# 1 Introduction and background

The Ministry of Justice (MoJ) has presented proposals for reforms of the funding provided by the Legal Services Commission (LSC), including the funding of experts[1].

The proposals include matters related to the fees charged by experts and funded by the LSC (Part Three). This response is made on behalf of The Forensic Institute, the staff of which act primarily as defence experts. As such, we set out some background material as to the role of the defence expert, and discuss how the proposals are likely to relate to the policy and practise of providing a defence perspective in forensic science. Some of the background material was provided to the Forensic Regulator and the Law Commission in response to other consultations involving expert witnesses[2,3].

## *1.1 The Forensic Institute*

The Forensic Institute is a private firm which, in addition to its own four staff based in offices in Glasgow, has an international network of experts and organisations that provide a comprehensive scientific and medical service to the legal profession in all of the jurisdictions of the UK and have performed work in other countries including Australia, USA, Egypt, and New Zealand. The Institute provides scientific and medical advice and training relevant to civil or criminal justice matters. The Institute is not based in a laboratory but can, and does, contract analytical services if necessary.

The Institute is normally instructed by the defence to assess the merit of the scientific evidence in criminal prosecutions. It is commonly accepted that all experts should be impartial participants in the legal process, whether they are retained by the prosecution or the defence. This view is strongly endorsed by The Institute.

Our service model is perhaps fundamentally different to the traditional approach, in which a single defence expert deals with a single aspect of a case. The Institute specialises in assessing multi-disciplinary and, frequently, complex cases involving multiple evidence types. For example, Professor Jamieson, the director of The Institute, co-ordinated the scientific evidence for the defence in the Omagh Bomb Trial (*R v Sean Hoey*), as well as giving several days of evidence in that trial, and is currently involved in three conjoined Appeal Court cases (*Reed & Reed, Garmson, and Wong*) which is likely to set precedent for the use of aspects of Low Template DNA evidence. We have, therefore,

[1] Legal Aid: Funding Reforms. Consultation Paper CP18/09. Ministry of Justice, 2009.
[2] The Law Commission Consultation Paper No 190, The Admissibility Of Expert Evidence In Criminal Proceedings In England And Wales. A New Approach to the Determination of Evidentiary Reliability
[3] Consultation Paper. A Review of the Options for the Accreditation of Forensic Practitioners (2009). Forensic Regulator

extensive experience of reviewing and challenging in extensive detail the work of forensic practitioners and forensic science in a variety of disciplines, and also seeing our expertise and experience challenged in court.

Professor Jamieson also has extensive experience in the development of standards in forensic science, having served on the Lead Body and Sector Skills Committee for Forensic Science, which developed the first suite of National Occupational Standards for Forensic Science. He also chaired the Standards Committee of the Forensic Science Society, served on the SEMTA committee investigating the link between education and employment in Forensic Science[4] and, as Head of Forensic Science for Lothian & Borders Police, was a member of the Consultative Forum which created the Council for the Registration of Forensic Practitioners (CRFP). He is one of two Editors in Chief of a 5-volume Encyclopaedia of Forensic Sciences published by Wileys.

# 2 Purpose of the Defence Review

The Forensic Institute maintains that the main purpose of a competent scientific defence expert is, rather than to simply repeat the Crown tests, to review the processes, procedures, and conclusions of the prosecution experts. The main components of a thorough and competent defence review are verification and discovery.

## *2.1 Verification*

### 2.1.1 Procedures

Procedures are frequently developed for critical parts of the evidence and analysis chain. In some instances there will be internal procedures in addition to national or international references (e.g. several publications on the use and interpretation of LCN, and also internal procedures). Review entails checking that these procedures are appropriate, and that they have been utilised.

To verify the procedures, the reviewer will check Standard Operating Procedures, Quality Manuals and other procedure documentation, contemporary notes, standards documents, supporting scientific or other literature, and witness statements.

### 2.1.2 Interpretation

When items are tested and results are obtained, those results are interpreted. Therefore, a defence verification of the interpretation involves checking that the correct testing has been performed in the correct way, and that the results

[4] **Forensic Science: Implications for Higher Education 2004**
http://www.heacademy.ac.uk/assets/ps/documents/forensic_science_implications_for_higher_education_2004.pdf

properly reflect the sample. Checking will include viewing any printed output obtained from the testing, viewing contemporary notes, and may include verification of the calibration of the equipment, reference standards, positive and negative controls, and the maintenance and calibration log of the equipment.

