

## Additional requirements of ILAC G-19 06/2022 ‘Modules in a Forensic Science Process’ vs ILAC G-19 08/2014

The following analysis highlights the additional content of ILAC G-19: 06/2022 ‘Modules in a Forensic Science Process’ over and above the previous version of the document ILAC-G19 - 08/2014. Most changes are minor in nature but with a few additional text items added as indicated in the table below. Qualimetric Ltd has made best efforts to ensure the correctness and completeness of the document but cannot be held responsible for any omissions or errors in the document. Feedback and comments are welcome to suggest further improvements (info@qualimetric.co.uk).

ILAC Guide G19: 06/2014 Section	Affected text in ILAC Guide G19 06/22 (relevant extracts)	Change	Impact of change
1 Scope	<p>1.0 Scope</p> <p>This <b>document</b> outlines the series of steps within the forensic science process from the time a forensic unit is notified of an incident until the presentation of results and observations</p> <p>Any <b>examination</b>/test conducted as part of scene of crime investigation shall be carried out according to documented procedures and ISO/IEC 17020 may cover these procedures provided that the relevant clauses of ISO/IEC 17025 are considered (see Annex D).</p>	<p>Changed from being ‘guidance’ to ‘document’</p> <p>‘examination’ added to ‘test’</p> <p>‘presumptive testing’ removed from this section</p>	Terminology
2. Terms and Definitions			
2.4 Court Statement		Definition deleted	None
2.7 Equipment	<p>2.6 Equipment</p> <p>Equipment refers to all, <b>but not limited to</b>, tools, instruments, software, reagents and chemicals that are used as part of the forensic science process which need to be monitored and controlled.</p>	‘but not limited to’ added	Terminology
2.8 Examination/Test	<p>2.7 Examination/Test</p> <p>Examination/test has been used in this document to refer to sampling, analysis, visual inspections, comparisons, and interpretations.</p> <p><b>In this context an examination/test is one which, having been documented and validated (and if necessary, verified for proper performance), is under control so that it can be demonstrated that all appropriately trained staff will obtain the same results within defined limits. These defined limits can relate to expressions of degrees of probability as well as numerical values. Visual examination, qualitative examinations, comparative examinations, enhancement, recovery, and computer simulations are included in the definition of examination/test, for example, examination of damage, presumptive blood tests, toolmark comparison, fingerprint enhancement and recovery, extraction of data from mobile phones.</b></p>	<p>The term ‘Opinions’ deleted</p> <p>Definition combined with 2.15 Objective Examination / Test in previous edition which has been reworded and simplified slightly</p>	Terminology
2.9 Exhibit	<p>2.13 <b>Item:</b></p> <p>An item is an <b>object, substance</b> or sample recovered as part of an investigation.</p>	Terminology changed from ‘Exhibit’ to ‘item’ adding ‘object or substance’	Terminology

2.10 Facility	2.8 Facility Facility is any physical environment used to protect the integrity of items, conduct examination, testing <b>or inspection activities</b> ,	'inspection activities' added	Terminology
	2.10 Forensic report A forensic report (however named) includes the results and interpretations of forensic examinations/tests. Such reports may be hard copy or electronic and may be in a format prescribed in relevant legislation. Forensic reports may be submitted to law enforcement investigators, members of the judiciary and other interested parties.	New definition 'Forensic report'	Terminology
2.12 Impartiality	2.12 Impartiality <b>The forensic unit shall undertake all activities impartially; some examples of the aspects of the forensic science process related to the demonstration of impartiality are the use of alternative hypotheses when developing strategies for scene of crime or laboratory examination or testing (4.3 and 4.7.2), the provision of background information (4.4.1 and 4.7.1) and the use of balanced scales of opinion (4.9).</b>	Definition expanded to include additional text	Terminology
2.13 Investigator	2.9 <b>Forensic</b> investigator A person, however named, trained to perform scene of crime examinations and/or investigations. Other names used for this function are, for example, Scene of Crime Officer, Crime Scene Investigator, Scene of Crime investigator and Scene of Crime Examiner.	Term now 'forensic' investigator, instead of 'investigator'	Terminology
2.15 Objective Examination / Test	2.7 Examination/Test An objective examination/test is an examination/test which, having been documented and validated, is under control so that it can be demonstrated that all appropriately trained staff will obtain the same results within defined limits. These defined limits relate to expressions of degrees of probability as well as numerical values. Objective examinations/tests will be controlled by: documentation of the examination/test validation of the examination/test training and authorisation of staff maintenance of equipment and where appropriate by: calibration of equipment use of appropriate reference materials provision of guidance for interpretation checking of results testing of staff proficiency recording of equipment/test performance Visual inspection, qualitative examinations, comparative examinations and computer simulations are included in the definition of objective examination/test. In this document the word examination or test refers to an objective examination or test.	Definition now combined with 'examination/test'	Terminology
