

THE EXPERT WITNESS INSTITUTE
THE MICHAEL DAVIES MEMORIAL LECTURE

Given by

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Forensic Science Regulator

**THE REGULATION OF QUALITY STANDARDS IN FORENSIC SCIENCE: THE
PAST, THE PRESENT AND THE FUTURE**

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1 Introduction

Good evening and thank you for welcoming me here. I am honoured and pleased to be with you. An important and pleasurable part of a regulator's role is to meet with the many stakeholders who have an interest in the business to be regulated. I recently saw an advertisement for a regulator's job which included the following requirement of the candidate:

“An excellent relationship manager and communicator, personal qualities will include a strong strategic ability and an analytical mind set. Robustness, integrity and a willingness to listen is required in all regulators”.

There is no doubt, in my view, that I have to be prepared to manage a wide variety of relationships with people involved in forensic science. I am also in no doubt that I have to listen. Meeting stakeholders, and listening to what people have to say about the many issues surrounding modern forensic science, has been the central plank of my strategy in the first months of this job. It has been extremely valuable and informative. I am sure I will leave here this evening knowing a bit more and having added to my growing insight into the world of forensic science. As regards the other qualities listed in that quote from the advertisement, I'll leave you and others to judge!

Sir Michael Davies, in whose memory this lecture is given, was a man who undoubtedly had all the qualities listed in the quote, and many more. As a founding chairman of this institute he recognised and worked hard for the proper administration of justice and the early resolution of disputes through fair and unbiased expert evidence.

I will return later to the topic of expert witnesses and where I think my role has a part to play in the use of expert evidence. First though, I want to explain some background to my role and how it came about, what my role is, what I want to achieve, and how I propose to achieve my objectives. I will finish with a view of the future.

2 Background

Discussions about some form of regulation for forensic science can be traced back to the early 1990's and have been repeated in varying arenas since then. The gestation period has been long. We all know of the relationship between an animal's period of gestation and its size, the longer the gestation the larger the animal. If I apply that principle to my role then, as regulators go, I should have a large team. The opposite is the case, I have a staff of seven who are committed and bring a good range of knowledge and expertise to their work, but they will not have the capacity to manage everything that has to be done. I will be relying heavily on the teams of people I describe as 'professional volunteers' who have signed up to advise, help and support me.

There is one certainty I have established: everyone wants to achieve high quality standards in the delivery of forensic science. In my travels I have yet to meet someone who does not want high standards and who shows any inclination to resist me in my work. That should not surprise any of us and is what I expected. Standards at the moment are generally very high, but they are fragmented and lack any coherence.

Recommendations for the regulation of forensic science can be traced back to the Royal Commission on Criminal Justice (reported 1993)¹ that recommended the establishment of a forensic science advisory council. This followed a recommendation to establish an advisory board and register for forensic scientists made in 1993 in the Report on Forensic Science by the House of Lords Select Committee on Science and Technology², the recommendation was for a system of individual registration of all forensic scientists. More recently, in 2005, the House of Commons Science and Technology Committee³ was critical of the absence of an agreed protocol for the validation of scientific techniques prior to their being admitted in Court. The Committee also recommended an independent regulator in the form of an advisory council to oversee the regulation of the forensic science market, and to provide independent and impartial advice on forensic science.

Calls for some form or other of regulation of forensic science have focussed on one or more of each of three levels of forensic science provision:

- regulation of the market and the suppliers;
- registration and regulation of individual forensic practitioners; and
- regulation of the scientific validity of the forensic products or services supplied to the Criminal Justice System (CJS).

Reform of the forensic science service market, recent changes in the status of the Forensic Science Service and the retention of the National DNA Database under public sector control underline the need for oversight and standard setting for forensic science services.

¹ Report of the Royal Commission on Criminal Justice. Cm 2663. Published July 1993

² House of Lords Session 1992-93 5th Report. HL Paper 24 Printed 3rd February 1993

³ 'Forensic Science on Trial. Seventh Report of Session 2004-05. Published March 2005

Historically, the Forensic Science Service (FSS) has been the standards setting body for forensic science. The FSS also advised the government on forensic science issues. With the status of the FSS moving to that of a Government Company in a new competitive market with other suppliers now in the field, it is no longer appropriate that they retain these responsibilities.

