Expert Evidence

Executive Summary

Expert evidence can be used to assist the court in determining the issues in a case where it is relevant and where the opinion of an expert is needed to give the court a greater understanding of those issues. This guidance is intended to give prosecutors practical guidance on issues relating to the prosecution and defence experts as they arise during the life of a case.

Headlines

- The first question for prosecutors to consider is always going to be: **Is expert evidence needed in this case?** If a bench or jury is going to be able to decide upon the case by listening to or viewing the evidence and bringing to bear their own senses, knowledge and experience, then no expert is needed. In many cases, prosecutors can prove the point in issue by reference to other evidence where unnecessary use of experts may result in confusion.

- Expert witnesses are under a duty to the court to provide an objective and independent opinion on matters outside the experience or knowledge of a jury irrespective of any obligations owed to the party instructing them.

- Expert evidence will only be admissible where it will assist the court in reaching its conclusions and is given by an expert who is impartial and sufficiently qualified in a field of expertise, which itself is considered to be reliable.

- The circumstances in which expert evidence will be ruled inadmissible will be rare. This does not mean that expert evidence cannot be challenged by way of cross examination and rigorous application of the Criminal Procedure Rules (Crim. PR).

- Experts instructed by the Prosecution Team are expected to have regard to the ACPO/CPS Guidance for Experts, which sets out their obligations in relation to case management and disclosure. Forensic Science providers must also comply with Core Foundation Principles.

- Streamlined Forensic Reporting and summaries of evidence should be used where applicable, to ensure that expert evidence is presented as simply as possible, court time is saved and unnecessary forensic work is avoided.

- Where expert evidence is in issue, the Criminal Procedure Rules (particularly Crim. PR 33) must be complied with by the prosecution **and** the defence. Non-compliance with these rules could result in a court ruling that an expert cannot be relied upon.

- Expert evidence should be clearly presented and both experts and prosecutors should be prepared to meet in conference, if such a meeting will facilitate understanding of the issues.

- In common with other participants in criminal proceedings, experts have a duty to ensure that cases are dealt with justly. This requires that they: address the issues, including any alternative hypothesis; comply with court directions and case management, and meet with and prepare joint statements with Defence experts, when directed to do so by the court.

- Experts will assist with and facilitate proper disclosure by retaining all material that they generate; recording all of their involvement and revealing that material to the police.

- Every effort should be made to minimise the unnecessary appearance of expert witnesses at court, by ensuring that their attendance is managed and that the nature and length of examination and cross examination is planned in advance.

- The Crown Prosecution Service is only responsible for the costs of experts in presenting their evidence. All investigative costs, at whatever stage of the proceedings, must be met by the police.

- This Guidance concludes with reference to particular categories of expert evidence, most commonly relied upon within the criminal justice system. It is not an exhaustive list and where a type of expertise is not mentioned, other Legal Guidance should be referred to.

Expert Evidence

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(Note: Part 2 relates to particular areas of expertise. It does not purport to provide an exhaustive list of all the different types of expert evidence. All of the sections need to be read in conjunction with the general principles relating to experts as set out in the guidance.)

Part 1 - Guidance

Introduction

Experts can be of great assistance to Magistrates and juries in aiding them to determine the issues in a case, including the guilt or innocence of an accused. Prosecutors will require the appropriate knowledge and understanding of the evidence in question to present and challenge expert evidence.

The purpose of this Guidance is to assist prosecutors in identifying, understanding and challenging, where appropriate, this type of evidence.

It should always be kept in mind that expert evidence is merely one tool to be used in proving a case. The danger in placing too much reliance on the findings of experts is demonstrated in a series of cases in relation to DNA analysis, where there was no other evidence against the accused save the presence of his DNA found at the scene of a crime. The Court of Appeal has emphasised that expert evidence can only be judged in the light of the other evidence in the case. In these cases, the absence of any other evidence, however limited, should have been fatal to the case being charged - see *R v Doheny & Adams* (1997) 1 Cr. App. R. 269 (at paragraph 372).

The dangers of an over-reliance on expert evidence without considering the significance of the other evidence in the case is a factor that prosecutors need to consider in reviewing any file presented by the police for advice and review.

Definition of Expert Witness

An expert witness is a witness who provides to the court a statement of opinion on any admissible matter calling for expertise by the witness and is qualified to give such an opinion.

The Duty of an Expert Witness

The duty of an expert witness is to provide independent assistance to the court by way of objective, unbiased opinion in relation to matters within their expertise. This is a duty that is owed to the court and overrides any obligation to the party from whom the expert is receiving instructions - see *R v Harris and others* [2005] EWCA Crim.1980.

Rule 33.2 Criminal Procedure Rules (Crim. PR) expands upon this by providing that an expert's duty includes obligations upon an expert:

- To define the expert's area or areas of expertise:
    i. in the expert's report, and
    ii. when giving evidence in person;
- When giving evidence in person, to draw the court's attention to any question to which the answer would be outside the expert's area or areas of expertise; and
- To inform all parties and the court if the expert's opinion changes from that contained in a report served as evidence or given in a statement.

Crim. PR, Rule 1 states that the 'overriding objective' of the rules is for criminal cases to be dealt with justly. This rule places certain obligations on each participant in the criminal justice process, which includes expert witnesses. These obligations require the participant to deal with the case justly and in an efficient and expeditious manner, complying with the Rules and any other direction that the court makes, and advising the court should he or another participant not comply with such rules and directions.

Admissibility of Expert Evidence

The general rule is that witnesses should only testify in relation to matters within their knowledge. Evidence of opinion or belief is inadmissible. However exceptions have been made by statute and at common law in relation to expert evidence.

Statute

Section 30 of the Criminal Justice Act 1988 states that an expert's report is admissible as evidence of fact and opinion, whether or not the expert attends court to give oral evidence, but if it is not proposed to call the expert witness, the leave of the court must obtained prior to introducing it.

In considering whether to grant leave, the court will have regard to:

- The contents of the report;
- The reasons why it is proposed that the expert will not give live evidence;
- The risk that it may not be possible to controvert statements in the report if the expert does not attend;
- Any unfairness to the accused; and
- Any other relevant circumstances - which, in practice, should include

consideration as to whether the Criminal Procedure Rules have been complied with and the extent to which the evidence would have been admissible at common law.

Common law

Expert opinion evidence is admissible at common law where:

1. It will be of **assistance** to the court

   For expert opinion to be admissible it must be able to provide the court with information which is likely to be outside a judge's or a jury's knowledge and experience, but it must also be evidence which gives the court the help it needs in forming its conclusions.

   The role of the expert is to give their opinion based on their analysis of the available evidence. The Bench or jury is not bound by that opinion, but can take it into consideration in determining the facts in issue.

   If the expert is seeking to advance an opinion which is not relevant to an issue in the case or which might be deemed a matter of common sense upon which the jury could reach its own conclusions, then the opinion of an expert will be inadmissible.

   For instance, in *R v Turner* (1975) 60 Cr. App R. 80, the issue as to the credibility of a witness was a matter for the jury. Psychiatric evidence as to how an ordinary person who was not suffering from a mental disorder would react to a given situation was held to be inadmissible.

2. The expert has **relevant expertise**

   The individual claiming expertise must have acquired by study or experience sufficient knowledge of the relevant field to render their opinion of value.

   The court is concerned that evidence should not be given by experts who are, patently unqualified or little more than 'enthusiastic amateurs'. More commonly, it is vital to ensure that an expert does not give evidence in relation to matters outside of their expertise - see *R v Clarke & Morabir* [2013] EWCA Crim. 162, a case where an expert in fractures and bone disease gave an opinion as to cause of death, in circumstances where the Court of Appeal held that he "did not have the experience or expertise to consider all of the causes of death" in the way that a Home Office registered forensic pathologist would.

   However, where the witness possesses relevant formal qualifications in the field of study, challenges to admissibility on the basis of lack of expertise will rarely succeed. Challenges may be more frequent if the expert has gained knowledge based upon experience or informal studies, but, even here, that

knowledge can be of assistance to the court.

In *R v Hodges* [2003] EWCA Crim. 290, the evidence of a police officer with years of experience in the investigation of drugs offences and using knowledge acquired from informants and arrested suspects was admissible in relation to the issue of the normal manner of supply of heroin, the usual price and the quantity of drugs that would constitute a supply for personal use. In *R (Doughty) v Ely Magistrates' Court* [2008] EWHC 522, the fact that a defence expert had not recently handled a speed detection device of the type used in the case before the Magistrates, nor had he attended the same approved courses as the prosecution expert was a matter which went to the weight to be attached to his evidence and was not a reason for ruling his evidence to be inadmissible.

If there is evidence that a witness has been discredited, then the court may need to examine this undermining material in order to form a view as to whether the witness can still be relied upon, or whether he is so discredited that his evidence should be ruled inadmissible. Alternatively, this material can be placed before a jury to allow them to assess weight to be attached to the evidence, as opposed to its admissibility.

3. The expert is **impartial**

The expert must be able to provide impartial, unbiased, objective evidence on the matters within their field of expertise. This is reinforced by Rule 33.2 of the Criminal Procedure Rules which provides that an expert has an overriding duty to give opinion evidence which is objective and unbiased.

An expert is independent of the parties to the proceedings and should not be seen to usurp the role of the advocate in the proceedings by seeking to make submissions to the court - see, for example, the case *R v Cleobury* [2012] EWCA Crim. 17, where a DNA expert sought in his report, prepared for the purposes of an appeal, to criticise the judge's summing-up in the original trial and commented on the importance of the forensic evidence to the case as a whole.

A potential conflict of interest does not operate so as to automatically disqualify a witness from giving evidence. The key question is whether the evidence that the witness gives is impartial and not, for example, whether he works for the same company as the defence expert. However, it is vital that any potential conflict is disclosed to the court and other parties to the proceedings by the party wishing to call the expert as soon as possible, so that an informed decision can be made as to whether the expert is impartial and what weight to be attached to his evidence - see *Toth v Jarman* [2006] EWCA Civ. 1028 and *R v Stubbs* [2006] EWCA Crim. 2312. In *Stubbs*, a bank employee was charged with conspiracy to defraud his employer using its online banking facility. The Court held that expert evidence as to the operation of that system could be given by another employee of the bank. It was admissible as long as the witness's status was explained to the jury so that

they could take this into account in assessing the weight to be attached to the evidence.

4. The expert's **evidence is reliable**

   There should be a sufficiently reliable scientific basis for the expert evidence or it must be part of a body of knowledge or experience which is sufficiently organised or recognised to be accepted as a reliable body of knowledge or experience.

   The reliability of the opinion evidence will also take into account the methods used in reaching that opinion, such as validated laboratory techniques and technologies, and whether those processes are recognised as providing a sufficient scientific basis upon which the expert's conclusions can be reached. The expert must provide the court with the necessary scientific criteria against which to judge their conclusions.

   In satisfying itself that there is a sufficiently reliable basis for expert evidence to be admitted, the court will be expected to have regard to Criminal Practice Directions Amendment No.2 [2014] EWCA Crim. 1569 (at paragraph V33A.5-6) which states:

   "33A.5 ... factors which the court may take into account in determining the reliability of expert opinion, and especially of expert scientific opinion, include:

   a. the extent and quality of the data on which the expert’s opinion is based, and the validity of the methods by which they were obtained;

   b. if the expert’s opinion relies on an inference from any findings, whether the opinion properly explains how safe or unsafe the inference is (whether by reference to statistical significance or in other appropriate terms);

   c. if the expert’s opinion relies on the results of the use of any method (for instance, a test, measurement or survey), whether the opinion takes proper account of matters, such as the degree of precision or margin of uncertainty, affecting the accuracy or reliability of those results;

   d. the extent to which any material upon which the expert's opinion is based has been reviewed by others with relevant expertise (for instance, in peer-reviewed publications), and the views of those others on that material;

   e. the extent to which the expert's opinion is based on material falling outside the expert's own field of expertise;

   f. the completeness of the information which was available to the expert, and whether the expert took account of all relevant information in arriving at the opinion (including information as to the context of any

facts to which the opinion relates);

g. if there is a range of expert opinion on the matter in question, where in the range the expert's own opinion lies and whether the expert's preference has been properly explained; and

h. whether the expert's methods followed established practice in the field and, if they did not, whether the reason for the divergence has been properly explained.

"33A.6 In addition, in considering reliability, and especially the reliability of expert scientific opinion, the court should be astute to identify potential flaws in such opinion which detract from its reliability, such as:

a. being based on a hypothesis which has not been subjected to sufficient scrutiny (including, where appropriate, experimental or other testing), or which has failed to stand up to scrutiny;

b. being based on an unjustifiable assumption;

c. being based on flawed data;

d. relying on an examination, technique, method or process which was not properly carried out or applied, or was not appropriate for use in the particular case; or

e. relying on an inference or conclusion which has not been properly reached.

If satisfied, having regard to the Criminal Practice Direction, that the evidence is sufficiently reliable, the court will leave the opposing views to be tested by the jury. The court will be keen to ensure that the jury is not deprived of useful relevant evidence that will assist them in determining the issues in the case. In these circumstances, the court may wish to allow the evidence to be admitted in circumstances where the jury is provided with the underlying information to allow them to judge the weight to be attached to it.

