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RG 201

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Accreditation of bodies carrying out incident scene examination

Contents

Changes since last edition

- Update to terms used including ‘Incident Scene’ and ‘Forensic Units’ to align with the Forensic Science Regulator Code of Practice and ILAC G19.
- Alignment with UKAS Publication LAB 201 Accreditation of bodies carrying out forensic testing on site.
- Update to reflect revision of ILAC G19 Modules in a Forensic Science Process.
- Inclusion of some aspects relating to investigation of incidents involving Fire and Collision.

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 incident scene examination and testing conducted in laboratories respectively.

1.2 When incident scene 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, 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 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. This UKAS publication RG 201 *Accreditation of Bodies Carrying out Incident Scene Examination* is relevant for forensic units that undertake examination of incident scenes and are to be accredited to ISO/IEC 17020.

1.4 RG 201 does not cover all the requirements of ISO/IEC 17020, which remains the authoritative document, and consequently it should be read in conjunction with ISO/IEC 17020, and ILAC-G19 *Modules in a Forensic Science Process*. Accredited inspection bodies are required to comply with all requirements of ISO/IEC 17020. Where a forensic unit has requested that compliance to the Forensic Science Regulator (FSR) Code of Practice is included in their scope, they shall also ensure that the relevant requirements within that document are met.

1.5 The term ‘forensic unit’ is used in this document to describe the legal entity or a defined part of a legal entity that performs incident scene examination and that will be accredited to ISO/IEC 17020. The forensic unit undertaking incident scene examination may be part of a larger forensic unit, for example, a crime scene unit in a police force or a team within a forensic science provider.

1.6 For a forensic unit covering more than one aspect of the forensic process (for example, incident scene examination and laboratory-based testing) the management system can cover all normative requirements without needing additional systems for each aspect. For example, a forensic unit can have one single management system meeting the requirements of both ISO/IEC 17020 and ISO/IEC 17025.

1.7 Forensic units that hold UKAS accreditation to ISO/IEC 17025 *General Requirements for the competence of testing and calibration laboratories*, for the laboratory analysis of forensic items, may obtain accreditation to ISO/IEC 17020 by seeking an extension to its accreditation scope to include incident scene examination activities.

2. Inspection services

2.1 The scope of inspection for forensic units undertaking incident scene examination will be defined initially as either Major Crime or Volume Crime depending on the type of incidents that the forensic unit attends; and then additionally by the types of evidence that may be examined or recovered from those scenes. For example:

Volume crime:

- Incident Type - for example, burglary, vehicle crime, criminal damage, vandalism. robbery.
- Evidence Type - body fluids, marks (friction ridge detail (for example, fingermarks, palm, plantar, footwear marks, toolmarks), glass, paint, hair, fibres, photography.

Major crime:

- Incident Type - for example, murder, rape, kidnapping, serious assault, organised crime, clandestine labs, arson.
- Evidence types (in addition to those indicated for Volume Crime) - firearms, digital, explosives, blood pattern analysis, accelerants, fire debris, entomology, archaeology.

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

2.3 The assessment of a forensic unit carrying out incident scene examination shall utilise some or all of the following techniques:

- Witnessing of the examination of a live incident scene
- Witnessing of the examination of a mock-up incident scene
- Review of completed casework
- Interviewing of staff
- Witnessing of individual techniques in a controlled environment, for example, at a laboratory or at the Head Office

2.4 The UKAS accreditation schedule will state the scope of activity for which the forensic unit has demonstrated competence and for which accreditation is granted. This schedule will indicate the type of incidents for which the forensic unit has gained accreditation and additionally the specific evidence types related to those incidents.

3. Using this publication

3.1 The format of this publication has been aligned with ISO/IEC 17020:2012, 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 17020:2012 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 and independence

4.1.1 Due to the importance of the demonstration of independence by forensic units undertaking incident scene examination, UKAS policy is that all inspection bodies undertaking incident scene examination will be designated as Type C. Consequently, as a Type C inspection body the forensic unit shall be required to have demonstrable 'safeguards' (see Annex A: A.3 of ISO/IEC 17020) in place to ensure adequate segregation of responsibilities and accountabilities through appropriate reporting structures and/or documented procedures.