### 2.1.3 Evaluation

When results have been obtained and noted (i.e. interpreted), evaluation then occurs. Evaluation is the consideration of the analytical results in the specific context of the case in hand. Evaluation will almost invariably involve the consideration of other possible scenarios that encompass the evidence. In that regard, it is usually necessary for the defence to revisit the contemporary notes of the prosecution experts to inform either the creation of new scenarios, or to test current ones.

## *2.2 Discovery*

The second function of the defence review, after verification, is to discover any information that is not apparent from the statements or notes produced by the prosecution.

These may include, but not limited to;

- Items seized but not examined
- Items not tested
- Items not reported
- Validation and accreditation of methods
- Training and competence of analysts
- Contamination opportunities

This last aspect is increasingly important as the sensitivity and specificity of tests, such as LCN DNA, increases. Only close examination and comparison of continuity and case notes can establish the exact whereabouts of individual items at any pertinent time.

## *2.3 Assessment by the Defence*

### 2.3.1 Individual

Individual experts, with expertise in particular areas, will contribute to either the overall consideration of the case, or to specific reports on their area of expertise.

### 2.3.2 Collective

Most cases involve discussion and input from other scientists, usually on the particular science applied to testing, and on the interpretation within the opinion. The Institute staff collectively discuss and peer review cases, case briefings and statements, and also reports received from other consultants, prior to sending these to the instructing lawyer. This is a form of quality assurance and may involve experts across the world.

### 2.3.3 Reports and briefings

The main output of all of the above is a collection of data, briefing papers, and reports that enable the assessment of the work performed to derive the opinion expressed in prosecution reports and, where appropriate, to form the basis for other expert reports which may challenge those opinions.

The final output is in the form of briefing papers and reports to instructing lawyers or Counsel. In some cases the briefings or reports may concur with the methods, interpretations and evaluations employed by the prosecution experts, in other cases there are differences between the prosecution and defence conclusions. When required, experts from The Forensic Institute give evidence in court.

# 3 Specific responses

*Question 7: Do you agree that the proposed hourly rates based on current guidelines are a reasonable starting point?*

No. They are arbitrary and illogical and do not reflect either normal commercial rates for the provision of complex expertise or the fluctuating and undependable supply of work.

It is obscure how the different disciplines have been grouped in the way that they have, and there is no apparent rationale for the differing rates.

Additionally, it is recognised that in most circumstances it has not been hourly rates but overall cost that has determined whether sanction has been granted. Our belief in a thorough analysis of the evidence has undoubtedly caused us to lose business to others who may perform a lesser analysis whilst charging similar or higher hourly rates.

Given the low rates for attending Court, in comparison to casework rates, the current system, and the proposed, encourages a ‘low-quote, useless opinion’ approach in which the expert provides a low-cost estimate followed by an unhelpful opinion and thereby avoids ever appearing in court (or indeed scrutiny of their opinion). The solicitor will rarely have the opportunity to obtain a helpful second opinion after initial sanction has been consumed.

For that, and we believe issues of principle, the choice of expert must be primarily that of the defence solicitor who carries the responsibility for the conduct of the case.

Although not dealt with in the consultation, the current fees offered for travel are irrational in that they amount to half of the hourly rate. From our perspective, it is the expert's time that has to be paid for as the cost to the firm and the expert is the same regardless of whether they are traveling or performing casework. When they are traveling they are frequently unavailable for other fee-paying work. We try as far as is possible to continue to do work while traveling (whether in the instant case or others who would then be charged appropriately).

It is recognised that there are serious quality issues in the provision of forensic science and medicine. We have dealt separately with them in our response to the Forensic Regulator and to the Law Commission (q.v. extract in Appendix). It is unlikely that any of the proposed initiatives will have a serious impact on the provision of defence experts, and experts outside of the main forensic disciplines, for some years.

In the meantime, we believe that solicitors as users of experts will primarily determine quality for the immediate future. We have serious concerns about the State determining the status of an expert, and any system dependent on the current practitioners' view of competence being adopted as a filter by the LSC as a factor in funding decisions. The reasons have been set out in our response to the Law Commission.