Part of the early work undertaken before I was appointed was an examination of the standards landscape that currently exists. Dr Bob Bramley, formerly the FSS Chief Scientist, was commissioned by my predecessor to undertake this work. He produced a large database of standards that spread across different forensic functions and disciplines, and originate from a wide variety of sources. Suffice to say that forensic science is already subject to a range of controls:

- many individuals have formal qualifications, are members of professional bodies, or are registered with the Council for the Registration of Forensic Practitioners;
- scientific processes in laboratories are governed by the standards of quality assurance bodies such as the UK Accreditation Service,
- the CJS provides rules and guidance which govern the use of scientific evidence.

The fact that these arrangements exist, and the very simple fact that the adversarial system in our courts acts as an excellent auditor of standards in forensic science, means that quality standards in forensic science are generally high.

I describe this as the Regulator's paradox. If standards are high, and the courts maintain the role of standards auditor then why do we need a Forensic Science Regulator?

The answer lies in the fact there has been no strategic oversight of these existing arrangements to ensure that they are fit for purpose and comprehensive, especially in the current and emerging competitive market for the provision of forensic science to the Criminal Justice System. In addition, there is no focused responsibility for anticipating future developments in forensic science and ensuring that they will be appropriately regulated.

In summary; forensic science has a long and largely successful history, operating in an environment where there has been some oversight of quality standards and within a justice system that is good at exposing flaws in the science. There have been mistakes and perhaps, too often, the science is the subject of argument in court. Do we want a court to be a scientific symposium where experts argue their views or would it be better if forensic scientific processes were validated in accordance with accepted protocols and less open to scientific challenge?

3 Principles

I would like to explain the principles that I will follow as the Regulator, and the principles that I am developing for providers and practitioners to subscribe to. These are not yet agreed and will be discussed in my manual of regulation when it is published for consultation (more on the manual later).

The high level principles applying to quality standards for forensic science delivered for the criminal justice I suggest should be:

- Providers should be accredited by a recognised independent accreditation body to accepted standards;
- Practitioners should be able to demonstrate their on-going competence and development;
- Methods (products and services) should be validated according to acceptable scientific procedures, and.
- Records of accreditation, competence and validation must be accurate, retained and available for disclosure through the court process.

As the Regulator I will:

- work in the public interest to build confidence in the use of forensic science by the Criminal Justice System;
- take a risk-based approach towards standards and guidance, focusing on the areas that present the greatest risk to failures in the delivery of reliable and impartial forensic science;
- cover the whole spectrum of forensic science activity;

- be independent, transparent, accountable, proportionate, consistent and targeted in my approach to regulation of standards;
- consult widely;
- develop effective relationships with delivery partners and stakeholders;
- work closely with providers and practitioners to produce effective standards and guidelines that support current activity and enable new entrants into the market; and
- encourage and support innovation in the development and use of forensic science to a consistent high standard.

Forensic providers and practitioners will be expected to:

- work with integrity and impartiality to deliver high quality forensic science that meets the needs of the courts and benefits the Criminal Justice System;
- work with the Regulator and delivery partners in an open and cooperative way, and to disclose to the regulator anything that identifies a weakness or flaw in the delivery of forensic science; and
- support the Regulator and delivery partners in the development of standards and guidelines.

Alongside the principles sits the Regulators' Compliance Code. I am not bound by the Code. However, I will follow the principles of good regulation contained within it; that regulatory activities should be carried out in a way which is transparent, accountable, proportionate and consistent; and that regulatory activities should be targeted only at cases in which action is needed.

4 Vision and role

My vision is to achieve a standards framework that is comprehensive, transparent and available to all, and is built to achieve standards at the three levels of supplier, practitioner and product (method). I want to achieve a level playing field for all suppliers with quality standards maintained in the face of the changing market and increased competition.

The post of the Forensic Science Regulator was announced by the Permanent Under-Secretary of State for the Home Department (Meg Hillier) in July 2007, she included the comment:

“..... we have put in hand to establish the post of forensic science regulator, whose role will be to advise the Government and the criminal justice system on quality standards in the provision of forensic science. This will involve identifying the requirement for new or improved quality standards, leading on the development of new standards where necessary; providing advice and guidance so that providers will be able to demonstrate compliance with common standards, in procurement and in courts, for example; ensuring that satisfactory arrangements exist to provide assurance and monitoring of the standards; and reporting on quality standards generally.”