4.1.2 The importance of the demonstration of independence 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 The forensic unit shall identify risks to its impartiality on an ongoing basis, for example, through the use of a risk register. The mechanisms used for the identification of such risks and the subsequent mitigation taken to eliminate or minimise the risks will be reviewed during assessments. Some examples of risks to impartiality can be found in the FSR Code of Practice section 17.

4.1.4 Some examples of measures that can be used to mitigate risks to impartiality are, the use of case assessment and strategy (with regular review), organisational structures and reporting lines, the implementation of a Code of Conduct (for example, as detailed in the Forensic Science Regulator Code of Practice – Standards of Conduct).

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 attending incident scenes. This could be documented in an incident scene attendance policy. This policy should emphasise that the gathering of information relevant to the incident scene 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. Any information gathered at the incident scene that may be relevant to the investigation should be shared with the investigating authorities; where this happens, traceable records shall be maintained.

4.2.2 The forensic unit shall have processes in place to ensure the confidentiality of information taken or captured as a result of incident scene attendance. These processes shall include security during transportation between the incident scene and the office and subsequent storage, including if working from a remote location.

4.2.3 These requirements also relate to any sub-contractors.

5. Structural requirements

5.1 Administrative requirements

5.1.1 If, in order to meet their liabilities, the forensic unit opt to hold insurance (rather than reliance on reserves) then this insurance shall be demonstrably appropriate to the activity that the forensic unit undertake, for example, through the review and agreement by the organisation's legal department. If the forensic unit is part of a collaboration, then this shall have been considered as part of the review of suitability of the insurance held by the accredited legal entity.

5.2 Organisation and management

5.2.1 The inspection body (the forensic unit, or part of a forensic unit, undertaking incident scene examination) shall be clearly defined and identifiable, particularly if it is part of a larger organisation or if the staff have multi-functional roles within the forensic unit. This could be through an organisational chart and associated role descriptions which define the relationship with other parts of the legal entity, including other parts of the forensic unit that do not conduct incident scene examination.

5.2.2 If the forensic unit is operating within an organisational collaboration the requirements detailed in the UKAS Technical Bulletin *Accreditation Requirements for Police Force Collaborations* will be included in the assessment.

6. Resource requirements

6.1 Personnel

6.1.1 The competence of all staff shall be documented such that their competence to undertake different levels/types of incident scenes or evidence types is clear. For example, major incident, volume crime, blood pattern analysis, presumptive testing of blood, fire investigation for the determination of origin and cause, identification of accelerants, etc. The assessment of competence shall include the performance of all aspects of incident scene examination undertaken by staff including, where relevant, the review of assignments and subsequent tasking, the preparation to attend the scene, the setting of strategies and their review including scene, sampling and anti-contamination strategies, the technical activities, and use of related equipment, record keeping, photography and reporting. In addition, and where relevant, evidence of competence shall be available relating to the evaluation and interpretation of results and observations from the incident scene.

6.1.2 The forensic unit shall have a clearly defined set of criteria for the demonstration of initial competence of staff which may include, but not be limited to, theoretical tests, examination of mock-up scenes, 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 which may include, but not be limited to, re-examination of completed incident scenes, review of completed case records, witness of the examination of mock-up incident scenes, witness of live incident scenes, monitoring of performance figures, maintenance of caselogs.

6.1.4 The forensic unit shall demonstrate how it ensures that staff are kept up to date with the latest developments in technology relevant to the incident scene service.

6.1.5 Staff undertaking incident scene examination should be monitored at least annually. However, the forensic unit may want to increase this frequency for newly trained or less experienced staff.