New or Novel techniques

In *R v Clarke (RL)* [1995] 2 Cr. App. R. 425, Steyn LJ stated that there were no closed categories of expert evidence that could be placed before a jury. It would "be entirely wrong to deny to the law of evidence the advantages to be gained from new techniques and advances in science".

Caution should always be exercised in assessing whether a new technique or novel science is accredited or is sufficiently sound to be admissible as evidence at trial. Guidance was provided by the Privy Council in *Lundy v R* [2013] UKPC 28 in which the factors to be considered were set out as:

1. Whether the theory or technique can be or has been tested;
2. Whether the theory or technique has been subject to peer review and publication;
3. The known or potential rate of error or the existence of standards; and
4. Whether the theory or technique used has been generally accepted.

Challenges to Admissibility

The exclusion of expert evidence on the basis that it is inadmissible at common law will be rare. Applications to exclude prosecution expert evidence can be made by the Defence on the grounds that its prejudicial effect outweighs its probative value in accordance with section 78 PACE. Further, the courts have indicated that have been prepared to exclude prosecution and defence evidence, which although relevant and of probative value, is insufficiently helpful to the jury in reaching its conclusions - see *R v Turner* (1975) 60 Cr. App. R. 80 and *R v Hamilton* [2014] EWCA Crim. 1555.

Rather than risk having evidence excluded in its entirety, prosecutors are advised to consider and discuss with experts the extent to which their evidence can be edited. This could be useful where a report is generally admissible, but contains some material conclusions on unproven facts, or where the expert strays outside of his expertise to comment on other issues in the case.

Challenges are more likely to succeed because a party has not complied with its obligations under the Criminal Procedure Rules - see Case Preparation and Management below.

If a challenge on the grounds of inadmissibility is unlikely to succeed, prosecutors should be prepared to use the information available to them to cross examine Defence experts with a view to undermining the weight to be attached to that evidence - see Challenging Defence Experts.

Choosing an Expert

An expert may be instructed at any stage of a case, from the outset of the investigation to the point of trial. Prior to choosing an expert, prosecutors must have regard to how the expert is to be paid.

See further see Expert Fees below.

In cases referred to the CPS this falls into two categories.

Police / CPS instructions

The police pay for all investigative work and the CPS pay for all work relevant to the

presentation of the case at trial. This is the more common scenario where an expert will have been consulted and a statement obtained in advance of the prosecutor's involvement in the case.

In relation to forensic evidence, most police forces contract expert services from a range of independent accredited suppliers, in accordance with detailed commercial procurement procedures, which should address issues such as competence and accreditation. Alternatively, they undertake the work in-house. It is useful to establish at this stage whether the provider is accredited to do the work and that the assigned expert is competent.

CPS instructions

This can occur in limited situations, for example the instruction of a psychiatrist post-charge to assess a defendant's fitness to plead/stand trial. This is paid for by the CPS with no police involvement.

For Guidance on Choosing an Expert and an explanation on why the CPS does not maintain its own database of expert witnesses see: Expert Witnesses - how to find one.

Prosecutors might want to consider some of the following points on making a choice:

- Is an expert needed at all, or is this a matter upon which the court can reach its own conclusions on the evidence without assistance?
- Upon what issues is the expert's opinion being sought?
- What is the evidence upon which that opinion being sought. Has it been gathered and is it available to the expert in an admissible form?
- Can colleagues in the police/CPS (not necessarily involved in the case) recommend someone whom they have instructed in other cases? If so, prosecutors will still need to satisfy themselves that the witness's evidence meets the criteria for admissibility. Websites and databases cannot always be relied upon.
- Is the expert one who not only has the requisite expertise, but can also draft a concise and understandable report/statement, and is experienced in and able to give evidence before the criminal courts?
- If an expert claims to be the only person in his field, be prepared to challenge this and ask the expert to provide evidence to justify the assertion.
- Has the expert complied with Quality Standards published by the appropriate regulatory body? Has he ever been the subject of adverse judicial comment or disciplinary proceedings?
- Is a copy of the expert's CV available? The investigator should attempt to

identify other criminal cases that the expert has worked on, and prosecutors may wish to speak to the CPS lawyer dealing with those cases.

- In addition, even though an expert's fees may initially be an investigative issue, prosecutors need to be aware of the rates of pay right from the start of their involvement in the case.

- Is the expert's opinion being sought at the right time? This can be a difficult balancing exercise. The report should only be sought once the investigation has reached a stage where the evidence of fact has been obtained and the issues upon which assistance is needed are sufficiently clear to enable an opinion to be formed. However, prosecutors must be aware of the need to comply with the Criminal Procedure Rules as to early identification of issues and prompt service of reports.

Instructing an Expert

Whether the expert is instructed before or after charge it is desirable for the decision to instruct an expert to be agreed between the investigator(s) and the prosecution. The advantage of this approach is that:

- The most appropriate expert can be identified from the outset, i.e. as close to the start of the investigation as practicable in any given case; and

- The prosecutor can ensure that there is clarity as to what the expert is being asked to provide an opinion on. This is particularly important in cases which involve complex legal issues, for example causation.

This approach should reduce the potential for misunderstanding and delay caused by unnecessary work being undertaken by experts who have been provided with inaccurate or inadequate instructions.

Irrespective of whether an expert witness is instructed by the police or the CPS, the expert will be expected to have regard to the ACPO/CPS Guidance Booklet for Experts - Disclosure: Experts' Evidence, Case Management and Unused Material (May 2010) and prosecutors should be familiar with its content.

The Guidance Booklet for Experts provides a practical guide to preparing expert evidence and disclosure obligations. Unless the information in the booklet is to be incorporated into the letter of instruction to the expert, or the information has already been provided to the expert by the police, the Guidance Booklet should be forwarded to the expert.

An important part of the Guidance Booklet is the self-certificate at Appendix C. The investigator or prosecutor should ask the expert to complete this in all cases to provide assurance that the expert understands his disclosure obligations.

If the expert is instructed by the prosecutor, then the prosecutor should clearly identify the work to be undertaken in the terms of reference. This will involve

explaining the background to the work and specifying the issues, including a clear exposition of all relevant legal elements, on which an opinion is sought. In some cases, it may be necessary to limit the information given to the expert to avoid the risk of their conclusions being affected by confirmation bias, whereby the expert tests their hypothesis and conclusions by reference to confirming evidence, such as the prosecution's belief at to the identity of the suspect, as opposed to considering potentially conflicting evidence.

Drafting Terms of Reference

When drafting the terms of reference the prosecutor should not assume that the expert has a thorough knowledge of the criminal law and procedure. The law should be explained as succinctly and clearly as possible.

The Terms of Reference should include the following:

- The extent of the expert's remit i.e. precisely the issues, and/or the suspects, we want the expert to focus upon;

- The standard to which the expert is being asked to apply. For example, if being asked to address causation, the expert needs to be given clear guidance on the level of certainty the criminal court requires, and the need to avoid 'percentage' conclusions;

- Where the existing evidence of fact contains disagreement or ambiguity, the Terms of Reference should include an overarching narrative which sets out how the prosecution would propose to put the case in that regard, and ask the expert to provide his assessment based on that narrative. Alternatively, depending on the circumstances, the expert could be asked to advise based on a number of different scenarios. The key point is to ensure that the expert sets out clearly the factual basis upon which the opinion is based;

  If the material being sent to the expert contains reports from another professional then, insofar as the expert might wish to clarify any issue in the other professional's report, any discussion should be arranged through the investigator. Any discussion should be documented to ensure an auditable trail for disclosure purposes;

- The expert should be instructed to indicate immediately:

  - If he requires anything further - whether by way of legal guidance, evidence of fact, or expert evidence from other specialists - before reporting back. This should limit the number of experts' reports which are couched in contingent terms;

  - If any part of the Terms of Reference is unclear;

- An early, informal indication of the report's likely conclusions. This will enable the investigator to liaise with the prosecutor to consider which other areas of

evidence-gathering should be undertaken and inform of the overall timetable;

- All the relevant statements and exhibits. An expert's report based on a limited reading of the evidence is likely to be challenged by the Defence in cross examination;

- Finally, in terms of the content of the report itself, the expert should be reminded to preface his detailed observations by setting out (1) his experience and qualifications, and (2) an itemised list of the evidence and any other material (including the ACPO/CPS Guidance Booklet for Experts) with which s/he will have been supplied; and

- Timescales for completion of the report. This is vital given the Criminal Procedure Rules.

The Terms of Reference should be disclosed to the Defence.

Letter of Instruction

A letter template (Annex A) is provided for use only in cases where the CPS is responsible for instructing the expert. Where the police are responsible for doing so, prosecutors should still assist the police in drafting terms of reference for the expert. The prosecutor should complete the 'Assignment' section, and include the terms of reference. The section on fees may be completed by the paralegal.

The Letter of Instruction will need to address the issue of fees.

The expert should be encouraged to sign up to secure email as an efficient way of communicating. Further information and details are available using the link https://www.cjsm.net/.

Forensic Science

Those experts who provide forensic science analysis for use in the criminal justice system must comply with the Core Foundation Principles.

Compliance with these principles are a part of the procurement specification for police forces in obtaining forensic analysis, as is compliance with The Codes of Practice and Conduct of the Forensic Science Regulator (FSR).

The FSR sets applicable validation standards for scientific processes and provides accreditation (of individuals) of quality management standards in partnership with the United Kingdom Accreditation Service (UKAS). The FSR is independent of Government. It makes recommendations to forensic science providers as to how they can comply with the Codes and investigates non-compliance. The Regulator's focus is on ensuring that the criminal justice system has reliable forensic science.

It is for this reason that the Core Foundation Principles require compliance with the

Codes.

Whilst it is unlikely that prosecutors will have to instruct pathologists directly, pathologists instructed by the prosecution should be on the Home Office Register.

The Codes are a useful tool in understanding and challenging expert evidence and, under Core Foundation Principles, are mandatory for prosecution providers of forensic science. They are not mandatory for Defence providers, but may contain useful information for prosecutors to assist with cross examination.

Streamlined Forensic Reporting (SFR)

Streamlined Forensic Reporting (SFR) takes a more proportionate approach to forensic evidence through the preparation of short abbreviated reports detailing the key forensic findings that the prosecution intend to rely upon.

Used effectively, SFR has the potential to:

- Avoid the need for full forensic evidence to be produced when it is unlikely to be in dispute.
- Ensure that additional forensic testing is only undertaken when the case requires it, thereby saving the time of expert witnesses to concentrate on other work.
- Encourage early guilty pleas through a targeted and appropriate file building.
- Tackle delay and inefficiency through robust case management, ensuring that justice is dispensed more swiftly, thereby improving the service delivered to victims and witnesses.
- Reduce costly trial proceedings for cases that eventually result in a guilty plea.

Guidance on SFR can be found here.

It is vital that prosecutors address SFR staged reports as soon as they are received with a view to endeavouring to agree them with the Defence as early in the proceedings as possible. Specifically, prosecutors are advised to:

1. Ensure that the initial report (SFR 1), in conjunction with the other evidence in the initial details of the prosecution case, contains sufficient information to manage the case by allowing the Defence to decide whether the forensic evidence is accepted. For example, a SFR 1 report into a DNA match should specify the nature of the crime scene sample, its location, the match with the offender and the likelihood ratio.
2. If it is accepted, then the Prosecution or Defence should seek to agree the evidence by way of an admission made in accordance with section 10 of the

Criminal Justice Act 1967.

3. In a magistrates' court case, the fact that the forensic evidence is being agreed should be recorded on the case management form.

4. In a Crown Court case, prosecutors should attempt to agree the SFR 1 as soon as possible, for example at the point of the initial review post allocation. Leaving the issue to be resolved at the plea and case management hearing could leave insufficient time to allow further reports to be obtained, if needed.

5. The nature of any issues raised by the Defence should be clarified with sufficient precision to allow the Stage 2 Report (SFR 2) to be completed.

6. This will be sent to the expert who should produce a full report or statement that complies with Crim. PR 33.3.

7. SFR is likely to be used for DNA and fingerprint analysis, but is being extended into other areas, such as drugs analysis and firearms classification. It is unlikely to be appropriate in cases of novel or developing science.

Use of SFR and Summaries of Expert Evidence

Crim. PR 33.3(1) and (2) provides that where a party wishes the other party to make an admission in relation to a **summary** of expert evidence (which would include a Stage One SFR or a DNA match report), he must serve that on the court and the other party as soon as is practicable after the entering of a not guilty plea. The opposing party must respond within 14 days, setting out which of the expert's conclusions are admitted, and in relation to those that are disputed, what the issue is.

Content of an Expert's Report

The content of an expert's report or a statement prepared by an expert must comply with Rule 33.4 of the Criminal Procedure Rules. Crim. PR 33.4 does not apply a summary of expert evidence served in accordance with CPR 33.3(1) (per Crim. PR 33.3(2)).