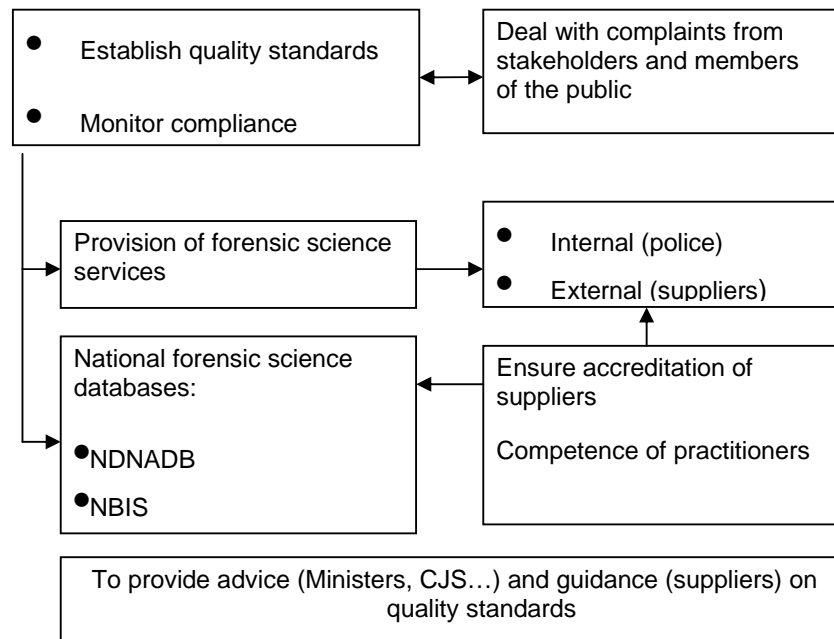
The role of the Regulator is to:

- establish and monitor compliance with, quality standards in the provision of forensic science services to the police service and the wider CJS;
- ensure the accreditation of those supplying forensic science services to the police, including in-house police services and forensic suppliers to the wider CJS;
- set and monitor compliance with, quality standards applying to national forensic science intelligence databases, beginning with the National DNA Database® (NDNAD) and the National Ballistics Intelligence System (NBIS) and extending to others as they arise;
- provide advice to Ministers, CJS organisations, suppliers and others as seems appropriate, on matters related to quality standards in forensic science; and
- deal with complaints from stakeholders and members of the public in relation to quality standards in the provision of forensic science services.

The Regulator will not be expected to deliver all these activities directly but is reliant on the coordinated activity of key delivery partners and stakeholders, and established processes (unless these processes are unable, for some reason, to

deliver the required outcome). It will be the function of the Regulator to ensure that the standards exist, they are fit for purpose, they are subject to accreditation and that they are monitored. Where organisations already exist to deliver the above activities this will continue. Examples of these organisations are the United Kingdom Accreditation Service (UKAS) with respect to the accreditation of suppliers and the Council for the Registration of Forensic Practitioners (CRFP) with respect to the accreditation of individuals.

Figure 1 The Role of the Forensic Science Regulator



5 Current plans

What I plan to achieve in my first year is set out in my business plan. In essence I am setting up a number of specialist groups to:

- Develop a risk model that gathers and assesses information on risks of failings in any of the many forensic processes or systems that combine to deliver forensic science.
- Specify an end-user requirement for forensic science services. The end-user is taken to refer to the courts and the needs of the justice system in the use and presentation of forensic science.

- Specify quality standards; to advise on all matters related to the preparation, implementation and monitoring of quality standards.
- Advise on all matters related to quality standards applicable to DNA analysis including its interpretation and use in the Criminal Justice System.
- Specify new or improved quality standards for the delivery of digital forensic services. Digital forensics covers processes to extract information from data storage media associated with computing and communications devices. This is a growing and developing area of police business, but it is an area covered by few quality standards.
- Advise on quality standards to be applied to forensic pathology.
- Review and advise on quality standards for forensic practitioners. This piece of work has been agreed after my business plan was published and recognises the need to review how practitioners and expert witnesses can demonstrate their competence.