It is noted that elsewhere in the consultation that, "In criminal cases and we would expect defence and prosecution rates, for similar work, to be consistent." We deal with this in detail in Section 4, but here note that prosecution work in criminal cases is frequently performed in contracted laboratories who have a very different cost structure and volume efficiencies that are not normally open to those instructed by the defence. Nevertheless, despite the expectation of unit-cost volume efficiencies that should be achieved in such organizations, we are aware that one Crown supplier quoted over £200 per hour and another £170 per hour for scientific time (time only – not analytical work). This would appear not to offer a mechanism to cut expert fees if Crown rates are to be used as the benchmark.

The rates for Court appearance are in our view the least attractive aspect of all (as indeed they are presently). Court appearances can be stressful for the individual and are the poorest fee generators for firms. This again may be a positive discouragement to provide opinion that may result in court appearances.

*Question 8: Are there situations when this would not be appropriate? If so, what would they be and why?*

This question appears to assume a positive answer to question 7, which we do not give.

*Question 9: Do you agree that it is appropriate to pay the same rates for the same type of expert in both civil and criminal cases? If not, why and what would the difference be?*

We are not routinely involved in civil cases, but would accept in principle that the same rates should apply to the same work.

*Question 10: What are the circumstances when prior authority would need to be sought to go above the proposed rates?*

When specific and rare expertise is only available at a higher rate, and the expertise is to be applied to an important component of the evidence.

*Question 11: Are there any circumstances where fixed fees would be appropriate, for example DNA and GP reports? What should the fixed fees be?*

We are surprised that DNA should be regarded as a topic for which fixed fees could be charged. The production of a profile is of course a relatively straightforward process which can be costed and priced on a fixed basis. The interpretation (e.g. What alleles are present? How many contributors are there?) and evaluation (what is the significance of this in the context of the case?) are separate and frequently complex matters that are not amenable to such an approach.

Other areas that *may* be able to be unitised, such as search of clothing or other items for body fluids; ignitable liquid analysis; drug analysis; and similar processes. In each instance the same requirement for interpretation and evaluation prohibits unitisation for most useful reports of these processes.

The fees will be based on the cost of staff time, building overheads, capital cost of equipment, and consumables. Some of these are subject to volume efficiencies and therefore can only be sensibly determined by the supplier.

*Question 12: Are there particular types of experts who may cease to do the work for the proposed rates? Who are they and what can be done to address this?*

We occasionally seek to subcontract other experts in specific circumstances. We have direct experience of experts, especially medical experts, who do not routinely appear in court or provide forensic reports who have been deterred primarily by the possibility of professional opprobrium and abuse following cases such as those of Professor Roy Meadow. Although poor fees may not be the primary deterrent, they may have some influence on personal decisions. We have no data on that.

*Question 13: What other factors lead to issues with supply in some areas? What can be done to address these?*

There are several 'forensic' specialties, especially in the areas of trace physical evidence, such as footmark, glass, and fibre analysis, where there is insufficient work to enable any practitioner to generate sufficient income to earn a living wage. Such expertise therefore inevitably remains within large organisations providing a range of services to the police.

The development of funding mechanisms that enable better planning and cost efficiency by larger defence-oriented organisations will be a partial solution to this problem as they could, for example, train such staff in other areas to improve their fee earning capacity.

# 4 Other comments arising from the Consultation Document

We agree that it is necessary to obtain value for money in the purchase of all public services. It is recognised morally and legally in developed countries that the defendant has a right to a fair trial.

When expert testimony is involved the equality of arms between the state and the defendant is already highly skewed in favour of the prosecution who have access to well resourced laboratories and other resources which even a cursory examination of the relative amounts spent on expert opinion in most cases by the Crown and the defence will attest. We have been involved in one case where the Police spent at least £1m on LCN DNA testing compared to our fees of less than £30k; the client was found not guilty.

Some years ago our Professor Jamieson discussed data collection to inform policy decisions on fees and defence funding issues with representatives of the LSC and LSC NI. It is understood that a steering group was to be formed involving all of the UK Legal Aid funders to investigate this in order to inform discussions such as are now being undertaken by the MoJ. We are disappointed that no apparent progress has been made on that project which was specifically designed to create the data that would better inform the current process.

Notwithstanding that, rates should be reviewed annually in consultation with representatives of suppliers. This representation should include the entire spectrum of suppliers from individual experts not normally performing forensic work to larger firms wholly or largely dependent on forensic work (specifically work for defence agents). It may be possible that a mechanism can be found that will enable each supplier to be provided an 'approved rate' in advance that recognises the circumstances of that individual supplier (e.g. resources, capacity, and capability).