The rule states:

> 33.4.
>
> 1. An expert's report must -
>
>   a. give details of the expert's qualifications, relevant experience and accreditation;
>
>   b. give details of any literature or other information which the expert has relied on in making the report;

c. contain a statement setting out the substance of all facts given to the expert which are material to the opinions expressed in the report, or upon which those opinions are based;

d. make clear which of the facts stated in the report are within the expert's own knowledge;

e. say who carried out any examination, measurement, test or experiment which the expert has used for the report and -

   i. give the qualifications, relevant experience and accreditation of that person,

   ii. say whether or not the examination, measurement, test or experiment was carried out under the expert's supervision, and

   iii. summarise the findings on which the expert relies;

f. where there is a range of opinion on the matters dealt with in the report -

   i. summarise the range of opinion, and

   ii. give reasons for the expert's own opinion;

g. if the expert is not able to give his opinion without qualification, state the qualification;

h. include such information as the court may need to decide whether the expert's opinion is sufficiently reliable to be admissible as evidence;

i. contain a summary of the conclusions reached;

j. contain a statement that the expert understands an expert's duty to the court, and has complied and will continue to comply with that duty; and

k. contain the same declaration of truth as a witness statement.

In assessing what to include in the report, in order to comply with CPR 33.4 (1)(h), the expert should have regard to the content of at paragraph V33A of *Criminal Practice Directions Amendment No.2 [2014]* EWCA Crim. 1569 – see Admissibility of Expert Evidence above.

To the extent that an expert's evidence is also in the form of witness statement, it must also comply with Section 9 Criminal Justice Act 1967 and Rule 27 of the

Criminal Procedure Rules.

The primary facts upon which the expert's opinion is based, such as a description of what is found and its location must be proved by admissible evidence. This evidence will derive from the expert's own personal knowledge or experience, or evidence of other witnesses.

Section 127 of the Criminal Justice Act 2003 allows a party to rely on hearsay evidence to assist in proving the facts upon which the expert's opinion is based, if those facts are contained in a statement made for the purposes of criminal proceedings (or an investigation), by a person who had first-hand knowledge of the matters stated. However, the fact that the expert is relying upon such evidence and the details of the maker of that preliminary evidence should be disclosed in the notice serving the expert evidence on the other party (Archbold paragraph 11-47).

Non-compliance with Crim. PR 33

The Court of Appeal has made clear in *R v Reed, Reed & Garmson* [2009] EWCA Crim. 2698 (at paragraphs 129-131) that failure by the Prosecution or the Defence to comply with Crim. PR 33 could result in a ruling by the trial judge that the expert witness should not be called.

Further support for a robust approach to be taken in relation to expert evidence and the content of reports can be found in *R v Hamilton* [2014] EWCA Crim.1555 (at paragraphs 43-44).

Points to Note

1. Any literature and material relied upon should be listed and disclosed with the report or statement.

2. Once the primary facts upon which an expert bases his conclusions are proved, they can draw on the work of others in reaching those conclusions but should set out in the report where they have done so.

3. Changes of opinion should be disclosed as soon as possible in accordance with Crim.PR 33.2.

4. Conclusions based on statistical analysis, whereby a numerical probability is attached to the likelihood of an event should be confined to those cases where there is a solid statistical basis for that analysis. The prime example is DNA analysis, where it is possible to measure the number of people who share the same DNA and where the characteristics are un-changing - see *R v Adams (Dennis)* [1996] 2 Cr. App .R. 467 and *R v T* [2010] EWCA Crim.2439.

5. Drawing upon his experience, an expert may enumerate a range of possible explanations for a particular event where the underlying science is sufficiently reliable and the circumstances of the particular case permit it. This is provided

that he makes any limitations on his evidence clear and does not convey the impression that he is certain when he is not. See *R v Reed, Reed & Garmson*.

An expert can express his conclusions in terms of the degree of support that a forensic procedure provides for that conclusion and based on his experience in the field provided that:

- He emphasises that it is a subjective opinion;

- The absence of an objective criteria (such as a database of persons sharing the same characteristics) is made clear to the court;
- The degree of support is expressed in conventional language that is not designed to mislead (for example, strong, very strong etc.); and
- The expert is prepared to explain and justify that degree of support.

An example of this type of conclusion can be found in *R v Atkins & Atkins* [2009] EWCA Crim. 1876, where an expert compared facial features in photographs of the offenders with a CCTV shot and highlighted what he concluded were similarities. There is no database of facial features from which to calculate the frequency with which those features appear in the population at large or sub-sets of the population. The expert was permitted to say that the similarities that he had identified lent support/strong support to his conclusion that the offenders were the persons shown in the CCTV.

Understanding an Expert's Report

It is crucial that experts are instructed who are capable of conveying their findings and conclusions in a way that is easily understood by the lay person. As a participant in criminal proceedings, the expert has a duty to ensure "that evidence whether disputed or not, is presented in the clearest and shortest way" (Crim. PR 3.2.2 (e)). Reports should be robust, logical, transparent and balanced.

If not, or if an expert's report opens up issues which require further exploration, or which clash with other expert evidence on the file, a supplementary report could be requested from the expert. It remains open to the prosecutor to discuss with the expert by telephone, the contents of which may need to be added to the Disclosure Schedule, whether the matters requiring exploration are sufficiently straight-forward as to be best capable of development or resolution by an additional report, or whether they need to be explored by way of a case conference.

Case Conferences

A case conference with an expert may be required pre or post a charging decision. Experts are usually more than willing to participate in the conferences as they

appreciate the importance of having a full understanding of the issues before the trial commences.

Care should be taken to avoid delaying a conference until a late stage in the proceedings as it may be too late at that point to obtain additional reports, if required, or to correct any misunderstandings. An early conference can assist the preparation of the case for trial.

The following steps should be taken in relation to conferences with prosecution experts and the prosecution team:

- A conference agenda should be circulated to all attendees in advance;
- All experts attending the conference should have documented access to the same case materials, including one another's reports;
- Following the meeting, a conference note should be prepared by the CPS at the earliest opportunity and circulated to participants. Each of the experts should then endorse the note as being a full and accurate representation of the views they expressed in conference. This step is absolutely critical and should not be missed. The conference note then becomes relevant material for the purposes of CPIA; and
- If, as a result of the conference, there is significant movement in an expert's view, such that a conference note alone will not suffice, the expert should be asked to prepare a further statement at the earliest opportunity, setting out the amended position to be served as further evidence.

Note: There are risks in having a case conference before an expert has committed his opinion to writing. This is because there needs to be a clear, auditable record of the expert's original view - not merely for disclosure purposes, but in order that everyone attending the conference understands clearly the views of the expert in relation to the evidence.

Conferences may be required for a number of reasons. In particular, they provide an opportunity to explore with experts whether there exists:

- A dissenting body of professional opinion upon which the defence is likely to rely. If so, this should be explored: How has that dissenting opinion been received in trials elsewhere? How should it be dealt with?
- Any other specialist expert input that the existing expert(s) considers should be obtained.
- Any additional information that can be used or obtained in order to assist the advocate in challenging Defence expert evidence.
- A way in which difficult technical evidence can be better explained to a jury.

The case conference is also an opportunity to see how the expert "presents" when

their views are explored around the conference table.

If the purpose of the conference is to explore or resolve evidence issues, then the cost of that conference (in terms of experts' fees) is an investigative one for the police to bear. This applies whether the conference occurs at the pre or post charge stage. If the conference is held for other purposes, expert fees may be met, at least in part by the CPS. Where the CPS may be asked to meet some of the expert's costs, this should be discussed in advance of arranging the conference with the Unit Head.

Service of an Expert's Report

Section 81 of the Police and Criminal Evidence Act 1984 (Crown Court cases) and Section 20 Criminal Procedure and Investigations Act 1996 (Magistrates court cases) provide for the making of rules requiring the parties to proceedings to make advance disclosure of any expert evidence that they propose to rely on. A party to proceedings is prohibited from adducing such evidence, without leave of the court, should advance disclosure not be made.

Crim. PR 33.3(3) requires that expert evidence must be served on the court and the other party to proceedings as soon as is practicable, with any application in support of which that party relies upon that evidence.

Crim. PR 33.3(3)(c) requires that the party serving the expert report, serve with it anything, of which it is aware, which "might reasonably thought capable of detracting substantially from the credibility of the expert."

Crim. PR 33.3(3)(d) requires that, if requested, the party serving the expert evidence must also provide a copy of, or a reasonable opportunity to inspect, a record of any examination, measurement, test or experiment on which the expert's findings and opinion are based, or that were carried out in the course of reaching those findings and opinion. In addition, that party must provide a copy of, or a reasonable opportunity to inspect, anything on which any such examination, measurement, test or experiment was carried out.

A party may not introduce expert evidence if that party has not complied with this rule, unless every other party agrees or the court gives permission.

Crim. PR 33.5 stipulates that at the same time as serving the expert's report on the prosecution, the court and any co-accused, the party serving the report must inform the expert that it has been served.

These provisions do not apply to the service of summaries of experts' conclusions, in relation to which, please see Use of SFR and Summaries of Expert Evidence above.

Case Preparation and Management

Expert witnesses are participants in criminal proceedings. Therefore they must act in accordance with the overriding objective of the Criminal Procedure Rules which is to ensure that criminal cases are dealt with justly. Dealing with a criminal case justly includes acquitting the innocent and convicting the guilty, whilst dealing with the case efficiently and expeditiously.

Good case management will require the expert to address at an early stage any alternative hypothesis. To do so, he should be provided with a copy of any Defence Statement as soon as possible.

Authorities (*Reed, Reed & Garmson; R v Henderson & others* [2010] EWCA Crim. 1269) have stressed the importance of case management stipulating that:

- Expert reports should spell out with precision its conclusions and the basis for them;
- The reports must be carefully analysed by the parties and any disagreement brought to the attention of the judge as soon as possible and preferably by the date of the plea and case management hearing;
- The judge can then decide whether to exercise his power to make an order for a joint statement under CPR 33.6 - see below.

Examples of how experts can assist in terms of complying with CPR 1 and CPR 3 include preparing reports that are short, concise and easily understood by lay people, complying with timescales set out in letters of instruction and attending case conferences.

Joint Reports and Case Conferences between Experts

Rule 33 of the Criminal Procedure Rules sets out how the court will seek to manage the expert evidence in a case through joint prosecution and defence expert reports and Case Conferences between experts for each party. The aim is to limit the issues in dispute, ensuring that the bench or jury can focus on the key issues in the case and have a clear understanding of each issue.

33.6.

1. This rule applies where more than one party wants to introduce expert evidence.
2. The court may direct the experts to;
    a. discuss the expert issues in the proceedings; and
    b. prepare a statement for the court of the matters on which

they agree and disagree, giving their reasons.

3. Except for that statement, the content of that discussion must not be referred to without the court's permission;

4. A party may not introduce expert evidence without the court's permission if the expert has not complied with a direction under this rule.

Prosecutors should take the initiative in seeking to arrange a conference between experts, only seeking a court order, where necessary.

Experts should be asked to set out in a joint statement the basic science and accepted principles underlying their field of expertise and the points where they agree and disagree. These points can be put to the Magistrates or jury by way of formal admission, leaving them to decide upon the issues in dispute.

In the case of *R v Henderson and others*, it was held that these meetings should take place in the absence of legal representatives with a careful and detailed minute prepared for the purposes of disclosure. It was also emphasised that the trial judge should be prepared to exclude evidence of an expert witness who fails to comply with such a direction to discuss his evidence.

Co-Defendants

Crim. PR 33.7 provides that where more than one defendant wants to introduce expert evidence on an issue at trial, the court may direct that the evidence on that issue is to be given by one expert only. Where co-defendants cannot agree who should be the expert, the court may select the expert from a list prepared or identified by them, or direct that the expert be selected in another way.

Under Crim. PR 33.8, where the court gives a direction under Crim. PR 33.7 for a single joint expert to be used, each of the co-defendants may give instructions to the expert and must, at the same time, send a copy of the instructions to the other co-defendant(s). In addition, the court may give directions about the payment of the expert's fees and expenses and any examination, measurement, test or experiment which the expert wishes to carry out.

Although these provisions relate to co-defendants, prosecutors will have sight of reports and should be alive, particularly in multi-handed cases, to the dangers of confusing the jury with large amounts of expert evidence, often covering the same points. In these circumstances it is part of the prosecutor's duty to assist the court in actively managing the case to raise the need for a single joint report.

Examinations/Access

It is likely that once a Defence expert is instructed, that expert may wish to have access to the material analysed by the prosecution expert in the completion of his

report.

In criminal proceedings, the court has a duty to retain and preserve the exhibits in a case, which it entrusts to the Prosecution Team, usually the police. For guidance on how to respond to requests for Defence access to such material, please refer to guidance on Exhibits.

It is essential that requests for access to Defence exhibits are dealt with in an expeditious manner as failure to respond to these requests could result in delay and criticism from the court. It also needs to be noted that in a commercial market for the provision of forensic science and other expert evidence, many prosecution providers will wish to charge for the provision of documentation to the Defence expert and for allowing the expert access to their premises, equipment and staff.

The following points are designed to assist prosecutors in addressing these requests. They should be read in conjunction with the guidance on Exhibits:

1. The Legal Aid Authority (LAA) has indicated that, where appropriate, charges levied upon the defence by prosecution forensic science laboratories for provision of documentation to the defence expert and for allowing the expert access to their premises, equipment and staff may be payable by the LAA.

