Millington Hingley Ltd – Written evidence (FRS0075)

Declaration of Interest

This submission represents the sole view of Millington Hingley Ltd, a private limited company, based in the UK. Our company is one of the smaller suppliers of forensic science services to the Criminal Justice System (CJS) and is entirely owned and run by its two founding directors, Jo Millington and Lynne Hingley. The majority of our business is in the provision of case review, forensic science related advice, consultancy and training and we collaborate with a broad range of experts from across the industry. Casework services are provided to prosecution and defence, consultancy and training services to industry and government departments, in the UK and abroad, and we undertake a significant proportion of pro bono work. We have both been employed by a number of the major forensic science providers in the UK, including the Forensic Science Service (FSS) and have worked in police laboratories. We have a combined experience of over 40 years working in the UKCJS and feel that we are well placed to address the issues that have been raised. We have focused our response to the questions that we feel most qualified to address.

Questions

Forensic Science in the Criminal Justice System

1. Is forensic science contributing to the delivery of justice in the UK?
   1.1. In the majority of cases, yes, but there are significant inconsistencies in the way in which forensic science is being applied across different investigation types and how it is used by the court.

2. What are the current strengths and weaknesses of forensic science in support of justice?
   2.1. Forensic science continues to provide a powerful tool in the investigation of crime. In order to use forensic science effectively, it is first necessary to develop a dynamic case strategy; one that identifies and capitalises on the initial forensic opportunities, but that can then adapt to opportunities (or requirements) that emerge as the case progresses. Decisions made in the early stages should not therefore preclude the possibility of applying other technologies down the line, including the ability to re-test materials in the advent of newly emerging techniques, or in the event that a case is re-examined.

   2.2. The majority of tests that are currently available to the forensic investigator are fit for purpose and have the ability to consistently produce robust and reliable data. Almost all of the quantification methods in regular use are amenable to accreditation and there are well-established quality frameworks against which outputs can be measured and improved.
2.3. The UK has historically led the charge in terms of research in forensic science and in the development of best practice. When the principles that resulted from this investment are properly applied, forensic science can offer strong and irrefutable evidence.

2.4. Forensic science however is at its most vulnerable when the submission strategy is biased towards a particular hypothesis and/or the resulting data is not interpreted in context with the case circumstances. Critical thinking and the evaluation of forensic results, particularly in the early stages of an investigation, have effectively been driven out of the system by market pressures, particularly the appetite to deliver results quickly and cheaply.

2.5. Results are now routinely reported in a staged manner: from streamlined forensic reports (SFRs) at the outset (which provide a high level overview of the test result) through to what are referred to as abbreviated reports (which can provide more detail but contain little technical or interpretative context) as the case progresses. Although there are clear guidelines on how streamlined reports should be used, we regularly deal with cases where the trial is being progressed on the back of an SFR. We also often review cases where only staged or abbreviated reports, from multiple scientists across different and commercially independent providers, have been commissioned. This can mean that the results are at best incomplete and at worst misrepresent the overall impact of forensic science in the context of the scenarios that are being considered.

2.6. Full witness statements are increasingly being instructed in the closing stages of an investigation, as the CPS prepare for trial. Whilst these generally accommodate an evaluation of the scientific findings relative to the prosecution allegation, they do not necessarily consider any alternative scenarios.

2.7. It is rare to see results from multiple forensic science providers having been evaluated holistically, but it is not uncommon to find reports on complex analytical results in the unused material.

2.8. It is our experience, when instructed to review the scientific findings on behalf of the defence, that we are the first scientist to have access to all of the results, including the raw data and relevant case information.

2.9. We are often then instructed to put all of the findings into context with the available case information and scenarios that have been presented. But acting on behalf of the defence raises additional challenges. The disclosure system is not fit for purpose and the funding system also often favours the cheapest quote. It is not unusual for delays in both disclosure and legal aid funding to mean that we have to issue reports on complex and serious crimes within days, so as to preserve a trial date that the court is reluctant to move because of resourcing pressures. This means that scientists, for both the prosecution and defence, are undertaking additional analyses at the last minute to answer the questions that are most relevant to the court: not simply could this DNA have come from that person, for example, but if it did, how did it get there? If questions
such as this are to be answered in a balanced way they need to be addressed in the controlled framework that is ostensibly available to the investigator as the case progresses, and not be considered reactively as the case comes to trial. It is not uncommon for scientists to be asked to address scenarios in the witness box – this is not good scientific practice and it presents an unacceptable risk.