Such discussions may be taken further by considering a set number of contracted hours that could potentially remove the need for prior authority if mechanisms can be developed to monitor deployment of the hours in a reasonable fashion. For example, 1000 hours of work could be contracted at £120ph, 2000 at £110 etc. This circumvents the costs for small firms or individuals associated with a variable demand and enables better planning of provision and pricing. This approach could be implemented quite quickly and provides a comparatively easy route to savings based on volume efficiencies, but should also involve the creation of proper data collection mechanisms to monitor efficiency and effectiveness for the future.

The consultation states,

"*Setting rates aims to increase transparency, ensure consistency and control the unsustainable rising costs of expert's fees.*"

In our opinion;

1. It is not obvious how the proposals will increase transparency.
2. Whilst consistency may be generated in the hourly rate, there is no evidence or proposal that will ensure a consistency in the quality of expertise or the overall cost of cases.
3. There is no data in the paper, or that we have seen, which would establish whether the rising costs are a consequence of rising hourly rates or a larger overall volume of casework. If it is the latter, and that trend continues, then the proposals would not appear to offer a solution.

*(1) a more robust approach to the accreditation and regulation of expert witnesses, whether called by the prosecution or the defence"*

Accreditation is primarily a means by which methods and procedures are set to paper, and a system put in place to ensure that those methods are followed. The service specification for International Standards Organisation (ISO) accreditation is primarily set by 'customer requirements', not by scientific accuracy or reliability.

Our role is to verify that the internal procedures have been performed by Crown scientists, and that those procedures, where applicable, conform to nationally and internationally acceptable science. Although training and validation is examined as a small part of the accreditation process, there are no set standards, for accuracy or reliability of analyses for example, imposed upon the organisation. In the existing schemes, the standards are described as 'fit for purpose', and that purpose decided by the customer.

In our view, it is unnecessary that such accreditation is applied to those tasked with reviewing results, in contrast to analysing materials and creating the results in the first instance. This would apply to many academic experts who, whilst undoubtedly expert, would not ever be part of any accreditation process.

There is diminished scope for the wider scientific scrutiny of forensic science as distinct from some other forensic disciplines. This is of especial concern when it is being increasingly recognised that,

*"… there is wide variability across forensic science disciplines with regard to techniques, methodologies, reliability, types and numbers of potential errors, research, general acceptability, and published material. Some of the forensic science disciplines are laboratory based (e.g., nuclear and mitochondrial DNA analysis, toxicology and drug analysis); others are based on expert interpretation of observed patterns (e.g., fingerprints, writing samples, toolmarks, bite marks, and specimens such as hair). The "forensic science community," in turn, consists of a host of practitioners, including scientists (some with advanced degrees) in the fields of chemistry, biochemistry, biology, and medicine; laboratory technicians; crime scene investigators; and law enforcement officers. There are very important differences, however, between forensic laboratory work and crime scene investigations. There are also sharp distinctions between forensic practitioners who have been trained in chemistry, biochemistry, biology, and*

*medicine (and who bring these disciplines to bear in their work) and technicians who lend support to forensic science enterprises."*[5]

The same extensive and authoritative report states,

*"disparities between and within the forensic science disciplines highlight a major problem in the forensic science community: The simple reality is that the interpretation of forensic evidence is not always based on scientific studies to determine its validity. This is a serious problem. Although research has been*

*done in some disciplines, there is a notable dearth of peer-reviewed, published studies establishing the scientific bases and validity of many forensic methods."*

It is therefore unlikely that an amalgam of 'practitioners' to decide on accreditation standards would have any more authority in some disciplines than a collection of astrologers or tea-leaf readers collectively deciding standards for themselves.

Much, if not most, of the practice of *forensic* science is the practice of science, including the interpretation and evaluation of evidence with an occasional overlaying of legal considerations such as continuity. "Forensic science" is not some self-contained discipline like medicine, mycology, civil engineering, or computing.

[5] Strengthening Forensic Science in the United States: A Path Forward. Committee on Identifying the Needs of the Forensic Sciences Community; Committee on Applied and Theoretical Statistics, National Research Council, National Academy of Sciences of the US. Published February 2009