Towards the end of my first year I plan to submit a paper to Ministers that reviews my role and its effectiveness, particularly in the absence of any statutory provision for my work. My thoughts at the moment are that I can achieve my objectives, to the satisfaction of the end user (the courts) without the need for legislation.

I should mention that the work on quality standards will focus equally on forensic services delivered in-house by police forces and those delivered by suppliers in the competitive market. I am also making it clear that I see no distinction between standards applied to intelligence as opposed to evidential forensic work.

I think it is also important that I am able to have a full and detailed understanding of the market for the supply of forensic services. It is not difficult to gauge the volume and share of the market held by the handful of leading suppliers. However, there are many small niche suppliers and many more forensic scientists who operate alone, or as part of a small team, or who are in a position to offer forensic expertise through their everyday work. For example, academics whose work places them in a position to offer forensic expertise on a part-time basis. I have an on-going piece of work to map the forensic market.

One of my responsibilities is to set and monitor compliance with, quality standards

applying to national forensic science intelligence databases, beginning with the National DNA Database® (NDNAD) and the National Ballistics Intelligence System (NBIS) and extending to others as they arise.

Custodianship of the NDNAD has moved from the FSS to the National Policing Improvement Agency. There have been calls for independent oversight of the NDNAD by a body with full ethical and lay input, one such recommendation was made by the House of Commons Science and Technology Committee. I am taking on the role of oversight of the NDNAD with regard to quality standards. I will publish a section in my manual of regulation that discusses how I propose to do this, I am in discussions with the Custodian at the moment and will be presenting a paper to the FSAC at our next meeting.

I also have a responsibility to deal with complaints from stakeholders and members of the public in relation to quality standards in the provision of forensic science services. I suppose an example of this is the concerns about the use of low template DNA analysis. Concerns were expressed to my predecessor who set up an independent panel of experts to review the science and quality standards employed in the use of the analysis of trace amounts of human DNA. The work was led by Professor Brian Caddy, His report was published by me on 11 April. My response to his report was published on 7 May. Both are available on my website.

I will publish, for public consultation, a section of my manual of regulation that covers how I propose to deal with complaints, more on the manual later.

6 Working methods

How do I propose to achieve all this? As I told you earlier, I have small and enthusiastic team with high aspirations. My team is nicely balanced with a good mixture of policy and project staff, and two experienced forensic scientists. However, the task is immense and impossible for us to achieve working alone, and I would suggest arrogant to assume that we have the knowledge to develop a regulatory model that is fit for purpose.

Thankfully I have been able to travel and visit the full range of stakeholders (police, Crown Prosecution Service, suppliers (large and small), National Policing Improvement Agency, academics, Legal Services Commission, government, United Kingdom Accreditation Service, Council for the Registration of Forensic Practitioners, Criminal Cases Review Commission, and more), all of whom want to work with me. I am recruiting teams of professional volunteers who can support and advise me, volunteers who will be the backbones of the specialist groups I detailed earlier.

First though, let me tell you about the Forensic Science Advisory Council (FSAC). The FSAC was established to support and advise me on my work. The Council has met four times so far and is proving to be effective at giving me objective and relevant advice. For example, they have helped to prioritise work, to consider and advise on my business plan and on my developing manual of regulation. They were extremely helpful in their considerations of the recently published report of Professor Brian Caddy who reviewed the use of low template DNA techniques and were able to advise me in preparing my response. The strength of the Council comes obviously from its members, and the broad backgrounds and experience they bring. It is worth listing who the current members are so that you can judge for yourselves the depth and experience they bring:

- His Honour Judge Andrew Goymer (Lords Chief Justice's representative)
- Dr. Basil Purdue (British Association in Forensic Medicine)
- Brian Rankin (President, Forensic Science Society)
- Dr. Jane Beaumont (Director, United Kingdom Accreditation Service)
- Professor Julie Mennell (Chair of the United Kingdom Forensic Education Group)
- Mohammed Khamisa QC (Criminal Bar Association)
- ACC Paul Crowther (Association of Chief Police Officers)
- Dr. Kate Horne (Chief Executive, Council for the Registration of Forensic Practitioners)
- Roger Coe-Salazar (Branch Prosecutor, Crown Prosecution Service)
- Dr Sheila Willis (Chair, Association of Forensic Science Providers Group)
- Stan Brown (Chief Executive, Forensic Science Northern Ireland)
- Tom Nelson (Chief Executive, Scottish Police Services Authority)