2. The LAA will only authorise payment where it considers the charge to be reasonably incurred and reasonable in value, and has granted prior authority to incur the cost. There should be no additional charge levied by the prosecution forensic service supplier for:

    - The preparation of statements and exhibits for service on the defence as part of the prosecution case;

    - The provision to the defence of unused material which the prosecutor deems meets the test for disclosure, both at the primary and secondary disclosure stages;

    - Completion of further forensic work requested by the police/prosecutor to rebut a defence put forward by the defendant, which may or may not be highlighted in a Defence expert's report or Defence Statement.

3. Where the Defence requests access to the copy of a case file, or access to the exhibits for the purposes of preparing a Defence expert report:

    - They should put that request in writing;

    - The prosecution should reply in good time, indicating their consent and explaining that access to exhibits should occur at the premises of the police or prosecution provider. The Defence should be advised that they should write to the police or prosecution provider (depending on who holds the material), but that the police or provider may levy a charge for access to cover provision of materials, loss of laboratory facility and staff supervision; and

- The prosecution should ask the Defence to produce a copy of your letter to the police or prosecution provider. A copy of this letter should be sent to the police or provider directly, or via the investigator;

4. Prosecution providers are encouraged to publicise their charges so that the Defence and experts instructed by them can make appropriate arrangements to obtain funding to cover the cost of any charge; and

5. Requests for Defence Experts to take possession of exhibits should only be acceded to in exceptional circumstances and, only then, after consultation with the police Scientific Support Manager (SSM). The SSM will be able to advise on issues which ought to be taken into consideration such as to the extent to which the Defence expert is accredited to undertake the proposed work, issues of security and what (if any) conditions should be attached to the release of the material. This advice from the SSM can be used to inform the terms of any undertaking to be entered into by the Defence, or application to the court, in accordance with the guidance on Exhibits.

Disclosure

Investigators are under a duty to consider all of the material gathered in the course of an investigation and decide whether it is relevant to that investigation, and, in relation to material that is not being used as evidence, the prosecutor must decide if it should be disclosed. Unused material should be disclosed to the Defence if it assists the defence case, or undermines the prosecution case. This might include any draft report prepared by an expert instructed by the prosecution.

Material that has a bearing on the competence or credibility of an expert witness or is generated by him in the course of his analysis is relevant to a criminal investigation and potentially should be disclosed in subsequent proceedings. Examples of material that might be disclosed include:

- tests carried out in the laboratory, the results of which cast doubt on the expert opinion; and

- whether a particular hypothesis used or formulated in a case is controversial.

The expert is a third party to those proceedings and is not bound by the provisions of the Criminal Procedure and Investigations Act 1996. The police and CPS seek to impose these obligations on the expert as part of their contractual relationship with the expert. This is why it is vital to provide the expert with a copy of the Guidance Booklet for Experts and ensure that s/he signs the self-certificate, see ACPO/CPS Guidance Booklet for Experts.

Experts will facilitate proper disclosure in criminal proceedings if they remember that they should follow this process in relation to material generated by them in the case:

- **Retain** - all material and documentation generated in the case, until otherwise

instructed, or in accordance with guidance on the retention of materials;

- **Record** - at all stages of the expert's involvement in the case on the correct index; and

- **Reveal** - everything that has been recorded to the Disclosure Officer.

An expert witness must make all of his material available to other experts and cannot refuse to disclose material such as accreditation documentation, staff training records or details of software developed to analyse information on the basis of the need to protect his intellectual property rights.

For more detail on the duties of disclosure relevant to expert witness, see Chapter 36 of the Disclosure Manual.

Doubts about the Competence and Credibility of the Expert Witness

Guidance on dealing with cases where the competence or credibility of an expert witness is in doubt can be found at Chapter 37 of the Disclosure Manual. The following Guidance is additional to and is not intended to replace Chapter 37.

The guidance is informed by CPS experience in dealing with a number of such cases since the drafting of Chapter 37 of the Disclosure Manual in 2005. The guidance also takes account of the changed forensic science landscape following the recent disbanding of the Forensic Science Service (FSS). Forensic science providers (FSP) may include private companies, government agencies, public organisations, academic research departments and law enforcement agencies.

Information may be received that casts doubt on the competence and/or credibility of an expert witness. The issues may involve the methodology and systems used by the expert and might be capable of impacting on cases involving other experts employed by the same FSP or another organisation.

Disclosure to the defence in current investigations will be governed by CPIA principles. In past cases the test to be applied for disclosure is whether the information received might affect the safety of the conviction (this is the common law test set out in paragraph 72 of the Attorney General's Guidelines on Disclosure). The overriding principle in deciding whether, and to what extent, action is needed in current and past cases will be the need to maintain public confidence in the criminal justice system.

Where material or information relating to the competence and/or credibility of an expert meets the CPIA disclosure test in current cases or affects the safety of the conviction in past cases, the only action normally required by the CPS is to send a disclosure package to the defence.

In rare cases further action might be required. Such further action will include the following:

- Informing third party organisations and other Government Departments: the Law Society, the Bar Council, the Attorney General's Office, the Criminal Cases Review Commission and other prosecuting agencies etc.

- A full and formal national review by Operations Directorate at CPS Headquarters – see the section on Disclosure in past cases below.

How will CPS become aware of a Competence/Credibility Issue regarding an Expert?

Information on the competence and/or credibility of an expert can come from a number of sources. Whilst it is impossible to provide an exhaustive list of sources, examples include the following:

- Complaints made to the expert's regulatory body (e.g. General Medical Council, Home Office Pathology Delivery Board etc);

- Disciplinary Proceedings before the expert's regulatory body. Some regulatory bodies will notify the CPS (nationally or locally) when such Disciplinary Proceedings are instituted;

- Adverse judicial findings in cases at first instance;

- The Court of Appeal: Where a conviction founded on the basis of expert evidence has been overturned; or where the Court of Appeal has commented adversely on the expert evidence;

- Report from the reviewing lawyer or prosecution advocate where issues have been identified in the conduct of an individual case;

- Revelation by the police of an expert's previous convictions and cautions/ other out of court disposals;

- The expert's self-certificate; or

- Another prosecuting agency or the media.

Summary: Decisions to be made by CPS

On being informed that the competence and/or credibility of an expert is called into question, some or all of the following decisions will need to be made by CPS. The remainder of this section will deal with these decisions sequentially:

- Whether disclosure to the defence is required in the individual current cases which have been identified? Disclosure decisions in current cases will always be made on a case-by-case basis in accordance with CPIA principles;

- Whether action is required in addition to disclosure to the defence, for example, should third party organisations be notified;

- Whether to instruct a second expert to re-do the work (where the relevant

exhibit or the body of the deceased remains available) or to review the work/ evidence of the discredited expert, and;

- Whether the issue has potential to impact on other current and past cases involving the particular expert, in which case Operations Directorate at CPS Headquarters will need to be consulted.

Obtaining further information to inform some or all of the above decisions

Frequently, CPS will require further information before the decisions above can be made. Prosecutors will assess on a case-by-case basis whether it appropriate to seek the further information directly or to request the investigator to obtain the further information.

Such further information is likely to include the following (the list is not exhaustive):

- Obtaining full details of any complaint to the expert's regulatory body and details of any consequent Disciplinary proceedings before that body, including disciplinary findings. The regulatory body may have commissioned a peer review of the expert's work. The CPS should request a copy of the peer review;

- Where the complaint relates to the competence and/or credibility of the expert in an earlier criminal prosecution, the CPS will obtain the source documentation giving rise to the complaint (i.e. the expert's reports and findings and relevant court transcripts);

- Transcripts of adverse judicial findings;

- Assurances from the FSP or other organisation or regulatory body that safeguards are sufficient to prevent the repeat of errors;

- Information on whether the expert is available/ fit to attend court as a witness, if still required;

- Obtaining information on the methodology, systems and safeguards operated by the FSP or other organisation at which the expert is based;

- Full details of any internal investigation carried out by the FSP (or other organisation).

Disclosure to the Defence in Current and Past Cases

Material relating to the competence/ credibility issue may meet the CPIA disclosure test in some cases and not in others. The disclosure test is applied on an individual case basis and the following factors will be relevant:

- The issues in the case and, in particular, whether the expert's evidence is likely to be challenged by the defence (by reference to the defendant's account in interview and the defence statement). By way of a simple example,

if the defendant has admitted killing the victim by shooting him at point blank range (but claims self-defence) the pathology evidence is unlikely to be challenged;

- The nature and degree of the lack of competence/ credibility; particularly in the context of the issues in the case;

- Where the competence/ credibility issue amounts to evidence of bad character for the purposes of section 98 Criminal Justice Act 2003 (commission of an offence or other reprehensible behaviour), the likelihood that the court would admit the evidence (or allow cross examination) under section 100 Criminal Justice Act 2003 - non-defendant's bad character; and

- As a general rule, misconduct amounting to dishonesty should be deemed to satisfy the disclosure test. Further guidance on these principles can be found in: Disclosure of Previous Convictions of Prosecution Witnesses.

In past cases, the test to be applied is whether the information/ material might cast doubt on the safety of the conviction. Whilst the factors referred to above will be relevant to prosecutors in applying this test, the overriding consideration is whether the conviction remains safe taking into account the totality of the evidence considered by the court that convicted the defendant.

Guidance on the Contents of a Disclosure Package

Where the disclosure test is satisfied (CPIA test in current cases; common law test in past cases), the prosecutor will determine what material will be sent to the defence. Further guidance on what to include can be found in Chapter 37 of the Disclosure Manual.

Prosecutors must ensure that sensitive material is not included in the disclosure package sent to the defence. Particular care should be taken to check any sensitivity which might be attached to details of complaints to regulatory bodies. Where appropriate, CPS should contact the regulatory body to check whether the material is in the public domain and to discuss redaction, or obtaining a summary of, the material, should any sensitive material require disclosure.

The disclosure letter to the Defence should be sent with a covering letter. The letter will include the legal basis for disclosure (CPIA or common law), a brief summary of the issue casting doubt on the expert's competence and/or credibility, a list of the material disclosed and (in current cases only) an indication that admissibility of the material at trial may be subject to the test(s) in section 100 Criminal Justice Act 2003 (evidence of a non-defendant's bad character).

Instructing a Second Expert

In current cases (and highly exceptionally in past cases), the CPS will determine whether to instruct a second expert to re-do the work or review the work of the

discredited expert.

It may be possible for the work to be re-done where the relevant exhibits remain available and intact (otherwise, the second expert will conduct a full review of the work by reference to all available case materials). Where the relevant expert is a pathologist, a further post mortem may be appropriate where the body of the deceased remains available. Prosecutors should consult with the police and HM Coroner.

In deciding whether to instruct a second expert, prosecutors will take into account the following factors:

- the nature and seriousness of the offence; the nature and degree of the competence/ credibility issue;
- the extent to which the expert's evidence is likely to be unreliable; the extent to which the expert evidence is likely to be contested; and
- whether the discredited expert remains available to give evidence.

In addition to consulting with the police, it may be appropriate for prosecutors to consult with the expert's regulatory body in selecting a second expert. The regulatory body may already have instructed other expert(s) to review the work of the discredited expert in relation to complaint(s) made to that regulatory body.

Prosecutors should act expeditiously in instructing a second expert, particularly in cases involving a custody time limit.

Continuing to Rely on the Discredited Expert

In current cases, prosecutors must determine on a case-by-case whether to continue to rely on the expert. The decision will usually be made following consultation with the police and, where appropriate, with the expert's regulatory body. CPS will take into account the factors above.

Consideration should be given as to whether the expert should be used in any future cases. That decision will be made by CPS Operations Directorate in conjunction with the CCP and will be conveyed to all CPS Areas. In highly exceptional cases, consideration should be given as to whether the FSP / other organisation at which the expert works should be used in future cases.

Extent to which disclosure will be required in cases other than the case at hand

In some cases, the CPS will only need to consider disclosure in the case in which the issue over the expert's competence/ credibility has arisen. An example would be a one-off error by the expert which is unlikely to be repeated and which is not indicative of inadequate working practice generally on the part of the expert or of

systemic failure on the part of the FSP or other organisation at which the expert works.

A decision not to consider disclosure in current and past cases beyond the case in question must be made by a lawyer at level E or above. It will usually be appropriate to seek written assurances from the FSP (or other organisation) or from the relevant regulatory body that they are satisfied that the error will not be repeated.

Disclosure in other Current Cases

In consultation with the police, the CPS Area will assess the number and geographical span of current cases in which disclosure is to be considered. The CPS Witness Management System (WMS) has capability to trawl cases by reference to a named prosecution witness. Police systems can also be used to trawl for cases.

In rare cases, prosecutors will consider whether to include other cases handled by the same FSP or other organisation at which the expert has worked. This consideration will typically arise where the methodology, systems or safeguards used by the FSP (or other organisation) at which the expert works are called into question.

If it is possible that the expert has worked in other Areas (or the FSP/ other organisation serves other Areas) then CPS Operations Directorate should be informed. The Directorate will consider whether to take a coordinating role in disclosure across the service. Consideration should also be given to whether the expert has worked for other prosecuting authorities and if so those authorities should also be informed.

Disclosure decisions in current cases will always be made on a case-by-case basis. Where the CPIA disclosure test is met, disclosure will be made to the defence in accordance with the principles summarised above.