2.17 Reference Material	2.16 Reference material A reference material is a material <b>from a known source..</b>  <b>Some reference materials may be certified reference materials in that the reference material is characterized by a metrologically valid procedure for one or more specified properties accompanied by a certificate that provides the value of the specified property, its associated uncertainty and a statement of metrological traceability.</b>	'Known source' added  Additional explanation added regarding certified reference materials	Terminology
2.18 Sampling		Text relating to 'representative sample', identification, sequence, sampling plan and strategy deleted from the definition.	Terminology
2.21 Testing		Definition deleted from this section (see 'examination/test' above)	Terminology

3.	General guidance common to all activity modules in the forensic science process		
3.2	3.2 Complaints	Term 'appeals' and 'opportunities' and associated text removed from the definition	Minor
3.3	3.3 Competence The forensic unit shall ensure that all staff working in the forensic unit are competent <b>and authorized</b> to perform the work required, and where their role requires it, to report the work.	The term 'authorised' added	Minor, but emphasises the need for specific authorisation of competence.
3.5	<p>3.5 Records</p> <p>The procedure in place should ensure that all of the components, both hard copy and electronic, are coordinated such that they are identified as a part of the case record and their locations are defined. In determining the retention period of the records associated with the forensic activity the forensic unit shall consider the legal requirements and customer expectations of the applicable economy or region. See ISO/IEC 17025 7.11 for more information regarding data and information management.</p> <p>Records shall be made at the time of the examination/test or observation, or as soon as practicable thereafter, and these shall include, where applicable, who carried out the scene of crime examination, who performed the examination/test and or sampling, the date, the location, who carried out <b>each stage of the process</b>, the examination/test results, quality checks and conditions of examinations/tests.</p> <p>Each page of every document in the case record should be traceable to the case, <b>or an equivalent system for electronic records</b>.</p>	<p>Section added emphasising the need to co-ordinate the filing and storage of records as part to the case record and traceability to their locations.</p> <p>Consideration of legal requirements and customer expectations relating to record retention added and reference made to the ISO/IEC 17025 requirements relating to data management.</p> <p>Records to cover each stage of the process.</p> <p>Expands the record requirement to cover 'equivalent system for electronic records'</p>	<p>Minor</p> <p>Minor</p> <p>Minor</p> <p>Minor</p>
New	<p><b>3.6 Risks and Opportunities</b></p> <p>In order to ensure that the management system and technical activities of the forensic unit remain appropriate, continue to support the purpose and objectives of the forensic unit and achieve improvements, the forensic unit shall consider the risks and opportunities associated with its activities.</p> <p>Risk-based thinking is a proactive approach to reduce potential undesired effects through early identification, planning and action. Some examples of risks to consider within a forensic context include:</p> <ul style="list-style-type: none"> <li>⊖ adverse environmental conditions creating a risk of item degradation or loss of evidence (see 3.11).</li> <li>⊖ effective cleaning regime for equipment in order to eliminate cross-contamination of items or scenes (see 3.12).</li> <li>⊖ planned and effective maintenance of equipment in order to minimize equipment failure (3.12).</li> <li>⊖ consideration of the health and safety of personnel, for example, related to hazards at a scene (e.g., sharp objects, bloodborne pathogens, armed suspect at large).</li> <li>⊖ establishing equipment calibration intervals based on the stability of the equipment, cost associated with calibration and the impact to casework if the equipment fails a calibration or intermediate check (verification).</li> <li>⊖ establishing the format and frequency of the evaluation of the on-going competence of staff, including infrequently performed activities (see 3.3).</li> <li>⊖ management of consumables and</li> </ul>	Risks and opportunities added (preventive action removed)	New clause added replacing the original clause on preventive action. Examples of risks are provided for consideration. This list also covers health and safety aspects for consideration (effectively replacing the requirement of the original clause 3.6 of ILAC G19:2014. Organisations already compliant with ISO/IEC 17025 will already have a system to address risks and opportunities, and should review current risk assessments to cover appropriate requirements listed here. Organisations compliant with ISO/IEC 17020 will need to address this requirements.

