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LAB 201

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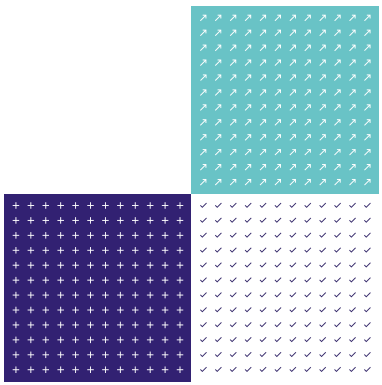
Accreditation of bodies carrying out forensic testing on site



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Changes since last edition

Updated to reflect the change from the Forensic Science Regulator's Codes of Practice and Conduct to the Forensic Science Regulator Code of Practice.

1. Introduction

1.1 UKAS has utilised both ISO/IEC 17020 *Conformity assessment - Requirements for the various types of bodies performing inspection* and ISO/IEC 17025 *General requirements for the competence of testing and calibration laboratories* within the forensic sector to assess and accredit scene of crime examination and testing conducted in laboratories respectively.

1.2 When scene of crime examination is conducted, even if this includes an element of testing at the scene, ISO/IEC 17020 has been used for the assessment and accreditation of these activities. However, where the activity conducted away from the laboratory is primarily a testing activity the use of ISO/IEC 17025 becomes the more appropriate standard.

1.3 UKAS publications, which are available at www.ukas.com, provide some additional interpretation on the application of the requirements of ISO/IEC 17025 and ISO/IEC 17020. Within the forensic sector UKAS Publication RG 201 *Accreditation of Bodies Carrying out Scene of Crime Examination* is relevant for forensic units that undertake examination of scene of crime and are to be accredited to ISO/IEC 17020. This UKAS publication LAB 201 *Accreditation of bodies carrying out forensic testing on-site* is relevant for forensic units that undertake forensic testing on-site and are to be accredited to ISO/IEC 17025.

1.4 LAB 201 shall be used for the assessment of forensic units who carry out testing on-site, for example, at a scene of crime, a police station or mobile laboratory, and who will be providing results into the Criminal Justice System.

1.5 LAB 201 does not cover all the requirements of ISO/IEC 17025, which remains the authoritative document, and consequently it should be read in conjunction with ISO/IEC 17025, and ILAC-G19 *Modules in a Forensic Science Process*.

1.6 The term ‘forensic unit’ is used in this document to describe the legal entity or a defined part of a legal entity that performs the activity of forensic testing on-site and that will be accredited to ISO/IEC 17025.

1.7 The assessment of a forensic unit carrying out forensic testing on-site shall utilise some or all of the following techniques:

- Witnessing of testing at a live site
- Witnessing of testing at a mock-up site
- Review of completed casework
- Interviewing of staff

2. Testing services

2.1 Forensic testing activity, for example, fingerprint enhancement and recovery, extraction of data from digital devices, can be conducted at a variety of on-site locations away from the permanent laboratory, for example, police stations, commercial premises, crime scenes, mobile laboratories.

2.2 UKAS will review all applications for accreditation and determine, in discussion with the applicant body, which tests, and types of locations are relevant and how these will be reflected on the schedule of accreditation.

2.3 The UKAS accreditation schedule will state the scope of activity for which the organisation has demonstrated competence and for which accreditation is granted. This scope will indicate the type of location that the forensic unit has gained accreditation for testing, for example, at major crime scenes, police premises, commercial premises (for example for the recovery of CCTV footage), mobile laboratories, and additionally the specific evidence types related to those type of sites.

2.4 For an organisation covering more than one aspect of the forensic process the management system can cover all normative requirements without the need for additional systems for each aspect. For example, an organisation can have one single management system meeting the requirements of both ISO/IEC 17025 and ISO/IEC 17020.

2.5 Laboratories that already hold UKAS accreditation to ISO/IEC 17025 for the laboratory analysis of forensic items, may apply to extend their scope to include undertaking forensic testing on-site through the provision of an AC4 application form.

3. Using this publication

3.1 The format of this publication has been aligned with ISO/IEC 17025:2017, and consequently the following main clauses correspond to those of the standard.

