



**MOSTI**

**STANDARDS**  
MALAYSIA

**SKIM AKREDITASI MAKMAL MALAYSIA (SAMM)**  
*LABORATORY ACCREDITATION SCHEME OF MALAYSIA*

**SPECIFIC TECHNICAL REQUIREMENTS 1.9**  
**(STR 1.9)**

**SPECIFIC TECHNICAL REQUIREMENTS FOR**  
**ACCREDITATION OF**  
**DOCUMENT EXAMINATION FOR FORENSIC**  
**SCIENCE TESTING LABORATORIES**

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(Supplementary to MS ISO/IEC 17025)



**MS ISO/IEC 17025**

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## **1 Introduction and scope**

The purpose of this document is to describe specific technical requirements for accreditation of questioned document examination for forensic science testing laboratories on the following scopes:

- i) Handwriting and signature
- ii) Alterations including but not limited to obliterations, additions, overwritings or erasures.
- iii) Indentations
- iv) Security features
- v) Ink, paper, printing and photocopy processes and materials
- vi) Seals and stamped impressions
- vii) Other examinations related to questioned document

This document shall be read in conjunction with the MS ISO/IEC 17025:2005 standard, SAMM Specific Criteria 1.1 and the related SAMM Policy requirements. The clause numbers in this document correspond to those in the standard.

## **2 Normative references**

- i) MS ISO/IEC 17025:2005 – General Requirements for the Competence of Testing and Calibration Laboratories.
- ii) Specific Criteria 1.1 (SC 1.1) – Specific Criteria for Accreditation of Forensic Science Testing.

## **3 Terms and definitions**

- 3.1 Questioned document - Printed, typed or written material for the purpose of identifying the source, determining alterations or other means of gaining information about the item or the circumstances surrounding its production.

- 3.2 Specimen – A group of items, test results or portions of material, taken from a large collection of items or portions of material, which serves to provide information that may be used as a basis for making a decision concerning a questioned document.
- 3.3 Collected specimen – Specimen taken from personal or business files for the purpose of forensic examination
- 3.4 Requested specimen – Specimen prepared specifically for the purpose of forensic examination.
- 3.5 Exhibit – Questioned or specimen item submitted for the purpose of forensic examination.
- 3.6 Examiner – An individual who performs casework related duties on exhibits or items of evidence within the laboratory and issues reports containing opinions or interpretations concerning the findings and observations resulting from the work.
- 3.7 Technical support personnel – A person who assists in carrying out casework related duties within the laboratory under the supervision of an examiner.
- 3.8 Chain of custody – Procedures and documents that account for the possession of an exhibit by tracking its handling and storage from its point of collection to its point of disposition.
- 3.9 Administrative review – is an evaluation of the report and supporting documentation for consistency with the laboratory policies and for editorial correctness.

3.10 Technical review is an evaluation of reports, notes, data and other documents to ensure an appropriate and sufficient basis for the scientific conclusions. This review is conducted by a second qualified individual.

#### **4 Management requirements**

As in the MS ISO/IEC 17025:2005 and SC 1.1.

#### **5 Technical requirements**

**5.1** The laboratory shall have sufficient personnel with the necessary educational qualification, training, technical knowledge and experience where relevant for the assigned functions.

#### **5.2 Personnel**

5.2.1 The examiner shall:

- i) posses a Bachelor's degree in Science, Forensic Science or higher qualification in Physics, Chemistry or related fields.
- ii) have a minimum of one year working experience in questioned document examination.
- iii) before being assigned or lead a case, have passed a competency test in the relevant area of questioned document examination.
- iv) successfully complete an external or /internal proficiency test at least once a year in the area of questioned document cases(s) he/she is reporting.

5.2.2 The examiner may be assisted by technical support personnel who shall :

- i) have a minimum qualification of Malaysia Certificate of Education or equivalent with relevant practical training.
- ii) have passed a competent test in the area of work he/she is involved in.
- iii) have successfully completed an external or internal proficiency test, at least once a year.

5.2.3 The laboratory shall have a documented training program that will be used to train personnel in the knowledge, skills and abilities needed to perform the necessary casework related duties. The training shall also cover presentation of evidence in court for the examiner.

5.2.4 The laboratory shall have written procedures to monitor and review court testimony of each examiner.

### **5.3 Accommodation and environmental conditions**

The laboratory shall establish procedures and maintain appropriate practices to ensure safe and healthy working environment.

### **5.4 Test methods and method validation**

5.4.1 Wherever possible, original copy of the questioned document shall be submitted for examination.

5.4.2 Any questioned document submitted for examination shall be accompanied by collected and/or requested specimen(s) that should be contemporary or as close as possible to the date of the questioned document.

5.4.3 The laboratory shall maintain all documentation generated by examiners related to case examined .

5.4.4 The laboratory shall have written procedures for taking and maintaining case notes and shall maintain all documentation generated by the examiner related to each case examined.

5.4.5 Indentation examination shall be conducted prior to any chemical processing on the questioned document(s).

5.4.6 When multiple examinations are required on questioned document, non-destructive examination procedures or technique(s) shall be performed first.

5.4.7 Destructive examination on questioned documents

- i) Destructive examination techniques should be performed only after non-destructive methods available within the laboratory have been exhausted.
- ii) The examiner shall determine the need for any destructive examination to be carried out on any questioned document. Consultation with the submitting authority is advisable prior to destructive testing.
- iii) Before a questioned document is subjected to any destructive examination, a duplication including but not limited to photocopy, of the questioned document shall be made for reference.

## **5.5 Equipment**

The laboratory shall establish procedures and maintain appropriate practices for proper and safe handling, use and planned maintenance of the equipment to ensure proper functioning.

## **5.6 Measurement traceability**

As in the MS ISO/IEC 17025:2005 and SC 1.1

## **5.7 Sampling**

- 5.7.1 For handwriting/signature examinations, the laboratory shall ensure that collected and/or requested specimens are submitted together with the questioned document.
- 5.7.2 For the examination of alterations to a document, printing processes or decipherment of indented impressions of handwritings/signatures, the original document(s) shall be submitted.
- 5.7.3 For the examination of forgery on questioned documents, specimens of the official document/seal/stamp impression, where applicable, shall be provided for examination.
- 5.7.4 If the examination involves the analysis of ink and paper, specimens of the ink and paper shall also be submitted with the questioned document.

## **5.8 Handling of test items**

- 5.8.1 Any marking or labeling required for identification of the questioned document shall not be made on the questioned portion of the document.
- 5.8.2 The laboratory shall ensure that all exhibits or items of evidence under its custody is properly secured and protected from loss, damage or mix-up. A record of the chain of custody for all evidence from the time of its acceptance until its proper disposition shall be maintained by the laboratory.

## **5.9 Assuring the quality of test results**

All test results shall be subjected to a technical review.



## **5.10 Reporting the results**

5.10.1 The laboratory report shall where applicable include but not limited to the following information:

- (i) case reference number
- (ii) date of issue
- (iii) description of exhibit received and examined
- (iv) additional marking or labeling introduced by the examiner (if any)
- (v) disposition of exhibit
- (vi) method and instrumentation used
- (vii) any specimen used
- (viii) results of examination
- (ix) conclusion or opinion of the examiner on the case
- (x) name, function and signature of the examiner

5.10.2 All reports shall accurately reflect the questioned document examiner's findings in the examinations.

5.10.3 The basis and reasons for the conclusion(s) and opinion(s) shall, where applicable, be included in the report.

5.10.4 All case reports shall be subjected to administrative and technical reviews.

5.10.5 The laboratory shall record information related to the release of the case report and exhibit(s).

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