6.1.6 The monitoring of the performance of staff undertaking incident scene examination shall include on-site witnessing. On-site witnessing shall be carried out by suitably trained staff that are technically competent and are sufficiently independent to carry out the witnessed activity objectively. The forensic units programme for witnessing should be designed so that each scene-going member of staff is witnessed at a live incident scene of appropriate complexity and challenge to evidence their competence at least once in an accreditation cycle. The monitoring

should include an assessment of both the technical aspects and the interactions with customers / staff at incident scenes.

6.1.7 If all technical aspects, for which the examiner is competent, cannot be witnessed at the planned monitoring at a live incident scene then the forensic unit should employ other mechanisms to ensure the demonstration of on-going competence of all technical activities relevant to that individual.

6.1.8 If the staff of the forensic unit also undertake laboratory work and the forensic unit has a competence monitoring system to review their competence for laboratory activities that they also conduct at a scene, then the competence monitoring system for incident scene examination does not necessarily need to duplicate this aspect.

6.1.9 The monitoring of staff should also include the review of completed case records.

6.1.10 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 – Standards of Conduct. However, emphasis of the additional considerations when conducting incident scene examination should be made to relevant staff, for example, the potential for the receipt of information that could lead to cognitive bias.

6.1.11 The forensic unit shall determine the appropriate level of vetting/clearance required by their customers and ensure that staff, including subcontractors, demonstrably meet these expectations.

6.1.12 Where the nature of the incident scene examination requires it the forensic unit shall ensure that staff are included within relevant elimination databases, for example, DNA and fingerprints, to ensure that there is appropriate and timely identification of any potential contamination.

6.2 Facilities and equipment

6.2.1 The security of any facilities used, including those where staff work away from the main offices of the forensic unit, shall be appropriate and ensure that unauthorised personnel would not have access to items, records, equipment, and consumables. This includes facilities used permanently or on a temporary basis.

6.2.2 Any reagents or kits used at incident scenes shall be demonstrated as fit for purpose initially through validation and subsequently through on-going quality assurance mechanisms that will ensure suitability at the point of use. Information of shelf life, storage conditions and, where relevant, preparation information shall be available for all reagents, and where possible included on the label. Systems shall be in place to demonstrate traceability of kits or reagents used at each incident scene.

6.2.3 The forensic unit shall undertake and document a risk assessment of the issues surrounding potential contamination of equipment, for example, in relation to DNA and trace evidence, with due regard to the possibility of the equipment as a vector for contamination within and between incident scenes. The risk assessment should include a consideration of the required cleaning regime and subsequent monitoring system to demonstrate the effectiveness of the cleaning performed. In addition, an assessment of each individual incident scene should be undertaken and recorded to ensure that suitable anti-contamination is in place given the circumstances of the case.

6.2.4 Vehicles used for incident scene attendance shall be suitable and meet the relevant requirements for equipment and facilities, for example, have appropriate records of maintenance demonstrating fitness for purpose, have appropriate security commensurate with the storage of equipment, items etc, have an appropriate environment if used for conducting any forensic activity.

6.2.5 Procedures shall be documented for the use of equipment at scenes, for example, light sources, ESLA, PID, surveying equipment, cameras.

6.2.6 An equipment list should be available for vehicles and scene kits which includes all equipment necessary for attendance at incident scenes. In addition, the levels of consumables should be monitored to ensure suitable levels are available.

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

6.2.8 Specifications for supplies used at scenes shall be documented to ensure that they are fit for purpose at scenes, for example, PPE, memory cards.

6.2.9 The suitability of consumables and packaging shall be demonstrated, for example, through initial commissioning and on-going quality assurance mechanisms. Systems for the management of consumables and packaging shall ensure appropriate storage to prevent contamination and monitoring of stock levels to facilitate the ongoing provision of the incident scene service. Systems shall be in place to demonstrate traceability to batches of critical consumables used at each incident scene.

6.2.10 Policies surrounding the use of electronic devices, for example, mobile phones, Sat Navs, tablets, laptops, voice recorders, and PDA's, shall be documented including security, access, contamination avoidance, maintenance etc. and shall have been reviewed and confirmed to be in accordance with the organisation's own information security policies.