	<p>kits to ensure they are appropriate at the point of use. For example, starting with the selection of suppliers (which could include a consideration of compliance of the supplier with ISO 18385:2016 Minimizing the risk of human DNA contamination in products used to collect, store and analyze biological material for forensic purposes — Requirements) through to stock management (including the management of expiry dates of kits etc.) and any appropriate quality control checks e.g., positive controls for test kits. ω risk to impartiality, for example, based on relationships/familiarity of persons involved in the investigation process or those involved in an incident under investigation. ω consideration of the extent and frequency of quality control/quality assurance mechanisms throughout the forensic science process to give confidence in the output, for example, use of positive and negative controls, critical findings checks, peer review, proficiency testing and/or interlaboratory comparisons. ω suitability of packaging materials to prevent deterioration or loss of evidence. ω suitability of the type and use of Personal Protective Equipment (PPE) to manage potential contamination and to assure the health and safety of staff. ω management of a scene of crime to ensure effective recovery of samples in terms of sequence and separation to maximise the recovery, assure the integrity and minimise the detrimental impact.</p>		
3.6	Health and safety	Section removed	Health and safety deleted ( but covered under 'risks and opportunities' (see above).
3.10	<p>3.10 Methods and Method Validation</p> <p>In demonstrating the suitability of a non-analytical discipline e.g., fingerprint enhancement, marks comparison, the forensic unit will need to review the list above and determine which aspects are appropriate to consider, whether there are additional considerations and how these would be evaluated for the method that they are reviewing. For example: ω range – does the technique work for typical items and/or surfaces ω accuracy – can the technique capture and/or reproduce the item to the required level of detail for future use ω repeatability – do all examiners get the same outcomes (within defined and acceptable limits) ω robustness – does the technique work as effectively in different conditions, types of scenes ω limitations – are there scenarios when the technique could not or should not be used, are there potentials for false positives and/or false negatives</p>	Section added relating to non-analytical disciplines and considerations to ensure their suitability.	Existing procedures should be reviewed for non-analytical methods to determine if additional controls might be required.
3.12	<p>3.12 Equipment and Measurement Traceability</p> <p>3.12.1 General The forensic unit shall define and document its procedures for the selection and use of purchased external services, equipment and consumable supplies that affect the quality of its service.</p> <p>There shall be procedures and criteria for acceptance, rejection and storage of equipment and/or materials, for example, consumables used at the scene, during analysis and personal protective equipment.</p> <p>Appropriate quality records of external services, supplies and purchased products shall be established and maintained for a period of time, as defined in the management system.</p> <p>3.12.2 Equipment The forensic unit shall operate a program for the maintenance and calibration of equipment that can influence the results; this shall allow for the demonstration of measurement traceability, where appropriate.</p>	<p>Section added regarding purchasing</p> <p>Consumable materials changed to 'equipment and/or materials'</p> <p>'Critical' equipment changed to 'equipment that can influence the results'</p> <p>Section added</p>	<p>New section added, but this should already be covered by existing purchasing requirements in ISO/IEC 17020/25 or ISO 15189.</p> <p>Definition of consumables expanded – need to ensure that controls are applied to equipment and materials which should have already have been addressed.</p> <p>A more pragmatic definition of 'critical equipment' is adopted.. no significant change.</p> <p>Consideration should be made to accommodate cleaning of equipment after</p>

	<p>Equipment that could be re-used at another scene should be cleaned after use, the rationale for the cleaning regime should be based on the potential risk to contaminate subsequent items and/or scenes.</p> <p>3.12.3 Equipment records Records shall be maintained of each piece of equipment and its software <b>that could influence the activities conducted</b>, for example, <b>forensic light sources and cameras, or the examinations/tests performed, for example, measurement and analytical equipment</b>. It is expected that the records held by all forensic units would be in accordance with the requirements specified in ISO/IEC 17025 6.4.13.</p> <p>3.12.5 Consumables <b>Consumables, for example, swabs, chemicals, gel lifts, glassware, PPE, scalpels, scissors, packaging etc., shall be demonstrably suitable, stored correctly and monitored (if required). Consideration could be given to the compliance of the supplier of relevant supplies with ISO 18385:2016 Minimizing the risk of human DNA contamination in products used to collect, store and analyze biological material for forensic purposes — Requirements.