Disclosure in Past Cases

In order to decide if a review of past cases is required, prosecutors should refer to Legal Guidance on Reviewing Previously Finalised Cases.

Using the Expert Witness at Court

Every effort should be made to minimise the number of appearances the expert is required to make in court and to ensure their evidence is deployed to the greatest effect. This can be done through ensuring that cases are properly managed in accordance with the principles set out above, and effective case management at court.

For example, it is advisable to ask the court at the PCMH to fix a date and time for the prosecution expert to attend, ensuring that the defence expert attends at the

same time.

If the case involves a number of very technical issues which the jury needs to understand it may be useful for the expert to provide his or her evidence in two stages. Firstly, by explaining what the technical terms/processes mean, possibly by way of a glossary of terms; then by applying the technical knowledge to the particularities of the case. Diagrammatic and photographic illustration, so long as it has been seen and approved by the expert witnesses, particularly the use of body-map technology can be of considerable assistance to the witness as well as to the judge and jury. Advocates can deal with such evidence in a similar fashion when opening the case.

In *R v Dlugosz and others* [2013] EWCA Crim. 2, the Court of Appeal commended the use of a written presentation setting out the basic science of DNA for use by the jury. Prosecutors should consider requesting experts to prepare such a document in conjunction with the Defence expert to assist the jury in its deliberations.

Examination in Chief

Examination in chief should be prepared with particular care so as to ensure that the jury are given the clearest possible presentation of the evidence and its relevance to the issues in the case. Particular care is needed to present the findings at a pace which enables the jury to follow the evidence. Topics should be taken sequentially, and in a clear and logical manner so as to ensure the jury understands the conclusions and the reasoning behind the conclusions.

Cross Examination

Cross examination of experts requires particular care and preparation. Where necessary, the points of challenge to a defence expert should be discussed with the prosecution expert in conference, who may also provide a view on the credentials of the defence expert.

In considering how the Defence evidence is to be challenged, it is essential that the issues in dispute are identified. This may be done following joint conferences between the prosecution and defence – see above.

Once the issues in the case are identified, the advocate should decide the key points to be challenged. The expert should deal with all of these points in chief.

When considering how to cross examine the Defence expert, the following considerations may assist:

- What points has the Defence expert been asked to address? Are there any obvious points which the Defence is not considering?
- What evidence has the Defence expert looked at? Has he seen all the evidence including, for example, interviews under caution? A report based on

incomplete information is going to be of little weight. Has he relied upon assertions made by the Defendant or other unproved matters? Has he failed to understand the prosecution evidence?

- What opinions are the products of science and what opinions are the products of professional experience? If the science is agreed, then it will be the expert's personal judgment that will be the subject of scrutiny.

The prosecution expert should be present, if possible, when the Defence expert is called to give evidence.

Challenging Defence Experts

Basis of Challenge

It should not be assumed that the only way in which to challenge a Defence expert is by the prosecution calling its own expert. Other bases of challenge include:

- **Failure to comply with Crim. PR**

  The courts have indicated that they are prepared to refuse leave to the Defence to call expert evidence where they have failed to comply with Crim.PR; for example by serving reports late in the proceedings, which raise new issues (*Writtle v DPP* [2009] EWHC 236). See also: *R v Ensor* [2010] 1 Cr. App. R.18 and *Reed, Reed & Garmson* [2009] EWCA Crim. 2698;

- **The expert's qualifications and experience**

  Prosecutors should be prepared to explore (with a prosecution expert, if necessary) whether the Defence expert is in sufficiently expert in the field and whether he has the right qualifications and experience to give the opinion sought from him;

  An expert completely lacking in the requisite knowledge or experience should be subject to an application to exclude his evidence; or to an application that the judge orders him to confine his evidence to matters that are within in his experience. This can be combined with an order that the expert's report be edited accordingly, see: *R v Barnes* [2005 EWCA Crim.1138; *Clarke and Morabir* [2013] EWCA Crim. 162. Challenges to the admissibility of expert evidence on the grounds that the expert lacks the requisite qualification or experience should be raised with the Defence and the judge at the earliest opportunity;

- **Conclusions based upon incomplete analysis or a misreading of the evidence**

  Some experts will seek to reach conclusions based upon an incomplete reading of the evidence choosing to disregard accepted facts which do not

assist their conclusions, or who demonstrate in their reports that they have not understood those facts. They may also take into account irrelevant matters or matters not adduced in evidence upon which they form an opinion;

- **Experts who undoubtedly have relevant knowledge and qualifications but misuse it so as to mislead the court**

  Conclusions in reports with degrees of support for those conclusions should not be overstated. One such example is a laser expert in respect of speeding offences who only uses the test results that go in his favour and "omits" those that do not, thereby misleading the court by omission;

- **Experts who lack any qualifications but who claim that their experience in other fields makes them competent to comment**

  This is prevalent in respect of Home Office Type Approved speed and red light detection devices;

- **Failure to demonstrate methodology by which they reached their conclusion**

- **Lack of Accreditation/Validation**

  Whilst there is no requirement for an organisation or individual to be accredited to any national or international standard before results they generate are admissible as evidence, the absence of accreditation (for example, in accordance with ISO 17025: standards for forensic service providers who undertake laboratory activities) can result in evidence being excluded if it renders the evidence unreliable, or it can affect the weight to be attached to it.

  Similarly, there is no requirement for a technique to have been accepted by the wider scientific community prior to being admitted into evidence, but again, this may affect the degree to which it can be relied upon or the weight to be attached to it; and

- **Conflict of interest**

  See above.

Conflicts of Opinion between Prosecution and Defence Experts

Often a case may turn on a well-argued difference of opinion between Prosecution and Defence experts.

R v Kai-Whitewind [2005] 2 Cr. App. R. 31 states that a prosecution can still proceed and the case need not be stopped where there is a genuine conflict of opinion between experts. This does not detract from the prosecutor's duty of continued

review under the Code.

The Court of Appeal dealt with the same issue in *R v Dawson* [1985] Cr. App. R. 150 and *R v Gian* [2009] EWCA Crim. 2553, recognising that in appropriate cases, the jury is best placed to resolve the conflict between experts because it has heard all of the evidence. Accordingly, at paragraph 38 of *Gian*, it was held in relation to expert evidence from the prosecution:

> "That evidence had to be set against the defence evidence and the judge was not entitled, at the close of the prosecution case, to choose between the evidence which told powerfully in favour of the prosecution and the evidence which was strongly in favour of the defence. That was the jury's function ... The jury was confronted with a choice between the rival arguments. It was their task to choose between them. The fact that it was faced with a choice does not afford any basis upon which the judge should have withdrawn that choice from them."

Methods of Challenge

- By an application to the judge (on a voir dire or at a case management hearing) to exclude expert evidence that is biased, unhelpful or unreliable evidence under section 78 PACE and *R v Turner* (1975) 60 Cr. App R. 80;
- By an application to the judge to exclude expert evidence due to non-compliance with Criminal Procedure Rules;
- By requesting that evidence be edited to remove comment on matters outside of expert's experience, or amended where conclusions are overstated;
- By requesting the preparation of a joint expert's report may result in reports being amended to more accurately reflect the underlying science; or
- By testing the expert’s hypothesis in cross examination to ensure it has been the subject of sufficient scrutiny and peer reviews. For example, in drink driving cases, where defence experts produce new and unproven claims about breath test machines suffering from "long blow" or "long purge". There is no accepted legal basis for either claim.

Expert Fees

The CPS is only responsible for the costs of an expert witness in connection with work done on case presentation.

All investigative costs, at whatever stage of the proceedings, must be met by the investigator, usually the police, regardless of the stage in the proceedings at which the expert is instructed, which agency identifies the need for expert evidence or who it is that instructs the expert.

Investigative costs are accrued when expert evidence is required in accordance with the investigator's duty under the Criminal Procedure and Investigations Act 1996 to pursue all reasonable lines of enquiry. Where the expert evidence is relevant to prove whether the defendant is guilty of the offence with which he is charged, it is an investigative cost. In the context of psychiatric evidence, this means that the police will meet the cost of expert evidence on the defendant's ability to form the requisite mens rea and will also meet the cost of expert reports on diminished responsibility because this evidence is relevant to the issue of whether the defendant is guilty of the offence of murder. Conversely, the CPS will meet the cost of psychiatric reports which deal with fitness to plead. This evidence is not an investigative cost because it is not relevant to whether the defendant is guilty of the offence.

Where the issue is not clear cut, it should be determined by discussion with the police.

Experts' fees can be substantial. It is essential that expert witness fees in relation to presentation costs are agreed in advance of the trial as it is difficult to negotiate fees after the event. Where fees have been made clear to the expert, claims resulting from unauthorised work may be refused.

It should be noted that the CPS has standard agreements with a number of organisations and companies such as Cellmark, Forensic Telecommunication Services, Key Forensics and LGC. In such cases prosecutors and caseworkers should apply the terms of the agreement.

For details of the fees paid to different types of witness, please see Witness Expenses and Allowances.

In those rare cases where the CPS instructs an expert, please note the following steps to be taken:

1. **Contact the expert**

   Where an expert is to be instructed the paralegal officer/lawyer should contact the selected expert by telephone to confirm that the expert is able to do the work/attend court and if so agree the level of fees that will be paid in accordance with the Expert Witnesses Scales of Guidance.

   This applies whether an expert has already been instructed by the police or is being instructed for the first time by the CPS.

   Approval **must** be obtained from an individual with the appropriate level of financial delegation for expert fees exceeding those detailed in the scales of guidance.

   Assess how many hours are required to do the work

   This is a matter for agreement with the expert according to the nature and complexity of the task and the work involved. Consideration should be given

to the material that needs to be supplied to the expert. A page count of relevant statements and documentary exhibits may assist in reaching an agreement as to the number of hours required.

2. **Agree an hourly rate**

   For preparatory work, reports and conferences an hourly rate should be agreed.

   For court attendance, a day and half day fee should be agreed. The scales assume a normal court day (10.30 - 4.30) and include an element for local travel. The expert should only be paid for time travelling if the distance is in excess of 25 miles. In such circumstances (or where it is agreed that the expert is to be paid an hourly rate) the starting point should be £25 per hour (as it is with advocates, including QCs, instructed under VHCC). The maximum hourly rate for travelling should be half the hourly fee agreed with the expert for court attendance.

   Travel and subsistence rates must also be made clear and a copy of the rates must be forwarded to the expert witness.

   The mileage rate payable for travel by private car is 25p per mile. Exceptionally, if the expert can show that they had to use their car because there was no public transport available, there was a considerable saving of time and money or because they are disabled or infirm, a higher rate of 45p per mile is payable. Rail travel will be at standard class and expert witnesses are not entitled to day subsistence.

3. **Confirm the agreement**

   Once fees have been agreed verbally, the paralegal officer/prosecutor should complete the letter of instruction to the expert (Annex A of this Guidance) and the Expert Fees Form Parts 1 and 2.

   The letter should be accompanied by:

   - Witness Expenses: Current Rates (Expert Witness);
   - Expert Fees Form Part 1;
   - BACS Transfer Form;
   - Expert's Guidance Booklet (where directed by prosecutor); and
   - Expert Witness's Self Certificate.

   The letter should be accompanied by the Expert Fee Authorisation.

   The expert will be asked to raise an invoice for his/her work after the work has been undertaken. The expert should be asked to produce a detailed

breakdown of the work undertaken (date, time, description etc.) together with copy receipts for all claimable expenses. S/he should also be asked to provide bank account details so that payment can be made by bank transfer.

4. **Payment**

   A copy of the completed expert fee form should be retained in the finance folder. Upon receipt of the invoice by the paralegal officer/lawyer it must be checked against the expert fee form and where the fees claimed do not correspond with those agreed the expert must be contacted to resolve the matter. If necessary a revised invoice should be obtained.

   Where the invoice is correct it must be authorised by a person with the appropriate level of financial delegation and forwarded to the National Finance Business Centre, Wakefield, for payment.

5. **Cancellation fees**

   If the assignment is cancelled (for example, the expert is not required to give evidence at court) and he has been given prior notice of this (whether verbally or in writing) of one week, no cancellation fee will be paid. However, work already properly undertaken up to the point of notification of the cancellation will be paid in the above terms.

   If the assignment is cancelled with less than one week notice, a cancellation fee will be paid, subject to satisfactory proof of loss of earnings.

   Note that notwithstanding the above, **no cancellation fee will be paid if other work is undertaken on the date cancelled, regardless of the amount of notice given**.

Annex A - Letter of Instruction Template

Name
Address

Date

Our ref:
Your ref:

Dear

R v

In Crown Court

1. I refer to our recent *telephone conversation/correspondence* concerning your instruction as an expert for the Crown in the above named case.

   Assignment:

2. [*Set out the terms of reference for the expert. Consider what other information you might want to include (e.g. Expert's Guidance Booklet, relevant CPR)]*

   You are required to complete a self-certificate in every case where you are instructed as an expert witness for the prosecution. A copy of the *enclosed/attached* blank certificate must be completed and sent to [*insert name, address and contact details of person if not writer of letter*].