6.3 Subcontracting

6.3.1 No specific guidance to this clause.

7. Process requirements

7.1 Inspection methods and procedures

7.1.1 Methods and procedures used during incident scene examination shall be documented in sufficient detail to ensure consistent and appropriate implementation, including by staff at different hubs within the forensic unit.

7.1.2 The forensic unit shall validate any techniques that it uses at incident scenes 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.

7.1.3 Where validation has been undertaken centrally or by another party the forensic unit shall review the validation to ensure fitness for purpose and complete appropriate verification to demonstrate validity of the technique when deployed within the forensic unit's own system.

7.1.4 The forensic unit shall also have collated data to demonstrate the suitability of the whole process of incident scene examination including scene evaluation, strategy setting, search, sequential

processes, recording and interpretation. In addition to the analysis of completed cases, this shall include circumstances with a known output, for example, the repeated examination by different staff of a mock-up incident scene, reviewing of 360 enhanced images, interviews / discussions of generated scenarios with staff.

7.1.5 Forensic units shall ensure the ongoing validity of their incident scene examination through use of mechanisms such as proficiency testing, interlaboratory comparison, and peer review.

7.1.6 Validation data relating to specific techniques, or to the whole process of incident scene examination, shall be reviewed and, if necessary, updated if there have been any significant changes.

7.1.7 Staff shall have access to methods and procedures at the incident scenes, either in electronic format or hard copy.

7.1.8 An appropriate incident scene strategy shall be documented for each incident scene attended. In some instances, this may be a generic strategy that can be referenced in the incident scene attendance records. However, even in these circumstances a review of the appropriateness of a generic strategy shall be made. Where the scene does not meet the requirements of this generic strategy a more detailed specific strategy shall be recorded. The strategy should be reviewed during the incident scene examination to ensure continued suitability and any changes that occur, for example, as a result of an additional or alternative request from the customer, shall be indicated in the records. Confirmation that the incident scene examination has been completed in accordance with the documented strategy, and hence the customer expectations, should be recorded prior to departing the scene.

7.1.9 The precise scope of activity relating to the examination of incident scenes that the forensic unit will provide shall be detailed in a contract, Service Level Agreement or other formal agreement with the customer. The mechanisms for the review of requested work shall include any short-term initiatives as well as on-going service provision. If any of the services offered by the organisation are not covered by UKAS accreditation, then this shall be made clear to the customer.

7.1.10 Procedures for the review of requests for incident scene examination 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 scene requirements.

7.1.11 A documented risk assessment should be completed for each incident scene attended. For attendance at standard incident scenes this could be in the form of a generic risk assessment. However, this should be reviewed at the start of each incident scene to ensure it is appropriate. If other hazards are identified, or the incident scene is non-routine, the specific hazards should be recorded, and risk assessed prior to any work being carried out. Where appropriate, the forensic unit should additionally consider the welfare of staff.

7.2 Handling inspection items and samples

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

7.2.2 Records shall be available to indicate who has responsibility for each item, and its location, whilst in the care of the forensic unit. In addition, these records shall indicate when the item leaves the

inspection body's responsibility, for example, if items are handed over to a police force exhibits officer, a courier, a subcontractor, or a forensic provider.

7.2.3 The documented chain of custody shall include any onward transfer to laboratory facilities or storage. 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.

7.2.4 To ensure suitability for onward examination and testing, the packaging used at incident scenes shall be appropriate and agreed with the customer. Any deviation with respect to this shall be noted, along with the reason for the departure.

7.2.5 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 shall be recorded.

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

7.2.7 If items are to be temporarily stored, for example, in scene attendance vehicles, the suitability of the temporary store shall be assessed to ensure that the integrity and security of the item is not compromised.

7.2.8 The facilities used for the storage of any items taken from incident scenes shall be appropriate. If the items are to be sent to an item store within the legal entity but outside of the control of the forensic unit, for example, prior to onward movement to a testing facility, then the suitability of that storage area shall be reviewed, for example, by evaluation of the provider of the storage area as a supplier.