3.2 However, the sub-clauses do not necessarily follow the numbering within ISO/IEC 17025:2017 and therefore the detail within the sub-clauses in this publication does not always relate directly back to the same sub-clause in the standard.

3.3 Where no specific additional guidance has been identified for a clause, this has been indicated in this publication.

4. General requirements

4.1 Impartiality

4.1.1 Forensic units shall identify any risks to their impartiality on an on-going basis, for example, through the use of a risk register and through the review of conflicts of interest associated with requested on site work.

4.1.2 The importance of the demonstration of impartiality is particularly significant where the forensic unit is within the same organisation as the investigative unit, or where the forensic unit has a number of different customers.

4.1.3 Some examples of mechanisms that can be used to demonstrate impartiality are: the use of case assessment and strategy (with regular review), consideration of alternative hypotheses, organisational structures and reporting lines, the implementation of a Code of Conduct (for example, as detailed in the Forensic Science Regulator Code of Practice).

4.2 Confidentiality

4.2.1 The forensic unit shall ensure that staff are aware of the potential threats to confidentiality and what action to take to preserve confidentiality, particularly whilst working on-site. This could be documented in an on-site attendance policy. This policy should emphasise that the gathering of information relevant to the testing activity is to be encouraged, however, the dissemination of information shall be restricted only to those with prior agreed and legitimate access to the information. Guidance shall be given to staff with respect to aspects such as the potential for conversations to be overheard, the information that could be inadvertently gained from the viewing of exhibits / labels, how to deal with media interest and members of the general public.

4.2.2 Policies and procedures shall include requirements associated with the use of electronic devices e.g. mobile phones, laptops, removable media e.g. memory cards etc. where these are used in relation to on-site testing.

4.2.3 These requirements also relate to any sub-contractors.

5. Structural requirements

5.1 The forensic unit shall be clearly defined, particularly if it is part of a larger organisation or if the staff have multi-functional roles within the organisation. This could be through an organisational chart and associated role descriptions.

5.2 The forensic unit shall define and document the range of activities that it can undertake on-site, and detail which of those activities are included within their scope of accreditation.

6. Resource requirements

6.1 Personnel

6.1.1 The competence of staff shall be documented such that their competence to undertake different testing activities is clear, for example, specific fingerprint enhancement techniques, use of specific digital extraction techniques / tools etc. and whether this competence relates to laboratory or on-site testing. The documentation shall also identify any specific equipment and the competence to use it on-site, which may include aspects / functionality not normally utilised in the laboratory environment.

6.1.2 The forensic unit shall have a clearly defined set of criteria for the demonstration of initial competence of staff to conduct testing on-site which may include, but not be limited to, theoretical tests, testing at mock-up sites, interviews. The assessment of initial competence shall include some material of known outcome (ground truth).

6.1.3 The forensic unit shall have a clearly defined policy and process for the demonstration of the on-going competence of staff to conduct testing on-site which should include, but not be limited to, review of completed case records, witness of testing conducted at mock-up sites, witness of testing at live sites, monitoring of performance figures, maintenance of case logs.

6.1.4 The forensic unit should demonstrate how it ensures that staff are kept up to date with developments in practices and technology relevant to the on-site testing service.

6.1.5 Where appropriate, evidence from the laboratory-based competence evaluation system may be used in support of competence to conduct testing on-site but does not replace the need to evaluate competence on-site.

6.1.6 The requirement to act impartially may be included in a Code of Conduct. A suitable Code of Conduct can be found in the Forensic Science Regulator Code of Practice. However, emphasis of the

additional considerations when conducting testing on-site should be made to relevant staff, for example, the potential for the receipt of information that could lead to cognitive bias.

6.1.7 The forensic unit shall determine the appropriate level of vetting / clearance required by their customers and ensure that staff demonstrably meet those requirements.

6.2 Facilities and environmental conditions

6.2.1 Where the forensic unit conducts testing at sites and facilities outside of its permanent control, it shall ensure that relevant requirements relating to facilities and environmental conditions are met such that these do not adversely affect the validity of the activity undertaken, or the output. For example, an assessment of each individual site should be undertaken and recorded to ensure that suitable anti-contamination measures are in place given the circumstances of the case.

6.2.2 The suitability of any facilities used for conducting testing on-site shall be determined prior to commencement of any work, and this shall be documented. The review of the suitability shall consider the security of any facilities used to ensure that unauthorised personnel would not have access to items, records, equipment, and consumables.