   Fees:

3. The Crown Prosecution Service will be responsible for paying your fees in relation to the presentation of your evidence. This includes attending case conferences and court.

4. Please note that all work **must** be authorised by [*me or]* a member of CPS staff of appropriate authority **before** it is commenced. Please do **not** undertake any work requested by the police or independent counsel without first obtaining authority to do so from [*me or]* a member of CPS staff of appropriate authority.

   [Note - use the names and contact details of the CPS staff with authority if they are known]

5. The CPS may, in its discretion, refuse payment for any work done that is not so authorised.

6. It has been estimated that the above assignment should take no more than *[insert number of hours].* Please let me know as soon as possible if this is

insufficient. You will be paid at a rate of **£ XX** per hour for this work. Please note that you must notify the reviewing lawyer *[insert name and contact details of the reviewing lawyer]* if the level of work required to complete the assignment is likely to exceed the original estimate quoted above.

7. All necessary and authorised preparatory work will be paid at a rate of **£ XX** per hour.

8. If you are required to attend court you will be notified in good time of the date, time and the name and address of the court.

9. The fees for a full day (10:30am and 4.30pm) at court will be **£ XX**.

10. If the Court sits for only half a day (either for a morning or afternoon session only), you will be paid for a full day unless the court has given one week's notice that it will not sit for a full day If you are warned in advance that your attendance is required you will only be paid a half day's fee of **£XX**.

11. The daily court attendance fee covers all activity undertaken between 10am and 5pm (including preparation, conference time, giving evidence and travel time). Where there is a half day court session the relevant times are from 10am to 1.30pm or 1.30pm to 5pm. Any additional work required of you **outside these periods** will be paid at a rate of **£ £XX** per hour

12. A copy of current travel and subsistence rates (EFC 1A (09.08) is enclosed.

13. Your properly completed invoice should be sent to me at the above address within 28 days of the conclusion of your participation in the case. Please note that failure to submit timely invoices may result in payment being delayed or refused.

14. You will be paid within 14 working days of receipt by me of your invoice. This should be accompanied by a detailed record of the work undertaken together with copy receipts in respect of travel and subsistence should that be necessary. *You are responsible for your own PAYE, National Insurance and VAT liabilities*. Please also complete the attached form with details of your bank account as payment will be by bank transfer.

Cancellation fees:

15. If the assignment is cancelled (for example, if you are not required to give evidence at court) and I have given you one week's prior notice of this (whether verbally or in writing) no cancellation fee will be paid. However, work already properly undertaken up to the point of notification of the cancellation will be paid in the above terms.

16. If the assignment is cancelled with less than one week's notice, a cancellation fee may be paid, subject to satisfactory proof of loss of earnings.

17. Please note that, notwithstanding the above, no cancellation fee will paid if other work is undertaken on the date cancelled, regardless of the amount of notice

given.

Unavailability for court:

18. If you are unable to attend court you should contact me [*or insert other contact details]* immediately. You should not make arrangements for any other person to give evidence in your place without the prior approval of myself or other CPS representative [*insert details].*

Confidentiality:

19. Any information you obtain in the course of your assignment is confidential and is not to be given by you to anyone outside the CPS, whether during the assignment or after it has been finished, unless given permission by this office to do so. You must also comply with current *UK* Data Protection Act legislation.

20. You must not use any information you obtain in the course of your assignment for any purpose other than as authorised by the CPS. The rights to all such information rest with us and permission to access and use this information can only be given by a CPS representative of appropriate authority.

21. You must keep safe any documents provided to you in the course of an assignment. You must make sure they are not copied, in whole or in part, and you must return them to me at the end of the case or your involvement in the case.

Other proceedings:

22. You must contact me immediately, if, having accepted the assignment, you are summonsed, charged, cautioned or convicted for any offence or if you become the subject of any professional disciplinary proceedings.

23. If there is any breach of above terms or conditions relating to confidentiality, criminal or civil proceeding may result.

Insurance:

24. You are advised to have your own professional indemnity insurance cover as the CPS will not be responsible for any claims made against it, or against you, on the grounds (for example) of negligence or unprofessional conduct on your part.

Should you have any queries please do not hesitate to contact me on the above number or [*contact details of anyone else*]

Yours sincerely,

Name
CPS

Part 2 - Specific Areas of Expertise

DNA

DNA (Deoxyribonucleic acid) is found in the mitochondria and nucleus of each cell. In the nucleus (which is what is analysed by the expert in the vast majority of criminal cases) the DNA is arranged into 23 pairs of chromosomes; half inherited from the mother and half from the father. Except in the case of identical twins, different combinations of DNA are inherited and therefore each person's DNA is unique.

However, it is important to remember that current techniques used in forensic science do not allow for each difference to be examined with a view to establishing a unique whole genome profile for use in the criminal justice system. A profile is obtained through analysis of particular and specific areas or loci of a DNA strand, which are known to be widely different. A standard process known as DNA-17 is used which involves analysis of 16 loci in a DNA strand, each producing between one and two results, which is given a numerical value known as an allele. If the DNA obtained from the crime sample is of good quality and of sufficient amount, then a full or complete profile with up to two alleles at each of the 16 loci will be produced. This profile can then be compared, in the first instance against profiles held on the National DNA Database, and ultimately against the profile of a known suspect or victim.

Prior to 24 July 2014, a standard profiling test known as SGM*Plus* ® was used which involved analysis of 10 loci in a DNA strand.

If the DNA is degraded or present in very small amounts, some alleles may not be detected and there will be a "partial profile". If there is less information in the profile, then this will weaken the ability to assess the match of the profile to the suspect or victim.

Profiling may reveal more than two alleles at one or more of the loci tested, indicating the presence of DNA from more than one person. This is what is known as a "mixed profile". Where one person has contributed more DNA than another, one is expressed as being the major profile and the other is the minor profile. These are often found in samples recovered in relation to sexual offences and may not present much difficulty where one is from the suspect and the other is from the complainant, depending on the issues in the case.

The fact that a unique profile will not have been obtained means that the relationship of that profile to the DNA of the suspect has to be expressed to investigators, prosecutors and, ultimately, the jury in terms of probabilities, known as the "match probability". This is the probability of obtaining a match if, in fact, the DNA did not come from the suspect but came from an unknown person, who is not related to the suspect, but has the same profile. If the profile is full, it is possible to express the match probability as 1 billion to one. If the profile is partial, the match probability will be higher, for example 1 in 1 million or 100,000. If a profile is mixed, then this will

have to be taken into account in the evaluation of the match probability.

National DNA Database (NDNAD)

DNA helps police link offenders to crime scenes by matching DNA profiles that have been stored on the National DNA database (NDNAD) to DNA samples taken from crime scenes or suspects. It can also be used to eliminate suspects from enquiries.

The NDNAD was established in 1995, under the authority of the Police and Criminal Evidence Act 1984 (PACE 1984) as amended by the Criminal Justice and Police Act 1994.

Searches of the entire NDNAD are automatically carried out as soon as a DNA profile is added. The NDNAD has proved to be a very successful tool for the detection of crimes. Its effectiveness is likely to increase with more efficient processes for collecting samples.

There are three types of matches:

- Profile from suspect matched to crime scene profile.
- Crime scene profile sample matched to another crime scene sample.
- Suspect profile matched to suspect profile.

The first two types of matches are reported on match reports as soon as the match is obtained. Subject to subject match reports are not created but subject matches can be confirmed by the NDNAD enquiry centre.

Any resulting DNA match reports are usually accompanied by one or more caveats warning of limitations in the value of the match. It is important to take account of these caveats when deciding how best to proceed. These reports are sent to Forces to act upon the report.

The NDNAD Strategy Board has a policy which defines the use of samples and associated data. The NDNAD Strategy Board Policy for Access and Use of DNA Samples, Profiles and Associated Data can be obtained from the local police's Scientific Support Unit.

Use of DNA evidence

Where the DNA profile taken from a crime scene matches that of a suspect, this tends to suggest that they came from the same person. However, prosecutors are advised to approach DNA evidence with caution, having regard to the following:

1. **The need for supporting evidence**

   Where the evidence submitted by the police turns on the existence of a

positive DNA match between the crime scene sample and the suspect's profile, prosecutors are advised to consider the need for evidence that supports this identification of the suspect as the offender in the case.

2. **Adventitious (or chance) match**

In *R v Lashley* [2000] EWCA Crim. 88, there was no dispute that the DNA (saliva) was left by the robber during the commission of a post office robbery. The issue was whether the DNA had been left by the defendant as opposed to another individual with the same DNA profile. A DNA match between the crime stain and the suspect is never conclusive but instead expressed as a match probability. In *Lashley*, there was statistical evidence that the DNA profile could have originated from 7-10 males in UK. There was no other evidence against the defendant, and, accordingly the conviction was held to be unsafe. The Court of Appeal indicated that, on the facts of this case, a no comment interview would not of itself be sufficient supporting evidence, as there was no compelling case for the defendant to answer. The case might be compelling if there was some other evidence to establish a connection between the defendant and the scene of the crime and the Court gave the example of a geographical link between the defendant and the scene of the crime, although this may not always be conclusive for reasons referred to below.

The risk of there being an adventitious match increases in cases where an incomplete or mixed profile is obtained from the crime scene. This is because the probability of the match increases so that it could be said that there are a higher number of persons in the UK from whom the profile could have emanated. It follows that geographical proximity may not be sufficient supporting evidence in these circumstances, where there is a greater risk of persons living and working in the locality matching by chance.

3. **Moveable objects**

In other authorities on this point, it has not been disputed that DNA obtained from a crime scene matched that of the defendant (including where the match probability was 1: 1 billion). However the issue in these cases is that the offender claimed that the DNA had been deposited on a moveable object innocently and left at the scene by someone else. The authorities include *R v Grant* [2008] EWCA Crim.1890 (DNA on a balaclava found at the scene) and *R v Ogden* [2013] EWCA Crim. 1294 (DNA found on a scarf).

Whilst the courts indicated that a failure to account in interview would not be sufficient in terms of independent evidence establishing a nexus to the crime, the following might, namely: a connection to the crime scene; inconsistent explanations in interview for the presence of DNA at the crime scene; history of drug use and an admission that the suspect needed cash urgently; matching description. In *R v Darnley* [2012] EWCA Crim. 1148, it was held that where the suspect's DNA profile was one of three profiles found on a handkerchief at a burglary of a dwelling, his 21 previous convictions for

domestic burglary could be admitted as supporting evidence, especially where there was other supporting evidence.

Prosecutors will also have regard to evidence which points away from it being the suspect's DNA, such as an alibi or a physical condition suffered by the accused which renders the commission of the offence impossible, or the lack of any geographical proximity between the offender and the crime scene.

Similar considerations should apply where the suspect puts forward an innocent explanation for his DNA being at the crime scene, such as a legitimate or innocent reason for access to the crime scene prior to the offence being committed.

4. **Contamination/Sample handling errors**

In March 2012, the national media reported that the Crown Court case of *R v Adam Scott* (see: The Guardian; 13 September 2012) on a charge of rape, had been halted by the Crown when it was revealed that a DNA profile obtained from a crime scene sample at the rape had been contaminated by the re-use by the forensic science provider of a container which had contained evidence relating to an offence of affray perpetrated by Scott.

This type of incident is very rare in relation to the large number of cases involving DNA evidence, but it demonstrates the possibility of a person's DNA being linked to a crime due to a sample handling error or contamination event during processing. This may occur in the handling of samples by the same police force or forensic service provider, or by different forces or providers.

This presents another reason why prosecutors need to give careful consideration to the risks in charging without supporting evidence. The potential risk from of handling errors or contamination by forces or providers within the same locality handling samples from different offences also highlights why particular caution should be exercised when the only supporting evidence is the fact that the suspect lives within the same locality.

Prosecutors should consider the following factors:

- The **lack** of geographical proximity of the incident and the suspect's place of residence or work should alert the police and prosecutors to the potential for sample handling, error or contamination.
- For **high quality profiles**, geographical proximity may provide useful supporting evidence, but care should be taken to ensure that the risk of contamination has been taken into account, where there is no other supporting evidence.
- For **low quality profiles**, there is a greater probability of several individuals within a specified geographical area matching the crime scene profile by chance.

5. **The 'Prosecutor's Fallacy'**

The dangers of adopting the "prosecutor's fallacy" in approaching DNA evidence was ably highlighted in *R v Doheny; R v Adams* [1997] 1 Cr. App. R. 369 where the importance of supporting evidence is again highlighted. At paragraphs 373 -374, the Court Of Appeal held:

> "'The Prosecutor's Fallacy'
>
> "It is easy, if one eschews rigorous analysis, to draw the following conclusion:
>
> 1. Only one person in a million will have a DNA profile which matches that of the crime stain.
> 2. The defendant has a DNA profile which matches the crime stain.
> 3. Ergo there is a million to one probability that the defendant left the crime stain and is guilty of the crime.
> 4.
>
> "Such reasoning has been commended to juries in a number of cases by prosecuting counsel, by judges and sometimes by expert witnesses. It is fallacious and it has earned the title of "The Prosecutor's Fallacy".
>
> "Taking our example, the prosecutor's fallacy can be simply demonstrated. If one person in a million has a DNA profile which matches that obtained from the crime stain, then the suspect will be 1 of perhaps 26 men in the United Kingdom who share that characteristic. If no fact is known about the Defendant, other than that he was in the United Kingdom at the time of the crime the DNA evidence tells us no more than that there is a statistical probability that he was the criminal of 1 in 26.
>
> "The significance of the DNA evidence will depend critically upon what else is known about the suspect. If he has a convincing alibi at the other end of England at the time of the crime, it will appear highly improbable that he can have been responsible for the crime, despite his matching DNA profile. If, however, he was near the scene of the crime when it was committed, or has been identified as a suspect because of other evidence which suggests that he may have been responsible for the crime, the DNA evidence becomes very significant. The possibility that two of the only 26 men in the United Kingdom with the matching DNA should have been in the vicinity of the crime will seem almost incredible and a comparatively slight nexus between the defendant and the crime, independent of the DNA, is likely to suffice to present an overall picture to the jury

that satisfies them of the defendant's guilt.

