendency to grow into significant non-conformities if not addressed appropriately at the time.

### 2.16 Observation:

An assessment finding that does not warrant a non-conformity but is identified by the assessment team as an opportunity for improvement.

# 2.17 Proficiency Testing (PT):

PT is the determination of the testing performance of an inspection body against pre-established criteria by means of interlaboratory comparison.

#### 2.18 Interlaboratory comparison (ILC):

ILC is the organization, performance and evaluation of measurements or tests on the same or similar items by two or more inspection bodies in accordance with predetermined conditions.

2.19 SAC accredited inspection certificate or report:

A certificate or report that includes a statement by the inspection body that it is accredited for the inspection conducted and that the inspection has been performed in accordance with the terms and conditions for accreditation under SAC. It shall include the accreditation mark and the certificate number.

2.20 Schedule of Accreditation:

A schedule issued with the Certificate of Accreditation listing the specific inspections for which accreditation has been granted.

2.21 Surveillance:

Routine examination of an inspection body to evaluate its continued compliance with the IB Scheme's requirements, normally every 12-month period.

2.22 Suspension of Accreditation:

Process of temporarily making accreditation invalid, in full or in part of the terms of accreditation.

2.23 Terms of Accreditation:

The inspections and any functional tests for which an inspection body is accredited, including any qualifications such as inspection methods and standards.

2.24 Withdrawal of Accreditation:

Process of cancelling accreditation in full.

# 3. Organisation Structure

#### 3.1 Council Committee for Inspection

- 3.1.1 The Council Committee for Inspection (CCI) is a specialist committee appointed by the SAC Council. The CCI is responsible for the formulation of policies, provides guidance and oversees the operation of the Accreditation Scheme for Inspection Bodies.
- 3.1.2 The CCI is appointed under the SAC Council to review, evaluate and approve assessment reports for accreditation of inspection bodies through its Review Committees. The CCI may also co-opt individuals with relevant technical or management expertise as advisors for the review of assessment reports.
- 3.1.3 The term of office for members of the CCI is three years with provision for reappointment.

#### 3.2 Technical Committees

- 3.2.1 Technical Committees are established for each field or area of inspection activities which SAC offers accreditation.
- 3.2.2 Technical Committee members are appointed on the basis of the members' knowledge and expertise in respective technical field or area. The Technical Committees are to recommend detailed technical criteria in their respective fields of inspection and to review, evaluate and approve each assessment reports, on a selected member basis.
- 3.2.3 The term of office for members of the Technical Committee is three years with provision for reappointment.

# 3.3 Technical Assessors / Experts

- 3.3.1 Each Technical Committee maintains a panel of technical assessors / experts who are appointed from the ranks of government departments, academic and professional institutions, and industry practitioners. The technical assessors / experts are chosen on the basis of their professional knowledge and expertise in a particular area of inspection and their ability to examine and evaluate an inspection body's standard of management and practices.
- 3.3.2 The appointed assessors conduct assessments of applicants and accredited inspection bodies based on the criteria established under the IB Scheme.
- 3.3.3 The assessment team submits an assessment report to the Review Committee under the CCI for approval after the assessment.

#### 4. Accreditation Process

#### 4.1 Introduction

- 4.1.1 Enquiries regarding the IB Scheme can be made at the **Singapore** Accreditation Council.
- 4.1.2 Inspection bodies interested to be accredited may obtain the relevant documents (except ISO/IEC standards) from the SAC website. An online application can be made via the SACiNet. For new programmes where online application is not yet available in the SACiNet, the application form can be downloaded from the SAC website.
- 4.1.3 Inspection body is advised to study in detail the SAC Terms and Conditions to ensure that it can substantially meet the accreditation criteria before it lodges an application for accreditation.
- 4.1.4 The management system of the inspection body shall be operational for at least two months before SAC carries out an assessment of the inspection body.

# 4.2 Application

- 4.2.1 All applications shall be submitted in SACiNet and be supported with documents containing sufficient information regarding its staff, management system, equipment, calibration, inspection methods, or other information necessary or requested by SAC from time to time for the assessment of the inspection body.
- 4.2.2 The applicant shall nominate a management representative to liaise with SAC on all matters relating to accreditation and the applicant shall update any change in the representative in SACiNet.

## 4.3 Preliminary Assessment

- 4.3.1 Upon receipt of a duly completed application form in SACiNet and satisfactory supporting documents relating to its management system, equipment, calibration and inspection body practices, SAC will arrange for a preliminary assessment if it is requested by the applicant.
- 4.3.2 SAC makes recommendations to the applicant on nonconformities noted and upon full rectification of the nonconformities, may recommend the inspection body to proceed with the initial assessment.