</b></p> <p>3.12.6 Reagents, reference materials, <b>control materials and calibrators</b></p> <p>Reagents, reference materials, <b>control materials and calibrators</b> should be labelled with: ω name; ω concentration, where appropriate; ω date of receipt, preparation, and/or expiry; ω identity of preparer; ω storage conditions, if relevant; ω hazard warning, where necessary; ω the date it was placed in service.</p>	<p>'significant to' changed to ' could influence the activities conducted'</p> <p>Examples provided of 'forensic light sources and cameras, or the examinations/tests performed, for example, measurement and analytical equipment'</p> <p>New para added giving examples of consumables and ISO 18385.</p> <p>control materials and calibrators added</p>	<p>use if re-used to avoid contamination risks. Recommend existing procedures/risk assessments are reviewed to ensure that this is covered if applicable.</p> <p>A more pragmatic definition of 'significant to' is adopted.. no significant change. Examples provided – it would be prudent to check to see if these items are covered (although it would have already been expected)</p> <p>New para added relating to consumables giving examples of consumables and ISO 18385. Recommend that existing procedures are reviewed and updated to cover these aspects if considered relevant.</p> <p>'control materials and calibrators Added. However such items should have already been considered where used.</p>
4.1.1	<p>4.1.1 Contract review</p> <p><b>Ongoing monitoring by the forensic unit of its assignments and tasks. Monitoring of completed assignments or tasks to ensure they fulfil the requirements and have been carried out correctly.</b></p> <p><b>ω involvement of any other forensic units such that appropriate communication and coordination can be achieved (see 4.3.5)</b></p>	<p>.</p> <p><b>There may be a need for the forensic unit to reassess its assignments and tasks to ensure that the issues identified above remain appropriate. In addition, the forensic unit should review completed assignments to ensure that they fulfil the customer requirements.</b></p> <p>Bullet added relating to the involvement of other forensic units</p>	<p>Text changed regarding ongoing monitoring of its assignments. 'There may be a need to reassess its assignments and tasks' added. Text changed regarding the review of completed assignments (cf monitoring).</p> <p>To ensure establishment of communication and co-ordination protocols with other units (e.g fire) where required.</p>
4.1.2	<p>4.1.2 Instruction to the customer</p> <p>In some circumstances, it may be appropriate for the forensic unit to give some instruction to the customer on how best to preserve the scene of crime, <b>this should be recorded</b>. However, the amount of knowledge concerning the scene of crime at hand may be very limited and therefore it may be difficult to give exact instructions.</p>	<p>Requirement to <i>record</i> any instructions to the customer on how to best preserve the scene of crime</p>	<p>To ensure that any such instructions are recorded (which should have been the case anyway)</p>

4.1.3	<p>4.1.3 Subcontracting and other technical support</p> <p>Forensic units encounter situations where additional resources are needed. The needs may be met by the use of contracted or other technical support personnel or subcontracting the work. In all cases where contracted or other technical support personnel (<b>working under the forensic unit's own managements system</b>) are engaged the forensic unit shall <b>retain appropriate records</b> of their competence for their assigned tasks.</p> <p>In all cases of subcontracting (<b>where the subcontractor is working under their own management system</b>), the forensic unit shall retain appropriate <b>records</b> of the subcontracted body's competence, such as accreditation certificate or records of evaluation performed by qualified personnel according to appropriate procedures.</p>	Clarification added regarding contracted or support services are working under the forensic unit's own management system.	Clarification made here regarding contracted or support services in terms of the management systems that they work under. Suggest that existing procedures/processes/agreements are reviewed to ensure that this is addressed.
4.3	<p>4.3 Developing a Scene of Crime Examination Strategy</p> <p>The forensic unit shall determine what constitutes the scene of crime it is assigned to examine and aim at determining the requirements of the investigation. <b>In doing this they should consider alternative hypotheses, including those that might be presented by the customer.</b> It will also have to decide on the <b>sampling plan</b>, techniques and/or equipment required, determine the samples that need to be taken and then decide on the sequence of sampling and/or examinations/tests. All these aspects shall be recorded.</p>	Consideration of 'alternative hypotheses' and 'sampling plan' added	To review existing processes/procedures to see if these aspects are covered where relevant
	<p><b>4.3.2 Assessment of the scene and determining the requirements of the investigation</b></p> <p><b>Once assessment of the scene of crime has been performed, which includes any discussions with the law enforcement investigator or first responder, it is acceptable that the forensic unit may determine a different scope of examination than what was initially defined (see 4.4.1 in this document). In that case, this shall be clearly recorded, clarified and, where appropriate, authorized by the customer. At this stage a search pattern may need to be decided.</b></p>	New section added	Additional items for consideration relating to assessment of scene of crime.