> "The reality is that, provided there is no reason to doubt either the matching data or the statistical conclusion based upon it, the random occurrence ratio deduced from the DNA evidence, when combined with sufficient additional evidence to give it significance, is highly probative. As the art of analysis progresses, it is likely to become more so, and the stage may be reached when a match will be so comprehensive that it will be possible to construct a DNA profile that is unique and which proves the guilt of the defendant without any other evidence. So far as we are aware that stage has not yet been reached."

In *R v C* [2011] EWCA Crim. 1607, it was held that the mere fact that a judge had deployed the 'prosecutor's fallacy' in his summing up was not sufficient to render the subsequent conviction unsafe.

Partial Profiles

In *R v Bates* [2006] EWCA Crim.1395, it was held that there was no reason in principle why the evidence of a partial profile ought to be excluded, simply because a fuller profile might have shown the defendant not to be the offender. However, there may be cases where the probability of an adventitious or chance match occurring is so great that it ought to be excluded under section 78 PACE. Much would depend on what other evidence existed and the jury needed to be carefully directed in terms of the guidance to be given to them in how to evaluate such evidence.

Transfer

DNA can be transferred from the body of one person to that of another or from a person onto an object. Primary transfer occurs when a part of the person's body containing DNA comes into direct contact with the other person or object, for example through the offender touching a door handle or part of the victim's body or coming into contact with a victim's bodily fluid. Secondary transfer occurs indirectly, for example when an offender picks up clothing containing the victim's DNA.

Where a number of differing accounts are suggested for how a victim's DNA has got onto a suspect's body, it is permissible for an expert to evaluate the likelihood of the varying explanations in order to assist the jury in deciding which account to accept - see *R v Weller* [2010] EWCA Crim. 1085.

Presentation of DNA Evidence

1. Streamlined Forensic Reporting (SFR) - The Director's Guidance on Charging envisages that a confirmation of a match report, together with supporting evidence is sufficient for charging and a first appearance at the Magistrates Court. Many areas are now delivering this information by way of SFR and a full evidential report will only be obtained if the

case proceeds to trial and the DNA evidence is disputed. Guidance on SFR.

2. In accordance, with the Criminal Procedure Rules, the parties should agree the issues in advance of the trial. For example, if the underlying science behind DNA is agreed, a summary should be agreed or a primer provided for the bench or jury. The issues in dispute should be identified and matters not in dispute agreed by way of admission or in a joint report. For example, if the issue is innocent transfer, the fact that the DNA on the hands of the defendant is that of the victim can be admitted and the evidence in front of the jury can be limited to the most likely method of transfer.

3. Disclosure - the prosecution should serve details of how the calculations are carried out, such that the Defence can scrutinise the basis of those calculations. Details of databases relied upon should also be disclosed.

4. The expert should confine his evidence to the shared characteristics between the DNA profile obtained from the crime scene and the defendant, the match probability and, if qualified, whether the expert can state how many people sharing those matching characteristics are likely to be found within the country or smaller sub-group.

5. The expert should not be asked for his opinion on the likelihood that it was the defendant who left the crime stain as this is a matter for the jury.

Samples containing very low amounts of DNA (previously referred to as 'Low Template DNA')

In many cases, particularly where no identifiable bodily fluid is present, the amount of DNA present may be very low. This can result in random or stochastic effects occurring during profiling, such as allelic drop out/drop in where alleles apparently appear or disappear, thereby giving an incomplete or incorrect profile. (In these circumstances, the courts have countenanced the use of ultra-sensitive techniques to try and yield a profile.

In *R v Reed & Others* [2009] EWCA Crim. 2698, the Court of Appeal observed that there were dangers in undertaking analysis where the amount of DNA was too low. However, techniques can be used to obtain profiles capable of reliable interpretation if the quantity of DNA that can be analysed is above the stochastic threshold (defined as 200 picograms of DNA) - that is to say where the profile is unlikely to suffer from stochastic effects such as allelic drop out which prevent proper interpretation of the alleles.

There is no agreement among scientists as to the precise line where the stochastic threshold should be drawn, but it is generally accepted to be below 200 picograms. Below this level experts must consider the effects of

stochastic variation when interpreting the results.

In *R v Broughton* [2010] EWCA Crim. 549, with reference to the Reed case, it was held that the court had not held that DNA evidence of an amount below the stochastic threshold was inadmissible, simply that a challenge could not be mounted in relation to amounts above the stochastic threshold. There were a number of Low Template DNA techniques available that were supported by a body of reliable scientific opinion and which had been validated and were considered reliable. That is not say that the risk of stochastic effects should not be addressed in the expert's report and, if appropriate, the process should be repeated a number of times. In accordance with CPR, the type of process used, as well as the degree to which the results could be relied upon, should be highlighted in the report and could, if appropriate, be the subject of an application to exclude, or be tested in cross examination.

Ear Prints

If crime scene examiners find an ear print at a scene, there is no national database against which it can be compared, but when a suspect is arrested, an ear print can be taken, anonymised and placed with other prints for comparison with the print found at the scene. The evidence of a suitably qualified expert is admissible in forming a conclusion as to whether to the prints match (*R v Dallagher* [2002] EWCA Crim. 1903). However, in determining the weight to be attached to this evidence, juries should be less confident in an identification based on the similarity of gross features such as the folds in the ear, unless it is precise. This is due, in part, to the flexibility of the ear and its susceptibility to change depending on the amount of pressure applied to the surface where the print was left. The position would be different where there was some small anatomical feature, such as a notch or crease in the ear structure that could be identified and matched (*R v Kempster (No. 2)* [2008] 2 Cr. App. R. 19).

Facial Mapping and Video evidence

Facial comparison or identification are the processes by which a forensic scientist will compare an unknown image of a face with a known image, from for example a custody record, without having met or any prior knowledge of the individual being compared. This is a new area of forensic science for which there is no universally accepted methodology, validation of the process of comparison or means of determining whether someone is competent. All opinions of facial identification should be treated with caution and the methodology used should have been the subject of peer review by another forensic scientist.

Facial mapping or imaging is admissible to demonstrate similarities in particular facial characteristics or combinations of such characteristics - see *R v Grey* [2003] EWCA Crim. 1001.

The first issue for prosecutors and investigators to consider is whether the opinion of an expert witness in this field is necessary. A bench or a jury may be able to form its own opinion as to the similarity between the face of an offender from CCTV and that of the suspect in a photograph obtained by the police on arrest. There may also be no need for facial mapping, where a witness purports to be able to recognise someone well-known to them from a visual image, even if that image is not suitable for enhancement.

Alternatively, the use of enhancement techniques facilitated by specialist equipment may render an image that can be used by a bench or jury in its deliberations. The party seeking to adduce evidence arising from enhancement must be in a position to prove how the enhancement technique works. In producing his report and giving evidence, the person enhancing the image must be able to produce the original image and the enhanced version, with an explanation of the process that is repeatable by another suitably qualified person.

If the image is such that a bench or jury cannot reach its own conclusion, then the opinion of an expert in facial mapping may be required. The legal position is that set out in *R v Atkins and Atkins* [2009] EWCA Crim. 1876. Having explained points of similarity between images, a suitably qualified expert can express his conclusions as to the significance of his findings by using a verbal scale arranged in sequence from "lends no support" to "lends powerful support". He should not express any conclusion as to the probability of occurrence of those facial features, as there is no statistical database recording the incidence of the features compared as they appear in the population at large. It should be stressed that expert evidence in these circumstances is an expression of subjective opinion and it is ultimately for the bench or jury to decide whether the images match.

Although there is authority (*R v Hookway* [1999] Crim. L. R. 750) which states that such evidence may, of itself, be sufficient in deciding whether there is a case to answer, prosecutors will be aware of their duty to be satisfied that there is a realistic prospect of conviction prior to taking the case to trial.

More caution is needed where prosecutors are faced with evidence where an expert

purports to be able to compare other physical features or objects (such as car number plates, height estimations, colours and items of clothing) in different images with a view to offering an opinion as to any similarities. Concerns include:

- Whether the expert is in any better position than the bench or jury to form an opinion. For example: the defendant is the registered keeper of a green Volkswagen Golf. A CCTV image shows a small green car at the crime scene at the time of the offence. An expert states that it is a Volkswagen Golf. What is the expert's qualification in car design that enables him to be more of an expert in this field than the jury? The image expert will be able to describe certain features within an image and provide the bench or jury with additional knowledge as to whether they are artefacts within the image or actual features of the object. This does not make the witness an expert in the objects being compared;

- Whether the expert evidence advances the case. For example, the offender in the CCTV is wearing a bracelet that is the same as that worn by the offender on arrest. If there is nothing else in the CCTV of assistance to the case, then this will be of little help to the prosecution case when the object in question is a common one or a moveable one and could have been given away by the offender after the incident and prior to his arrest;

- The risk of cognitive bias means that those instructing experts should take care not to provide the expert with information that is not needed and which might unduly influence the expert in reaching his conclusions. For example: "Can the expert confirm if person 2 in the CCTV, who is believed to be the assailant, is holding a knife?" and

- Lack of validation and competence. The lack of validation studies, published scientific opinion, peer review of the expert's methods and formal training may not necessarily result in the exclusion of the expert's evidence but will be relevant to the weight to be attached to it.

Similar considerations to those that apply to facial comparison and its evaluation apply to comparisons by suitably qualified experts of similarities in walking gait - see *R v Otway* [2011] EWCA Crim. 3.

In the case of *R v Luttrell* [2004] EWCA Crim. 1344, it was held that lip reading undertaken by a suitably qualified lip reader was a well-recognised skill and part of a reliable body of knowledge and opinion. Lip reading from a video was no more than an application of that skill.

Fingerprints

Every finger, palm or sole of a foot comprises an intricate system of ridges and furrows, known as friction ridge skin. The ridge flow, arrangement and appearance of features within friction ridge skin persists throughout life and are accepted as being unique to each individual, and are recognised as a reliable means of human identification. Fingerprint Examiners are trained to interpret the ridge flow, arrangements of ridge features and to report their opinion as to the common origin or otherwise of any two areas of friction ridge. The examiner's opinion of an identification is not based solely upon the number of features in agreement, but is a holistic assessment of the entire ridge flow, the quality and quantity of features and the arrangement of the features in relation to each other.

The unique nature of a person's fingerprints means that a person may be identified by fingerprints alone, without the need for supporting evidence. The vast majority of police forces deliver fingerprint evidence in the first instance by way of Streamlined Forensic Reporting and the SFR 1 should (by itself or in conjunction with other evidence) establish the nature of the finger mark impression, its location and the identity of the person who has provided it. Prosecutors should seek to agree the fact that it is the defendant's impression by way of admission.

The fingerprint examination process consists of stages frequently referred to as Analysis, Comparison, Evaluation and Verification (ACE-V). The process is described sequentially for the purposes of this Guidance, but examiners will often go back and repeat parts of the process again in order to reach conclusions.

Analysis

Each impression is analysed to establish the clarity, quality and quantity of detail visible and to determine its suitability for further examination taking into account variables such as the surface on which the impression was left, any distortion arising from pressure applied or movement of the digit when the impression was deposited.

Comparison

The examiner will systematically compare the ridge pattern, ridge flow and sequence of ridge characteristics in an impression from an unknown source with that of a known source impression. The examiner will establish their opinion of the level of agreement or disagreement between the unique sequences of ridge characteristics visible in both impressions.

Evaluation

Evaluation is a systematic process considering all the quantitative observations (i.e, the number of features and the amount of information), the qualitative data (i.e, interpretations and judgments of observations) and the results of the comparison

process together in order to make a decision and proffer an opinion. Any observations made during both the analysis and comparison stage should be considered. Any abnormalities or discrepancies identified should be rationally accounted for. Conclusions will be based on one of the following terms:

- **Insufficient** - The quality and/or quantity of detail visible within either or both impressions is lacking.
- **Identified** to an individual - The examiner is satisfied that the level of agreement between both impressions is sufficient to determine that they were made by a common donor.
- **Excluded** - The level of disagreement between the two impressions is so significant that the examiner is able to determine that both impressions could not have been made by the known donor.
- **Inconclusive** - Although there may be some agreement evident, the extent of disagreement and/or the quality and quantity of detail visible in both or either impression is such that it is not possible to come to a definitive conclusion at this time.