6.2.3 A dynamic ongoing review of facilities may be required and when circumstances change such that the testing can be impacted, this shall be documented.

6.3 Equipment

6.3.1 Procedures shall be documented for the use of equipment on-site e.g. light sources, ESLA, cameras, reagents, test kits; these may be based on those for use in the laboratory but shall include any additional functionality or manner of use relating to on-site testing.

6.3.2 Any reagents or test kits used for on-site testing shall be demonstrated as fit for purpose through initial validation and periodic on-going verification. Information of shelf life, storage conditions and, where relevant, preparation information shall be available for all reagents, and where possible included on the label.

6.3.3 The forensic unit shall undertake and document a risk assessment of the issues surrounding potential contamination of equipment. This should include a consideration of the required cleaning regime and subsequent monitoring system to demonstrate the effectiveness of the cleaning performed.

6.3.4 Where vehicles are used as part of the on-site testing service e.g. for transport of equipment, consumables, samples, exhibits etc. they should be treated as equipment and should therefore have appropriate records demonstrating fitness for purpose.

6.3.5 An equipment list should be available for vehicles and on-site kit bags which includes all equipment necessary for attendance on-site. In addition, the levels of consumables should be monitored to ensure suitable stock is available.

6.3.6 A documented schedule for the checking of relevant equipment shall be defined to demonstrate continuing fitness for purpose.

6.3.7 The suitability of consumables and packaging shall be demonstrated, for example, through initial commissioning and periodic on-going testing.

6.3.8 Policies surrounding the use of electronic recording devices, for example, laptops, voice recorders, mobile phones, cameras, shall be documented including, for example, security, access, contamination avoidance, maintenance etc.

6.4 Metrological traceability

6.4.1 No specific guidance to this clause.

6.5 Externally provided products and services

6.5.1 Whilst products and services may have been deemed suitable for use in the permanent laboratory, their suitability for use on-site shall be evaluated, for example, cleaning materials, packaging, swabs, PPE etc. This determination of suitability shall be through definitions of specifications, acceptance criteria, initial commissioning and on-going evaluation.

7. Process requirements

7.1 Review of requests, tenders and contracts

7.1.1 The precise scope of activity that the on-site testing service is able to provide shall be detailed in a contract, Service Level Agreement or other formal agreement with the customer. If any of the services offered by the forensic unit are not covered by UKAS accreditation, then this shall be made clear to the customer.

7.1.2 Procedures for the review of requests for services should indicate the different levels where this review is undertaken and detail the specific authorities required and records that should be maintained. For example, the overarching contract or Service Level Agreement, ad hoc requests, and specific individual on-site requirements.

7.2 Selection, verification and validation of methods

7.2.1 The forensic unit shall validate any techniques that it uses on-site to demonstrate fitness for purpose. Where the validation of techniques has previously been conducted in a laboratory environment further validation shall be undertaken of the additional aspects that may impact on the tests e.g. temperature, humidity, surfaces, cross reactivity, lighting etc. In addition, if the method used on site has been adapted to remove checking / assurance mechanisms the impact of this should be evaluated, for example, absence of peer checking / dip checking at the time of test or repeat examination within digital forensic activity using multiple tools.

7.2.2 The forensic unit shall also have collated data to demonstrate the suitability of the whole process of on-site testing including site evaluation, strategy setting, sampling, sequential processes, and record keeping. This shall include circumstances with a known outcome, for example, the repeated examination by different staff of a mock-up site, interviews / discussions of generated scenarios with staff.

7.2.3 Validation data shall be reviewed and, if necessary, updated if there have been any significant changes relating to the method.

7.2.4 Technical procedures shall be available to examiners whilst on-site, either in electronic format or hard copy.

7.2.5 The detail required in methods and technical procedures shall be sufficient to ensure consistent application.

7.2.6 An appropriate on-site testing strategy shall be documented based on the request from the customer and considering additional aspects, for example, other testing / examination required (which may be conducted by a different forensic unit), other activities being conducted at the site and the potential

for contamination. In some instances, this may be a generic strategy that can be referenced in the on-site attendance records. However, even in these circumstances a review of the appropriateness of a generic strategy should be made. Where the site does not meet the requirements of this generic strategy a more detailed specific strategy shall be recorded. Any changes to the strategy that occur during the on-site testing activity, for example, as a result of an additional or alternative request from the customer, shall be indicated in the records. Confirmation that the on-site testing has been completed in accordance with the documented strategy, and hence the customer expectations, should be recorded prior to departing the site.