7.3 Inspection records

7.3.1 The detail of the records of the incident scene examination shall be sufficient that in the absence of the examiner any competent examiner could evaluate/determine what has been undertaken at the incident scene, including the scene strategy (and rationale for any subsequent changes), the anti-contamination measures adopted, the activities and tests undertaken, equipment used, the items recovered and any significant discussions that took place during the incident scene examination. Consideration should be given to including sufficient detail to explain when activities were not conducted, for example, if a surface is powdered and no friction ridge detail is found and therefore no recovery is required.

7.3.2 The incident scene records shall clearly detail what information relating to the case scenario has been received prior to attendance at the incident scene and which has been obtained at the incident scene, and the source of this information.

7.3.3 Where the records of the scene of incident are in different formats, for example, hard copy notebooks, electronic files, photographs, or stored in different case record systems, it shall be possible to identify all records relating to a specific case and the locations of each component of the complete record.

7.4 Inspection reports and inspection certificates

7.4.1 The forensic unit shall define the structure and format of the incident scene reports that it will produce. This may vary depending on the type of scene, for example, volume or major crime.

7.4.2 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 17020. 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 17020
- the preparation of an annex to the report that includes any additional information required by ISO/IEC 17020
- ensuring that the case records relating to a specific scene contains all the relevant information required by ISO/IEC 17020

7.4.3 Copies of any reports provided to customers shall be maintained, including any handwritten reports left with customers at incident scenes. If the forensic unit policy allows for the provision of oral reports the details given shall be recorded in the incident scene examination notes and followed up by a written report.

7.4.4 If provisional 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.

7.4.5 It is a requirement of ISO/IEC 17020 that results are reported to the customer correctly, accurately and clearly. 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.

7.4.6 Records of incident scene examination, including any provisional reports given, shall still be generated and maintained even if no further action is requested from the customer.

7.4.7 Where reports from incident scene attendance include interpretation and evaluation based on the results and observations made by the forensic unit, the hypotheses that have been considered shall be included in the report.

7.4.8 The forensic unit should document a policy and process for the peer/supervisory review of reports. The frequency of these reviews may take into account the crime type and experience of the examiner.

7.4.9 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.

7.5 Complaints and appeals

7.5.1 The documented procedures for dealing with feedback shall ensure that all feedback relevant to the incident scene examination service is appropriately managed and therefore should link with any corporate systems in place, for example, Professional Standards Units.

7.5.2 Staff that conduct incident scene examination shall be trained and competent to identify and record any feedback / complaints that occur whilst attending incident scenes.

7.5.3 Complaints may be received from many sources including customers, victims of crime, suspects, 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.

7.5.4 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.

7.6 Complaints and appeals process

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

8. Management system requirements

8.1 Options

8.1.1 When implementing their management system, the organisation should consider the content of this publication RG 201 and ILAC-G19 Modules in a Forensic Science Process.

8.2 Management system documentation (Option A)

8.2.1 Where a forensic unit has a management system that was developed to meet the requirements of ISO/IEC 17025 the forensic unit shall ensure that the management system is appropriately reviewed and updated to additionally meet the requirements of ISO/IEC 17020; for example, through undertaking a gap analysis.

8.3 Control of documents

8.3.1 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.

8.4 Control of records

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

8.5 Management review

8.5.1 The conduct of incident scene examination activities shall be appropriately included within the Management Review.

8.6 Internal audits

8.6.1 The internal auditing system shall verify the compliance of the incident scene examination service with the requirements of the forensic unit's own management system and also the requirements of ISO/IEC 17020, RG 201, ILAC-G19 and, where relevant, the Forensic Science Regulator Code of Practice. Internal auditing procedures shall include witnessing of authorised personnel carrying out incident scene examination.

8.7 Corrective actions

8.7.1 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 Preventive actions

8.8.1 No specific guidance to this clause.

9. References

ISO/IEC 17020:2012 Conformity assessment - Requirements for the operation of various types of bodies performing inspection

ILAC-G19 Modules in a Forensic Science Process

ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories

Forensic Science Regulator Code of Practice