#### 4.4 Initial Assessment

- 4.4.1 This is an on-site evaluation of the applicant to determine whether it conforms with the accreditation criteria before an accreditation is awarded.
- 4.4.2 SAC will appoint an appropriate assessment team comprising of a Team Leader and Technical Assessor(s) / Expert(s) to assess the applied scope for accreditation.
- 4.4.3 The applicant shall use the most current inspection methods for its terms of accreditation unless otherwise stated in pre-agreed contractual agreements.
- 4.4.4 The applicant shall make available personnel such as management representative, key technical staff and inspectors who are nominated as approved signatories of the inspection body for interview during the assessment.
- 4.4.5 The applicant shall conduct or demonstrate the various inspection activities applied for accreditation or participate in Proficiency Testing activities where such activities are available and appropriate.
- 4.4.6 The assessment shall take place at the premises of the inspection body and on a representative sample of inspection sites as recommended by the assessment team.
- 4.4.7 The applicant shall be advised on the assessment findings which include comments on competence and conformity. During the assessment, non-conformities are categorised as "Critical", "Significant" or "Minor". The

- management representative should ensure that the non-conformities and observations raised are fully understood and acknowledged.
- 4.4.8 The applicant with "critical non-conformities" will not be granted accreditation. However, the applicant may request to be re-assessed after rectification of the critical non-conformities.
- 4.4.9 The applicant with "significant" and "minor" non-conformities", is given 1 month to submit the corrective action.
- 4.4.10 As part of the corrective action, the applicant shall submit the relevant evidences and a form that captures information on investigation and root cause analysis (e.g. Corrective / Preventive Action Report or Corrective Action Report) in SACiNet.
- 4.4.11 Once the applicant has taken the necessary corrective actions, the assessment team shall review the corrective actions in SACiNet and if necessary, conduct a verification visit to verify the actions taken.
- 4.4.12 A Review Committee (comprising of appropriate members from the Council Committee for Inspection and members from the relevant Technical Committee) reviews, evaluates and approves the assessment report.
- 4.4.13 Appropriate technical experts may be co-opted by the Review Committee in its evaluation of the assessment reports.

#### 4.5 Award of Accreditation

- 4.5.1 The CCI grants accreditation to the applicant upon being satisfied that the inspection body meets the criteria for accreditation.
- 4.5.2 All decisions of the CCI on the granting, extension, reduction, renewal, suspension or withdrawal of accreditation shall, unless expressly provided herein, be final and not called into question by the inspection body.
- 4.5.3 A Certificate of Accreditation will be issued to the accredited inspection body together with a Schedule giving details of its terms of accreditation. Inspection body may request for an additional certificate and a nominal fee will be charged (please refer to IB 02). The Certificate of Accreditation is valid for a period of four years with provision for renewal on expiry.
- 4.5.4 The accredited inspection body shall pay SAC an annual fee and other assessment and administrative fees as determined by SAC from time to time.
- 4.5.5 All accredited inspection bodies will be listed in the SAC website.

## 4.6 Routine Surveillance and Renewal Assessment

4.6.1 SAC shall conduct surveillance assessments on accredited inspection bodies to ensure that the standard of practice complying with criteria is maintained. A

- surveillance assessment shall be conducted normally once every twelve months.
- 4.6.2 A renewal assessment shall be conducted prior to the expiry of the Certificate of Accreditation. The Certificate shall be renewed on the condition that the accredited inspection body has been found to have maintained the necessary standard of practice during the validity of the Certificate and is capable of maintaining the standard established.
- 4.6.3 The inspection bodies may request for an extension or reduction in the scope of accreditation for consideration during the surveillance and renewal assessment. For such requests, the inspection bodies shall indicate in SACiNet and upload the supporting documents at least 1 month prior to the date of assessment.
- 4.6.4 The inspection body will be advised on the assessment findings which include comments on competence and conformity. During the assessment, non-conformities are categorised as "Critical", "Significant" or "Minor". The management representative shall ensure that the non-conformities and observations raised are fully understood and acknowledged.
- 4.6.5 The inspection body with "critical non-conformities" may have the inspection body's scope of accreditation suspended or withdrawn. The inspection body is given one week to submit a corrective action plan for critical non-conformities which includes the investigation made, specific actions to be taken, the timelines for completion of corrective actions. Once the assessment team is satisfied with the corrective action plan, the corrective actions shall be completed 1 month from the last day of assessment.
- 4.6.6 The inspection body with "significant non-conformities" and "minor non-conformities" is given 1 month to submit the corrective actions.
- 4.6.7 As part of the corrective action, the applicant shall submit the relevant evidences and a form that captures information on investigation and root cause analysis (e.g. Corrective / Preventive Action Report or Corrective Action Report) in SACiNet.
- 4.6.8 Once the inspection body has taken the necessary corrective actions, the assessment team shall review the corrective actions and if necessary, conduct a verification visit to verify the actions taken.
- 4.7.1 The non-routine assessments will include visits made to consider requests for extension in the terms of accreditation or in signatory approvals, or to investigate complaints made against the accredited inspection bodies on areas within the scope of SAC accreditation, if these could not be conducted during the routine surveillance visits.
- 4.7.2 Unannounced assessments are conducted for special reasons such as to investigate a complaint against an inspection body. SAC reserves the right to conduct unannounced visits when the need arises.