7.3 Sampling

7.3.1 Where sampling is undertaken as part of the on-site testing, for example, the testing of drugs, the forensic unit shall have an appropriate method in place to define the selection of samples, the sampling plan, and the sampling process. Appropriate records shall be maintained of any sampling performed.

7.4 Handling of test or calibration items

7.4.1 The requirements for labelling of items shall be documented in a procedure and agreed between all relevant parties involved, for example, to include requirements for the recovery and labelling of exhibits and sub-exhibits.

7.4.2 Records shall be available documenting a chain of continuity for items, for example, who has responsibility for each item, and its location, whilst in the care of the forensic unit. In addition, these records shall indicate if / when the item leaves the forensic unit's responsibility, for example, if items are handed over to police force exhibits officers, subcontractors, or forensic providers.

7.4.3 If the forensic unit is responsible for the transportation of items back to the laboratory / storage facility, they shall have procedures that ensure the integrity and continuity of the items. The procedures shall prevent contamination and minimise any deterioration of the items. If the forensic unit are handing the items over to another unit / organisation for transportation / storage, they shall make them aware of any requirements with respect to the issues indicated above.

7.4.4 The packaging used on-site shall be appropriate and, where relevant, agreed with the customer. Any deviation with respect to this shall be noted, along with the reason for the departure.

7.4.5 Items should be sealed at the point of seizure, if this is not done the reason shall be documented. In any case the integrity of the item and other related items shall be ensured. Any issues with faulty or damaged packaging / seals should be recorded.

7.4.6 The assessment of potential contamination should also include the possibility of cross contamination between items and sites. Policies and procedures shall be documented relating to, for example, segregation of items relating to suspect / victim, and trace evidence / primary sources.

7.4.7 If items are to be temporarily stored e.g. in vehicles, then the suitability of the store should be assessed to ensure that the integrity and security of the item is not compromised.

7.5 Technical records

7.5.1 The detail of the records of the on-site testing shall be sufficient that in the absence of the examiner another competent examiner could evaluate / determine what has been undertaken whilst on-site, including the strategy, the anti-contamination measures adopted, the activities undertaken, and the items recovered.

7.5.2 The on-site records shall clearly describe what information relating to the case scenario has been received prior to attendance on-site and which has been obtained whilst on-site, and the source of this information.

7.5.3 All records, such as observations, tests and outcomes, shall be completed at the time they are made and any deviation from this, for example, to complete activities prior to the effects of adverse weather shall be completed as soon as possible afterwards.

7.6 Evaluation of measurement uncertainty

7.6.1 The measurement uncertainty associated with testing activities conducted on-site shall be evaluated, this may differ from that previously evaluated for the same activity conducted in the laboratory due to additional environmental factors.

7.7 Ensuring the validity of results

7.7.1 Procedures for the monitoring of the validity of results shall include testing conducted on-site, for example, through appropriate use of quality control materials, review of records and reports for on-site testing. The forensic unit shall review the type and level of monitoring of on-site activity compared to that in place for laboratory-based activity to ensure appropriate levels of assurance of the results remain, for example, an increased level of the review of records that have been made on site where contemporaneous peer checks on test activity have been reduced. Where possible, programmes for proficiency testing / interlaboratory comparison should include testing conducted on-site, for example, digital data extraction, fingerprint enhancement.

7.8 Reporting of results

7.8.1 Due to legal requirements, forensic units may not be able to include all of the items in their reports to customers that are detailed in ISO/IEC 17025. Therefore, in these circumstances forensic units may elect to adopt one or more of the following means of meeting these requirements:

- the preparation of reports which include all of the information required by ISO/IEC 17025
- the preparation of an annex to the report that includes any additional information required by ISO/IEC 17025
- ensuring that the case records relating to a specific site contains all the relevant information required by ISO/IEC 17025

7.8.2 Reports shall clearly indicate the location of the performance of the testing activity.

7.8.3 Copies of any reports provided to customers shall be maintained, including any handwritten / interim reports left with customers on-site. Records shall be maintained of any verbal reports given to customers.