- Julie Goulding (Commissioner, Criminal Cases Review Commission)

I have mentioned a few times the manual of regulation I am writing that will explain how I will operate. The manual will be published for public consultation, probably in July this year.

The manual will also explain how I propose to secure compliance with the standards that I do set. As I explained earlier, I will, where possible, rely on delivery partners who are best placed to manage compliance. For example, the United Kingdom Accreditation Service has the facilities and expertise to check for compliance with the standards set in for forensic providers. They also have the ability to remove an accreditation if required.

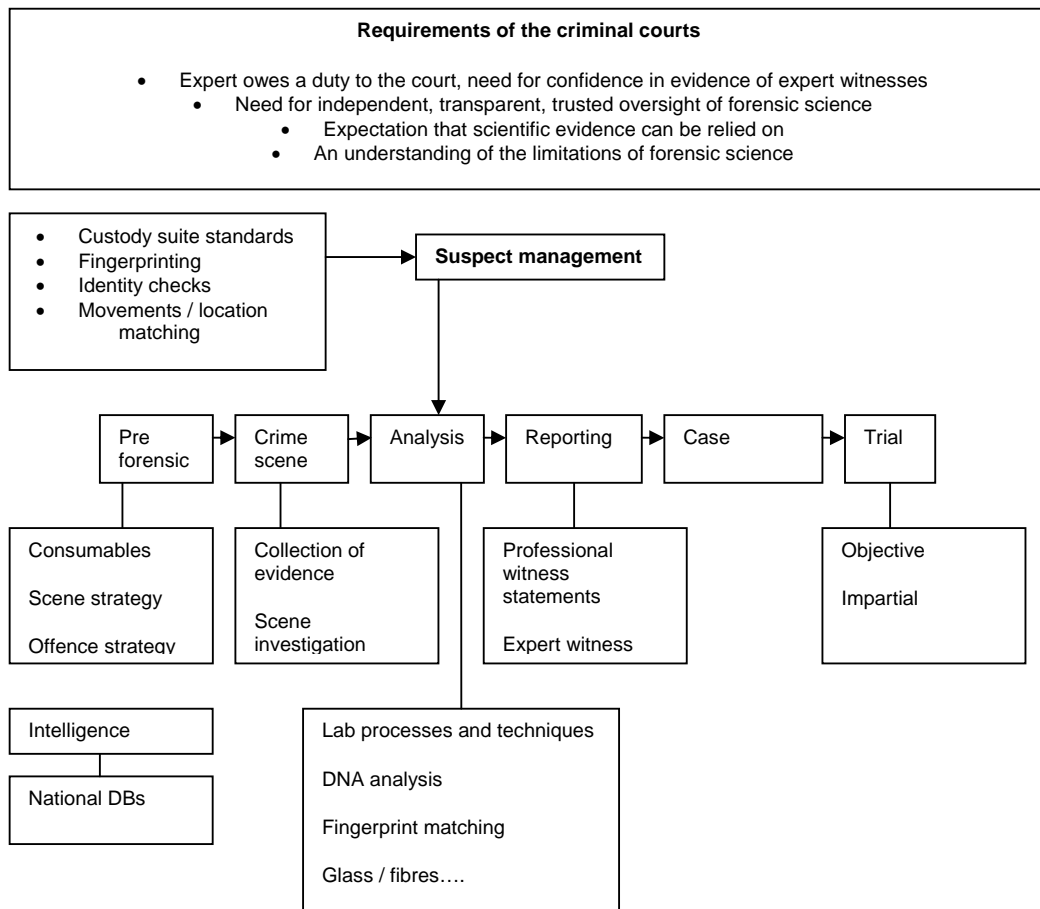
The manual will be a first version but more than sufficient for valuable public consultation. As the work of the specialist groups I mentioned earlier develops I will be able to add more detail into the manual but only after additions have been through the consultation process.