4.3.2	<p>4.3.2 Sampling</p> <p>Sampling in this context includes the selection, recovery, and prioritization of materials for examination or testing from scenes of crime. Typically sampling is carried out for a number of reasons including the following: selection to target potential evidence; units too large to be submitted to the laboratory as a whole item; to answer relevant questions by examination or testing of a portion of the population; to minimise the total number of required analytical determinations while assuring that all relevant legal and scientific requirements are met. In order to identify the samples that need to be taken, and the sequence of performing different sampling and/or examinations/tests, a sampling <b>method</b> and sampling plan are required.</p> <p><b>The sampling method shall ensure appropriate samples are taken in a manner that assures their integrity and the validity of any subsequent examinations/tests. In addition, the sampling method shall include the manner in which samples are selected, and the mechanisms for acquiring an appropriate sample, including any preparation or treatment.</b></p> <p>In determining the sampling methods and sampling plans to be used the following factors should be considered: <b>ω the request and/or requirements of the customer</b> ω the background information available ω prioritising the question(s) that need to be answered ω the generation of relevant hypotheses and their refinement throughout the scene of crime investigation</p>	<p>'Strategy' changed to 'method' and 'procedures' changed to 'method'</p> <p>New para added</p> <p>'The request and/or requirements of the customer' added</p>	<p>Minor textural change</p> <p>Additional items added for consideration when undertaking sampling.</p> <p>'request/customer requirements added (which should have been considered anyway)</p>
4.4.1	<p>4.4.1 Scene of crime examination procedures</p> <p>The forensic unit shall conduct scene of crime examination in accordance with the processes and procedures stipulated in their management system. In certain circumstances, the</p>		

	<p>customers provide additional or background information, which should be considered or explicitly examined at the time of the scene of crime examination. If such additional or background information is used, the information shall be recorded.</p> <p><b>Additionally, the provision of this information should not compromise the impartiality of the forensic unit.</b></p>	<p>Added: Additionally, the provision of this information should not compromise the impartiality of the forensic unit.</p>	<p>Consideration for addition to impartiality risk assessment</p>
4.4.2	<p>4.4.2 Documentation of the scene of crime Documentation of the scene of crime shall be made before the examination starts and throughout the examination. Documentation can be made, for example: ω in writing and/or drawing, ω by voice recording, ω by photographs <b>and/or digital imaging using cameras, drones, mobile phones, ω electronically, by using e.g., tablets, laptops</b>, ω in video ω by 3D laser scanning</p>	<p>Additional documentation examples added</p>	<p>Consideration to be given to ensure that digital imaging/electronic capture if not already covered by the Quality Management System</p>
4.4.4	<p><b>4.4.4 Examinations/tests</b> However, if a body is accredited to ISO/IEC 17020 and its inspection activity contains examinations/tests then it should meet the relevant requirements of ISO/IEC 17025, <b>for example, measurement traceability, validation, quality assurance. See Annex D.</b></p>	<p>Title changed to add 'examination'</p> <p>Examples given of relevant requirements of ISO/IEC 17025 to be included under an ISO/IEC 17020 scope.</p>	<p>Minor textual change</p> <p>To verify that aspects listed are covered if relevant.</p>
4.5	<p>4.5 Assess Scene of Crime Results <b>and Observations</b> and Consider Further Examination <b>or Testing</b> This is the stage where the forensic unit determines if the purpose of the examination or testing has been fulfilled, if further examinations/<b>tests</b> are necessary and are possible or whether the scene of crime examination <b>or testing</b> has been completed. At this stage the forensic unit will also decide whether samples need to be sent away for further examination or testing.</p>	<p>'Observations' and 'Testing' added</p>	<p>Clarification of terminology only</p>
4.5.1	<p>4.5.1 Review scene of crime results <b>and observations</b> in the context of the request and the strategy Abnormalities and irregularities are results and observations at the scene of crime that do not fit into the general expectation of the scene of crime, for example, attendance at a theft of a motor vehicle and the discovery of a body in the back of the car. Irregularity of an item could be that an item is missing, that there is an unsealed <b>item</b> or that there is doubt as to the suitability or integrity of the <b>item</b>.</p>	<p>'Observations' added and 'exhibit' changed to 'item'</p>	<p>Changes to terminology only</p>