Understanding and use of Forensic Science in the Criminal Justice System

3. **What is the scientific evidence base for the use of forensic techniques in the investigation and prosecution of crimes? Are there any gaps in that evidence base?**

3.1. There is a substantial and well-established framework that underpins forensic thinking in the UK, but we continue to recover from the brain drain that occurred when the FSS closed, i.e. loss of scientists with significant experience and specialist knowledge.

3.2. Many of the internal scientific reports, which represented a national resource, were also sequestered into the National Archive.

3.3. The closure of the FSS coincided with a boost in commercialisation of forensic science and gaps due to the loss of expensive (experienced) staff were backfilled with new (inexperienced) graduates. Much of the experience in the system was also lost and there was no organised transition to grandfather in knowledge from the previous generation(s). This happened at a time when there were significant developments in DNA technology and digital investigation.

3.4. The gaps that have emerged in the evidence base are therefore at the extremes: loss or degradation of specialist knowledge, such as forensic fibres and other niche areas, or in putting the results generated from new technologies into context. The advances in technologies and biometrics present significant challenges in that they enable the generation of complex DNA data and results from minute traces of biological material, but the lack of interpretative and contextual knowledge limits the evaluation and power of these results in case contexts. Without equivalent progression in critical analysis and evaluation, these new and emerging technologies are at risk of being misinterpreted and used inappropriately.

3.5. It is also evident that the ‘civil service’ ethos, which comes with working in a ‘not-for-profit organisation’, does not fit well in a commercial world. It is impossible to share best practice quickly when the tools and emerging technologies are commercially sensitive.

4. **How can the Criminal Justice System be equipped with robust, accurate and transparent forensic science? What channels of communication are needed between scientists, lawyers and the judiciary?**

4.1. The application of forensic science in the CJS cannot be driven by the police alone. Robust, accurate and transparent forensic science can only
be driven by independent and critical review. It could arguably be delivered by a scientist acting on behalf of the court, not the prosecution or defence specifically, if that scientist had open access to all of the exhibits and relevant case information. The framework for this approach already exists, there are institutions full of well-trained forensic scientists, but it is difficult to optimise this resource when the initial strategy is driven by the police. It is also difficult to ensure that the best tests are being applied when the overall strategy is being driven by cost.

4.2. This is not to say that the UK requires a mega-provider of forensic science. We feel that integrated forensic science can be delivered by a range of generalist and niche providers, but it requires oversight and a framework that supports robust forensic strategy and doesn't just focus on regulation. It requires communication and collaboration. The office of the Forensic Science Regulator could provide this oversight, but its scope and remit would need review. It could be delivered by a national centre of excellence.

4.3. In a significant proportion of the cases that we review, we will work with the crown scientist to present a joint and agreed position on the findings, and in many cases this will state that the findings do not help in favouring one alternative i.e. the prosecution allegation, over the other i.e. the defence account. The scientists do not collude to reach this opinion; they are merely evaluating the findings in the context of two opposing scenarios. These issues should have been addressed by the crown before trial. It is in everyone's best interests to know as soon as possible in the investigative process when, and if, the science may be evidentially neutral. This allows resources to be better targeted, and more appropriate tests to be commissioned. It also better supports the judicial process.

4.4. Robust disclosure channels are key, and conference between legal and scientific teams are critical in understanding the strengths/weaknesses of the science in a particular case. This needs to be backed up with education and training, which helps each player to understand the different roles within the UKCJS, and to collaboratively deliver the overriding objective.

5. **What is the level of understanding of forensic science within the Criminal Justice System amongst lawyers, judges and juries? How can it be improved?**

5.1. In our experience, there is a good level of understanding of forensic science within the CJS but there are also significant gaps and knowledge, in certain areas, can be variable. These gaps can be plugged with the continued publication of advisory notes and ‘primers’, and with complementary education and training. But many of the inconsistencies, or misunderstandings, can be addressed most effectively through the provision of clear and complete reports that include signposting and visualisation. Again the CJS needs to recognise that many of the reports submitted present only an abbreviated version of the data that is available and they might not address the relevant issues. If the report does not address the questions that are of ultimate interest to court, the strength
or limitations of the forensic results could be misconstrued - the reader must revert back to the scientist and ask for additional clarification.