Verification

Another examiner or examiners should conduct an independent analysis, comparison and evaluation of the impressions under examination. At least two examiners must concur that the two impressions were made by the same donor prior to reporting an identification.

It should be stressed that identification is a matter for the opinion and expertise of fingerprint experts. It is not a statement of fact and is not dependent upon the number of matching ridge characteristics.

Prosecutors should be aware that the numeric standard for reporting fingerprint identification was abolished in 2001 and identification is not based on the achievement of finding a specific number of characteristics in agreement. However, prosecutors should also have regard to the guidance set out by the Court of Appeal in *R v Buckley* (1999) 163 J.P. 561 which held at p.568:

> "If there are fewer than eight similar ridge characteristics, it is highly unlikely that a judge will exercise his discretion to admit such evidence and, save in wholly exceptional circumstances, the prosecution should not seek to adduce such evidence. If there are eight or more similar ridge characteristics, a judge may or may not exercise his or her discretion in favour of admitting the evidence. How the discretion is exercised will depend on all the circumstances of the case, including in particular:
>
> i. the experience and expertise of the witness;

ii. the number of similar ridge characteristics;

iii. whether there are dissimilar characteristics;

iv. the size of the print relied on, in that the same number of similar ridge characteristics may be more compelling in a fragment of print than in an entire print; and

v. the quality and clarity of the print on the item relied on, which may involve, for example, consideration of possible injury to the person who left the print, as well as factors such as smearing or contamination.

In every case where fingerprint evidence is admitted**, it will generally be necessary, as in relation to all expert evidence, for the judge to warn the jury that it is evidence opinion [sic] only, that the expert's opinion is not conclusive and that it is for the jury to determine whether guilt is proved in the light of all the evidence**."

Palm and plantar (foot print) analysis

Palm and plantar analysis should be approached in the same manner. The process for examination of the friction ridge detail on the palms and plantar is exactly the same, as described above.

In *R v Smith (Peter)* [2011] 2 Cr. App. R. 16, the Court of Appeal reviewed practices in fingerprint evidence and noted the importance of fingerprint experts (including those verifying an original expert's findings) keeping detailed contemporaneous notes and presenting their evidence in a manner that enabled the jury to understand and determine the disputed issues.

Footwear Impressions

In relation to footwear marks left at crime scenes, comparison of footwear impressions by a suitably qualified footwear examiner is admissible. The examiner can compare the mark with footwear seized from a suspect, assessing the degree to which the pattern size, pattern configuration and mould detail matches as well as similarities in the degree of wear and damage. The expert will have regard to the surrounding circumstances such as the likely use of the suspect's footwear in the period between the date of the alleged offence and the seizure. For this reason, it is vital that any explanation given by the suspect as to recent use of the footwear is conveyed to the expert for his consideration.

The interpretation to be placed on any comparison was considered by the Court of Appeal in *R v T (footwear mark evidence)* [2011] EWCA 1296 in which it was held that:

1. Where an expert concludes that the suspect's footwear could have made the mark, he can use his experience to express a more definitive opinion as to the likelihood of the match;

2. In doing so, the expert should state that his opinion is subjective and based on his experience. He should not use the word "scientific" as it gives an impression of a degree of precision and objectivity that is not present given the current state of this area of expertise;

3. In accordance with CPR 33 and the principle of transparency, the expert should set out, in his report, the data that he relied upon that allowed him to express a more definite opinion, including any formulae and databases accessed for the purposes of obtaining information on issues such as likely wear; and

4. In relation to footwear evidence, there is no sufficiently reliable database to allow an expert to calculate a likelihood ratio (as used in DNA cases) that marks were made by a particular shoe or trainer. Reliable data as to the number of shoes or trainers of a particular size or sole pattern in circulation in a given geographical area are not available so as to allow for an accurate statistical likelihood to be reached.

Forensic Anthropology

Forensic Anthropology is the identification of the human or what remains of the human for medico-legal processes.

At the crime scene, experts can assist in the identification of human versus non-human remains and in the mapping and logging of remains. This is particularly important if the remains are a surface deposition or are otherwise modified, co-mingled, separated at the joints, burned or cremated. If the anthropologist is also archaeologically trained, they can undertake the forensic excavation of buried remains. Advice can also be provided on in situ decomposition processes, post-mortem modification or remains altered by fossilisation and correct packaging and safe transportation.

At the mortuary, experts can assist the pathologist during the post-mortem examination to determine the identity of body parts, the re-assignation and/or re-association of body parts; determination of features of biological identity, including sex, age, stature and ethnicity of remains. Experts can also assist in establishing features of personal identity which may include orthopaedic intervention, disease processes evident upon the remains and/or the skeleton, etc.

Other work includes: reconstruction of skeletal injuries to assist with information pertaining to ballistic, blunt, sharp and associated soft tissue trauma; the provision of information pertaining to body decomposition in relation to the time of death; identification of animal scavenging and influences of potential human intervention, e.g. dismemberment.

The Royal Anthropological Institute (RAI) has undertaken the role of professional body for forensic anthropologists and is in the process of developing a framework of certification of competence to practice in this field. A list of those who have obtained certification and details of the certification process can be found on the RAI website via the link http://www.therai.org.uk/forensic-anthropology

The RAI are working with the Forensic Science Regulator to develop a set of standards in the field of forensic anthropology.

Forensic Archaeology

Forensic archaeologists use archaeological skills to locate, excavate and record evidence at a crime scene.

This can result in the recovery and preservation of evidence including: evidence buried by an offender to hide their involvement in a crime; human remains and evidence from a grave, which may assist the police in reconstructing the events around a burial; as well as surface body disposals, where a body has been concealed under other rubbish or other debris.

Forensic archaeologists are not compelled to be members of a single professional body and some practitioners may be members of a number of professional organisations, some of which may measure competency to practise. Others may work for large enterprises and others may be sole practitioners. Also, forensic archaeologists may already have existing working relationships with police forces.

The commercial status of an expert will not affect the admissibility of an expert's evidence as long as he is suitably qualified as a forensic archaeologist and his evidence is based on a reliable body of knowledge or opinion. However, in order to provide a measure of assurance to the criminal justice system around this developing field of expertise, the Institute for Archaeologists (IfA) (in conjunction with the Forensic Science Regulator) has developed Standards and Guidance for Forensic Archaeologists, which prosecutors can use in order to gauge the competency of an expert in this field and the weight to be attached to his evidence.

Standards and Guidance for Forensic Archaeologists

The IfA also maintains a list of its members and their locations which can be found at http://www.archaeologists.net/ro.

Forensic Pathology

Forensic pathology is the discipline of pathology concerned with the investigation of deaths where there are medico-legal implications, for example homicide. The pathologist will be asked to determine the cause of death and will often draw on the work of other experts (for example, toxicologists) to reach his conclusions.

Forensic pathologists attending suspicious deaths and homicides, at the request of the police, must be on the Home Office Register and will work within regional group practices independent of the police and government. Within the group practice, they are self-employed or may work for a university or hospital trust. As such, they can be instructed by the Defence in a case where there is no conflict of interest, as can former registered forensic pathologists.

The provision of forensic pathology services in England and Wales is overseen by the Pathology Delivery Board (PDB). The PDB considers registration of pathologists against published criteria and is responsible for appraisals, revalidation and the handling of complaints from the public, other practitioners and the criminal justice system.

For more information, please see the link https://www.gov.uk/forensic-pathology-role-within-the-home-office.

Handwriting

Expert evidence as to authorship is admissible by a suitably qualified expert, in accordance with section 8 of the Criminal Procedure Act 1865. In addition to being satisfied as to the competence of the expert, the judge must be satisfied to the criminal standard of proof that the piece of handwriting taken from the defendant for the purposes of comparison is genuine. Thereafter, it is for the jury to determine the authorship of the document, having heard from the expert his conclusions and the reasons for them.

It is permissible for an expert to make comparisons between the defendant's handwriting and a photocopy of the disputed writing, where the original has been lost. However the weight to be attached to the conclusions to be drawn from that evidence will have to be judged in light of the information that will not be revealed by the copy, such as pressure marks, tracings and overwritten words that might indicate that the document was forged.

There is no reason in principle why a lay witness cannot give evidence as to the author of a handwritten document, but the weight to be attached to such evidence will depend on the extent to which the witness can be said to be familiar with the defendant's handwriting (see Archbold 14-84 to14-87).

Hypnosis

For reasons set out in more detail in Archbold 10-70, such evidence is likely to be ruled inadmissible on the ground that the evidence is unreliable. It is not a generally accepted technique, the results cannot be tested or peer reviewed and there is no known potential rate of error.

For further Guidance, see: Legal Guidance: Hypnosis.

Medical

"Medical evidence" means the evidence of medically qualified persons, including psychiatrists, which is admissible to furnish the court with information outside the knowledge of a judge, bench or jury.

Evidence given by a suitably qualified doctor that simply reports the injuries sustained by a victim to an assault is not evidence of opinion and is rarely likely to be disputed. Whether a particular injury amounts to grievous or actual bodily harm is a matter for the bench or jury to determine.

Prosecutors need to be aware that where a doctor expresses a view as to the cause or likely cause of an injury, this is opinion and is subject to CPR 33, unless an admission can be obtained from the Defence, or the medical evidence is not otherwise disputed.

Medical evidence is admissible to show that a witness suffers from some disease, defect or abnormality of mind which affects the reliability of his evidence. Before it is proper for a psychiatrist to give evidence as to a witness's reliability, the disease or mental illness must be established and it must substantially affect the witness' capacity to give reliable evidence. The opposing party must be given the opportunity to serve rebuttal evidence. If there is no mental illness and/or the witness is mentally capable of giving reliable evidence, then the reliability of his evidence is a matter for the jury to determine - see Archbold 8-288 - 8-291.

As with Psychological Autopsies (below), psychiatric evidence is generally inadmissible to explain how an ordinary person, not suffering from mental illness, is likely to react to being involved in the circumstances surrounding the commission of an offence. However, where there is evidence that an offender was suffering from some form of medical condition, physical or mental, permanent or temporary, evidence as to the effect of that condition on the mental processes of the defendant is admissible in certain circumstances - see Archbold 4-395 - 4-397.

For the importance of medical evidence in Murder and manslaughter cases, please see the Legal Guidance Homicide: Murder and Manslaughter.

Non Accidental Head Injury (NAHI)

Guidance on the Prosecution approach to be taken to this evidence can be found elsewhere in Legal Guidance: Non Accidental Head Injuries.

Parasomnia

The instances in which the defendant will seek to rely on this as a Defence will be rare, but given the nature of the cases in which it is raised, prosecutors should be prepared to challenge it robustly. Further assistance is provided elsewhere in Legal Guidance Sexsomnia - Sleepwalking as a defence in sexual offence cases.

Psychological autopsies

In *R v Turner* (1975) 60 Cr. App. R. 80, Lawton LJ stated:

> "... the fact that an expert witness has impressive scientific qualifications does not by that fact alone make his opinion on matters of human nature and behaviour within the limits of normality any more helpful than that of the jurors themselves; there is a danger that they think it does ... Jurors do not need psychiatrists to tell them how ordinary folk who are not suffering from any mental illness are likely to react to the stresses and strains of life."

R v Gilfoyle [2001] 2 Cr. App. R. 5, the Defendant was charged with murdering his wife and his defence was that she had committed suicide. He sought to adduce evidence from an expert in "the systematic analysis of human behaviour" to assert that the behaviour of the deceased in the period leading up to her death indicated that she had taken her own life.

The Court of Appeal held that the existing academic standing of psychological autopsies was not sufficient to allow their admittance as expert evidence. The expert's conclusions were based on one-sided information, in particular from the appellant and his family, who had never given evidence; whereas family and friends of the deceased had not been spoken to and, of course, she had not been examined. Further, there were no criteria by reference to which the court could test the quality of the expert opinion: there is no data base comparing real and questionable suicides and there is no substantial body of academic writing approving the underlying methodology. The scientific literature indicated that there was a lack of a comprehensive assessment and evaluation of the nature and validity of those investigations (into real as opposed to questionable suicides) which had been carried out to date.

The conclusions reached were held to be unstructured and speculative and the court held that "unstructured and speculative conclusions are not the stuff of which admissible expert evidence is made."

Sexually Transmitted Infections (STI)

The nature and extent of the scientific or medical expert evidence to be obtained in these cases is set out in separate Legal Guidance Intentional or Reckless Sexual Transmission of Infection.

Voice Recognition

Expert evidence as to the identity of a voice is admissible where required, but in *R v O'Doherty* [2003] 1 Cr. App. R. 161, the Court of Appeal in Northern Ireland stated:

- Voice identification should come from a suitably qualified expert in **acoustic analysis**: the examination of the differences in the acoustic properties of speech which took into account the individual's physical characteristics;

- **Auditory analysis** of a person's dialect or accent was insufficient, except where the purpose of the evidence was to identify who from a known group was speaking at a particular time; where there were rare characteristics to identify the speaker or where the issue in the case related to accent or dialect; and

- The jury should be provided with tape recordings to allow them to evaluate the expert evidence but they should be warned about the dangers of relying upon their untrained ears.

For voice recognition by lay people and the importance of the need for caution - see Archbold 14-71, 14-72 and 14-74.