4.5.2	<p>4.5.2 Determine what should be examined further <b>and assurance of the integrity of items</b> <b>When the forensic unit is responsible for the transportation and storage of the items prior to further examination or testing they shall ensure that the identified items are recovered, stored, and transported without contamination (from the environment, weather, people etc.), deterioration and with due regard to the integrity and the 'chain of custody' of the items. Where perishable items are handled any deterioration of the items shall be minimised. If the forensic unit is handing over the items to the customer or other organization for the transportations and storage of the items prior to further examination or testing the forensic unit shall make them aware of any issues with respect to the aspects indicated above. If the forensic unit is responsible for determining which items are sent on for examination or testing, they should have an agreement regarding this with their customer.</b></p> <p>The forensic unit should also consider the aspects detailed above if they are responsible for <b>obtaining, or directing another organisation to obtain</b>, some or more of the following: ω information from other sources like mobile phone companies ω recovery of CCTV (<b>closed circuit television</b>) ω samples from potential suspects or from victims ω samples for the purpose of elimination <b>e.g., DNA or fingerprints</b></p>	<p>'assurance of the integrity of items' added to this section title</p> <p>Paragraph added to cover transportation and storage of items in terms of their integrity</p>	<p>Recommend that existing processes to be reviewed to ensure that the aspects mentioned here are covered where relevant.</p>

4.6	<p>4.6 Interpret and Report Results <b>and Observations</b> from the Scene of Crime</p> <p>This section refers to any interpretation and reporting of results <b>and observations</b>, which may take place directly after the scene of crime <b>examination</b>. The report should contain all the results of examinations/tests and observations and, where appropriate and admissible, conclusions arrived at from these outputs. The report should contain any information on which an interpretation might be made.</p> <p><b>Outcomes from the scene of crime may be available to customers via an internal database rather than through more formal reports or customers may request a simplified report. It is important that the extent of any simplification does not lead to ambiguity in reporting, and the records held by the forensic unit shall be such that a comprehensive report could be produced if later required.</b></p>	<p>Terms ‘observations’ and ‘examinations’ added</p> <p>Para added</p>	<p>Changes to terminology only</p> <p>Recommend that existing processes to be reviewed to ensure that the aspects mentioned here are covered where relevant.</p>
4.7.1	<p>4.7.1 Contract review and exchange of information</p> <p><b>Where the person</b> undertaking the examination or testing has been provided with any background information, the provision of this information should not compromise the impartiality of the examiner.</p>	Minor test change	Reworded, no change to intent
4.7.4	<p>4.7.4 Coordination of multidiscipline examination and testing</p> <p>When <b>items</b> in a case require multidiscipline examination or testing, an arrangement should be in place to ensure that each item requiring examination or testing is subjected to the appropriate examinations/tests, and that the sequence of examinations/tests does not, unintentionally, preclude additional examinations/tests.</p>	Terminology changed from ‘exhibit’ to ‘items’	Changes to terminology only
4.7.7.1	<p>4.7.7.1 Handling of test items</p> <p>For legal purposes, forensic units shall be able to demonstrate that the items examined and reported on were those submitted. A ‘chain of custody’ record shall be maintained from the receipt of items which details each person who takes possession of an item or alternatively the location of that item (e.g., if in storage). Where <b>items</b> are generated in the forensic unit e.g., fibre tape lifts, microscope slides, a ‘chain of custody’ record <b>shall</b> be started and included in the case records. There shall be documented procedures which describe the measures taken to secure items in the process of being examined which are left unattended.</p>	Minor text changes and terminology changed from ‘exhibit’ to ‘items’	Changes to text/terminology only
4.7.7.2	<p><b>4.7.7.2 Ensuring the validity of results</b></p> <p><b>The performance of examination or testing</b> shall be monitored by operating quality control schemes that are appropriate to the type and frequency of examinations/tests undertaken by a forensic unit.</p> <p>An effective means for a forensic unit to monitor its performance, both against its own requirements and against the performance of peers, is to regularly take part in proficiency testing programs. When participating in proficiency testing programs, the forensic unit’s own documented <b>examination/test</b> procedures should be used.</p>	Title change to align with ISO/IEC 17025. Minor rewording of text only,	Changes to terminology/text only and no change to intent.