7.8.4 If provisional reports, including verbal reports, are provided to customers, for example those which have yet to undergo the required peer review, then these shall clearly indicate this status and include appropriate caveats regarding the nature of the report and the reliability of the information.

7.8.5 It is a requirement of ISO/IEC 17025 that results are reported to the customer accurately, clearly and unambiguously. Simplified reports may be provided if agreed with the customer, however, it is important that the extent of the simplification does not itself lead to ambiguity in reporting.

7.8.6 Records of on-site testing, including any provisional reports given, shall still be generated and maintained even if no further action is requested from the customer.

7.8.7 The forensic unit should document a policy and process for the peer / supervisory review of reports. The frequency of these reviews may consider aspects such as the type of on-site testing conducted,

for example, examination conducted in isolation at a police station versus integration of a testing activity into a broader scene examination strategy and experience of the examiner.

7.8.8 The effectiveness of the peer review process should be periodically assessed to ensure it remains adequate. This assessment should include trend analysis of any issues identified during reviews and customer feedback etc.

7.9 Complaints

7.9.1 The documented procedures for dealing with feedback shall ensure that all feedback relevant to the on-site testing service is appropriately managed and therefore should link with any corporate systems in place, for example, Professional Standards Units.

7.9.2 Staff that work on-site shall be trained and competent to identify and record any feedback / complaints that occur whilst working on-site.

7.9.3 Complaints may be received from many sources including customers, victims of crime, police forces, the Forensic Science Regulator, other departments within the same organisation (for example, laboratory, investigation unit, Professional Standards Unit), the Independent Office of Police Conduct and the judiciary.

7.9.4 In addition, when a court decision is successfully challenged, and this reflects on any work performed by the forensic unit this should be handled through the complaints process or other improvement processes.

7.9.5 Responses to any complaints shall include examination of the potential impact on any work that has been undertaken by the forensic unit.

7.10 Nonconforming work

7.10.1 Staff that work on-site shall be trained and competent to identify and record any nonconforming work that occurs whilst working on-site.

7.10.2 Investigations into nonconforming work shall include examination of the potential impact on any work that has been undertaken by the forensic unit.

7.11 Control of data and information management

7.11.1 If the forensic unit's information management system is to be accessed whilst on-site this shall be verified as having suitable controls in place to prevent unauthorised access and to maintain the integrity of the data and information. In addition, staff shall be made aware of the additional risks associated with working on-site, for example, leaving laptops open and unlocked when unattended.

8. Management System Requirements

8.1 Options

When implementing the quality system, the forensic unit should consider the content of this publication (LAB 201) and ILAC-G19.

8.2 Management system documentation (Option A)

No specific guidance to this clause.

8.3 Control of management system documents

The document control system employed by the forensic unit shall ensure that relevant documents are available at the point of use, for example, in hard copy or electronic format whilst at the location of on-site testing.

8.4 Control of records

The retention of records shall be in accordance with customer expectations, for example, NPCC documented national guidance.

8.5 Actions to address risks and opportunities

ISO/IEC 17025 includes the requirement to consider the risks and opportunities associated with testing activities. The forensic unit shall ensure that the on-site testing activities are included within this consideration.

8.6 Improvement

ISO/IEC 17025 includes the requirement to identify and select opportunities for improvement. The forensic unit shall ensure that mechanisms are in place to identify improvements within the on-site testing activities.

8.7 Corrective actions

Corrective actions taken in response to the identification of any non-conformity shall include examination of the potential impact on any work that has been undertaken by the forensic unit.

8.8 Internal audits

The on-site testing activities shall be included in the internal auditing system to verify the compliance with the requirements of the forensic unit's own management system and also the requirements of ISO/IEC 17025, LAB 201 and ILAC-G19. Internal auditing procedures shall include witnessing of authorised personnel carrying out on-site testing activities.

8.9 Management review

The conduct of on-site testing activities shall be appropriately included within the Management Review.

9. References

ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories

ILAC-G19 Modules in a Forensic Science Process

Forensic Science Regulator Code of Practice