4.7.3 SAC may conduct non-routine assessment for reinstatement of accreditation for inspection body whose accreditation has been suspended or inoperative due to various reasons such as change of premises or loss of all signatories or key personnel.

# 5. Management Representative

- 5.1 The management representative of an inspection body shall be a full-time staff / permanent employee and will be the contact liaison with SAC.
- 5.2 The management representative shall understand the workings of the inspection body well and shall be able to make decisions on accreditation matters on behalf of the inspection body.

# 6. Approved signatories

- 6.1 The nominees for signatory approval shall be competent to make a critical evaluation of inspection results and be a staff occupying a position in the organisational structure which is responsible for the adequacy of results.
- 6.2 The status of approved signatory shall be granted only to person(s) nominated by the inspection body.
- 6.3 The status of approved signatory may be granted to a nominee for specific inspections which the inspection body is accredited.
- 6.4 As the status of approved signatory is granted in the context of the inspections being performed in a particular inspection body, it shall not be considered as a personal qualification.
- 6.5 The nominees for signatory approval shall be thoroughly conversant with SAC Terms and Conditions together with other relevant criteria for accreditation.
- The nominee for signatory approval should have worked in the organisation for more than 12 months and have the relevant qualification and experience in the related field. For works that are regulated by authority, the nominee shall be qualified by the relevant authority, where applicable.
- 6.7 No approval will be granted to a nominee without being interviewed by the assessment team. If the nominee for signatory approval is not present in the assessment, a separate visit or interview is required.
- In addition to the interview, the nominee, at the discretion of the assessment team, may be required to perform a demonstration of inspection. The nominee is also required to complete a pre-assessment quiz prior to the onsite assessment.

The approved signatory shall ensure the reliability and completeness of inspection reports for which responsibility is taken on behalf of the accredited inspection body concerned.

- All approved signatories are subjected to review during assessment. It is the responsibility of the accredited inspection body to ensure that existing approved signatories are present when their areas are being assessed. Otherwise their signatory approval may be withdrawn, or a separate visit or interview may be required.
- 6.10 The scope of accreditation will be reduced or the status of accreditation will be suspended if there is no approved signatory for specific inspections or all inspections for which the inspection body is accredited.

# 7. Proficiency Testing

- 7.1 Proficiency testing is one of the elements by which inspection bodies can demonstrate technical competency, where such activities are available and appropriate.
- 7.2 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 (refer to PROF 001) or when required by law or by regulators.

#### 8. Branch Offices

- 8.1 An accredited inspection body shall not issue SAC accredited reports for inspections conducted by its branch office unless accreditation has been extended to cover the work performed by the branch office.
- 8.2 If an accredited inspection body wishes to seek accreditation for its branch office, it shall apply formally to SAC through SACiNet to request for an extension of the accreditation to the branch office.
- 8.3 SAC may consider on a case to case basis the accreditation of overseas branch office with Headquarters (HQ) in Singapore, if they meet the following criteria:
  - The HQ oversees and controls the management system and its implementation in the branch office; and
  - The branch office must operate to the same management system and technical procedures as the HQ.

#### 9. Safety

9.1 Safe working conditions are essential to good inspection practice and management. The inspection body shall observe all necessary safety precautions to ensure that its inspections are performed in safe working environment.

- 9.2 SAC will not arrange for on-site assessment if it considers the inspection premises to be unsafe.
- 9.3 It is the inspection body's responsibility to comply with relevant health and safety requirements.

#### Annex 1

# **Listing of Accreditation Criteria Documents**

An inspection body seeking IB Scheme accreditation has to meet the requirements set out in the following documents:

1.	ISO/IEC 17020	-	Conformity Assessment - Requirements for the operation of various types of bodies performing inspection
2.	ILAC P15	-	Application of ISO/IEC 17020:2012 for the Accreditation of Inspection Bodies
3.	SAC 01	-	Terms and Conditions for Accreditation
4.	SAC 02	-	Rules for Use of SAC Marks and Mutual Recognition Arrangement (MRA) Marks
5.	IB 01	-	Accreditation Process
6.	PROF 001	-	Policies on Proficiency Testing
7.	SAC-SINGLAS 006	-	Traceability of Measurement

8. Field Specific Technical Notes which amplify and interpret technical requirements of ISO/IEC 17020 for the specific area of inspection activities (Available in the SAC Website).