4.8.1	<p>4.8.1 Making an interpretation</p> <p>When necessary, the customer should be asked to provide sufficient information about the items and the circumstances at the scene of crime. Lacking this information may limit the possibility for an appropriate interpretation, <b>however, the provision of such information should not compromise the impartiality of the forensic unit.</b></p>	Caveat added regarding potential impartiality issues relating to interpretations.	Consideration for addition to impartiality risk assessment or other processes.
4.8.2	<p>4.8.2 Peer review</p> <p>Peer review should be practised in cases of interpretation of results and observations, as this should be treated as a critical finding. <b>Peer review shall be performed by an authorized person with the appropriate competence in the technique in order to confirm the validity of the results and/or to assess that there is an appropriate and sufficient basis for the conclusions and/or opinions.</b></p>	Additional text relating to competency and authorisation of personnel performing peer reviews.	Recommend that existing processes to be reviewed to ensure that the aspects mentioned here are covered where relevant.



<p>4.9</p>	<p>4.9 Report from examinations and tests including interpretation of results</p> <p><b>When the legal system dictates</b> the format and/or information that must be included in a forensic report such that the forensic units may not be able to include all of the elements that are detailed in sub-clause 7.8 of ISO/IEC 17025 or sub-clause 7.4.2 of ISO/IEC 17020 then the forensic unit may adopt one or more of the following, or an equivalent, means of meeting the requirements: ∞ the preparation of a forensic report which includes all of the information required by ISO/IEC 17025 or ISO/IEC 17020 as appropriate...</p> <p>Conclusions shall be properly qualified. It shall be clear in the report to the customer on what an interpretation and/or opinion is based, including the results and <b>observations</b>, also the available information at the time of the evaluation presented in the report.</p> <p><b>Opinion scales shall be designed to demonstrate impartially, for example, that they are sufficiently balanced and should be communicated within the report and/or be available to the customer.</b></p>	<p>Addition of ‘When the legal system dictates’</p> <p><b>New requirement that ‘Opinion scales shall be designed to demonstrate impartially, for example, that they are sufficiently balanced and should be communicated within the report and/or be available to the customer’.</b></p>	<p>Textual change only</p> <p>Recommend that existing processes relating to opinions and their impartiality are reviewed to ensure that the aspects mentioned here are covered where relevant.</p>
	<p>Annex D - The use of ISO/IEC 17025 in situations where examinations/tests form part of an inspection activity</p> <p>The forensic science process (as detailed in this document) includes several stages from the initial discussion regarding scene of crime attendance through to the reporting of examinations/tests conducted in a laboratory environment. Accreditation Bodies have opted to have accreditation schemes based on ISO/IEC 17020 and/or ISO/IEC 17025 for different parts of the forensic science process. Consequently, the same activity conducted at a specific part of the forensic science process could be assessed using different standards by different Accreditation Bodies, and the same activity could be assessed by the same Accreditation Body under different standards depending on where in the overall forensic science process it takes place e.g., presumptive testing of blood at a crime scene or in a laboratory. Therefore, to ensure that equal confidence can be applied to all activities irrespective of the stage of the forensic science process at which they are conducted or if accredited by different Accreditation Bodies using different standards, consistent expectations are required. This document indicates, in the Scope, that any examinations/tests conducted as part of scene of crime investigation shall be carried out according to documented procedures and ISO/IEC 17020 may cover these procedures provided that the relevant clauses of ISO/IEC 17025 are considered. Examples of examination or testing activities that can be conducted at scenes include detection and recovery of body fluids, enhancement and recovery of footwear or finger marks, and determination of blood pattern analysis. The table below outlines the key relevant areas of ISO/IEC 17025 that should be met by the forensic unit if they are completing examinations/tests as part of an inspection activity.</p>	<p>Additional clarification given regarding testing as part of ISO/IEC 17020 activities and reference to a table indicating relevant ISO/IEC 17025 requirements.</p>	<p>Recommend that existing processes relating to testing at scene or as part of ISO/IEC 17020 accreditation are reviewed to ensure that the aspects mentioned here and in the associated table are covered where relevant.</p>