Standards and regulation

7. **Is the current market for forensic services in England and Wales sustainable? Are changes needed to ensure forensic science provision is maintained at the level required? What are the risks of a market approach, for example what happens if a provider goes out of business? And what is the impact on quality?**

7.1. No, the current market is not sustainable

7.2. Yes, changes are required.

7.3. The risks of a market approach to forensic science are well documented, including in previous submissions to the Select Committee. If a system is driven by the quick and cheap ethos, this will ultimately stifle investment, and any research will be progressed on its ability to lead to commercialised output. There is currently very little buffer available in turnover to sustain a research program, and in order to deliver quality-driven forensic services the majority of our resources are diverted into funding essential regulation and/or development of quality processes and procedures. Having worked in the commercial sector, we anticipate that a large proportion of staff work a significant number of unpaid hours in order to get the work done in the timeframe required. This is not sustainable.

7.4. There continues to be instability in the market place, and when a major provider such as Key Forensic Services runs into trouble, it prompts a reactionary investment to safeguard knowledge and case data so as not to disrupt the CJS process. Ironically if that emergency funding had been applied to the industry over a sustainable timeframe, it could have helped avoid such critical situations.

7.5. The fragmentation of provision presents a significant risk to archiving and retention of case materials. There is no guaranteed long-term investment in the National Archive, and this is being run quite leanly with additional resource being brought in when there is a critical requirement, such as failure of a market provider. There is no long-term strategy to digitise the contents of this national resource as far as we are aware.

7.6. The lack of an overarching national retention and archiving policy has long-term repercussions for cold case, right-to-appeal and post-conviction investigation.

7.7. The market-driven approach also stifles innovation and protection of niche and specialist skills which do not fit with the fast and cheap test-based approach.

7.8. As a result of the above, quality is degraded.
8. **Is the system of accreditation working successfully to ensure standardised results and the highest quality analysis and interpretation of significance of evidence?**

8.1. Accreditation and regulation go some way to ensuring that scientific outputs are consistent, and that they can be tracked and measured. But we deal with cases where results have been generated by an accredited provider - the data is good, but it hasn’t been interpreted correctly or evaluated holistically. This is not something that falls easily under accreditation. The current regulatory frameworks are (in reality) prohibitively expensive, and there is no accessible solution for smaller providers.

9. **What role should the Forensic Science Regulator have? If the Forensic Science Regulator is to have statutory powers, what should these be?**

9.1. The Forensic Science Regulator (FSR) must have a statutory role to be effective.

9.2. The office of the FSR should be driving and sharing best practice in a framework that incorporates a transparent feedback system for quality issues between forensic science providers. We need a regulatory scheme that is open-access and not-for-profit, that attracts central funding to encourage all FSPs to connect within a cooperative system. We also need a national body that drives coherent research and training strategies. There is also a critical requirement to retain expertise in a broader spectrum of forensic science. If the FSR is not the solution, then a centre of excellence should be considered wherein the FSR could reside.


11.1. No.

11.2. Repeated concerns were voiced in the written submissions to the Science and Select Committee Forensic Science Strategy inquiry that the strategy (as it stands) was police-led. It had ostensibly been written and devised by ‘users’ of forensic science with little or no contribution from forensic science providers, or forensic scientists.

11.3. Although it pertains to be a National Strategy on Forensic Science, it is weighted towards biometrics, fingerprints and digital investigations. You could argue that this simply reflects evidence in today’s crimes. These areas are traditionally delivered in-house by police forces, and it is possible that the policy group focused on their strengths; but our concern is that this was at the detriment of everything else.

11.4. Although biometrics may generate the highest volume of forensic data, the strategy does not recognise the power of, and contribution from, other forensic disciplines, nor the potential of blood, toxicology, ballistics, glass, fibres in crime investigation. If you search the Forensic Science
Strategy document, each of these evidence types generates 1 match - each. The term fibre actually appears in the footnote, telling the reader that the document is printed on paper that contains 75% recycled fibre content. There are 70 matches to the word digital, 33 to DNA, 14 to fingerprints.

11.5. Our view is that if the aim is to define a national and cohesive strategy, it is imperative that all parties are consulted and given an opportunity to contribute unless there are guarantees that the people involved in delivering it have sufficient oversight and knowledge of the strengths and weaknesses of the whole process to be able to represent everyone fairly.

11.6. On the other hand if it is intended that the Strategy will merely sit alongside the forensic science laboratory, so that investigators can use scientists simply to conduct tests on a case by case basis – market forces encouraging them to only use the cheap tests, that can be turned around quickly, then the relationship between the scientist and the investigator will degrade further.

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