I will not say much more at this stage and will leave you to read the details when I publish the manual, hopefully in early July. Suffice to say that for scientific evidence to be fit for purpose (i.e. robust and reliable), quality standards need to apply to the whole chain of activities from the crime scene through to the courtroom, including the handling of suspects, investigation and case preparation. Therefore, for the purpose of regulation, the definition of forensic science covers not only the scientific techniques used, but also the means whereby the evidence is collected and preserved, how its integrity and continuity are assured and how scientific evidence is presented to the CPS, the defence and the courts.

This chain of activities can cover a wide range of forensic disciplines, all of which can and do fall under the 'forensic' label. The manual will set out the boundaries within which I will seek to work, possibly expanding the boundaries as time and work loads permit. The clearest boundary at the moment is that surrounding the criminal courts, and other tribunals that use forensic science to decide on guilt or innocence, for example the Courts Martial. I am including the coroners' courts.

Less clear at the moment is the exact range of forensic disciplines to be included, suffice to say that forensic services that account for the vast majority of the police forensic budgets will be included, excluded will be specialist techniques at the edge of forensic activity, unless they present an unacceptable risk.

Figure 2 Scope of Regulation



7 Delivery partners

I explained earlier that, where possible, I will rely heavily on coordinated activity of delivery partners who will be the work horses to establish and monitor the standards that I set. I see the key delivery partners as:

- Supplier representative groups

- The National Policing Improvement Agency
- The UK Accreditation Service
- The Council for the Registration of Forensic Practitioners
- The Association of Chief Police Officers
- Skills for Justice
- The Crown Prosecution Service
- Professional bodies (e.g. the Forensic Science Society, the Expert Witness Institute and the Royal College of Pathologists)
- The Legal Services Commission
- The FSAC.

Lately I have become aware of standards delivered in the arena of chemical analysis. I met with a small company who specialise in chemical analysis work, operating to the Good Laboratory Practice standards set by the Organisation for Economic Cooperation and Development. In the UK these standards are monitored by the Medicines and Healthcare products Regulatory Agency (MHRA). The company also provide specialist forensic services, often at the request of the main forensic providers. It struck me that there are a set of standards delivered by the MHRA that might be acceptable and applicable in some circumstances. The MHRA do not know it yet, but I may add them to my list of delivery partners. I am certainly keen to learn more about how they operate, I can see similarities in our objectives and want to learn from the years of experience they have of regulating in a scientific field.

I am very pleased to hear recently of the formation of the new Association of Forensic Science Providers. The Association will represent the interests of the larger companies. I have discussed with them the idea that they could try to represent all providers, my advice is that it would be better to see another group form that represents the interests of the many small providers and other forensic experts who work alone, or as part of a small team. It is vitally important to me that the small providers, who generally undertake work for legal teams defending people in the courts, have a voice. I have met with some of these small teams in my early travels, I intend to meet with many more and in doing so want to find a mechanism for them to come together with a representative group.

8 Standards

The next question is, what do we mean by standards? Standards are required in areas such as laboratory processes (including chemical analysis), collecting and handling data (at crime scenes and in databases), quality management systems, measures of outcomes (such as turn round times) and the competence of individuals.

The United Kingdom Accreditation Service (UKAS) defines a standard as “... an agreed way of doing something. Standards can be recorded or published formally and may apply to a product, process or service.”

Standards may, for example, refer to the minutiae of a process such as comparison with a certified reference material used to test the trueness of an analysis result or to the wider, general analytical method used (such as a particular type of spectroscopy) or to the even wider capability to carry out the analysis of illicit drugs. Standards can be hierarchical. Regulation of forensic science is concerned with setting and establishing the generally higher-level standards that govern all the processes involved in achieving the required ends or outcomes within the whole CJS.

The most widely accepted standard for forensic science laboratories in the UK is ISO/IEC 17025 (“general requirements for the competence of testing and calibration laboratories”). This is an overarching standard of competence. It defines both management and technical requirements. It covers the competence of staff, the validity and suitability of methods and the appropriateness of equipment and facilities. It also governs continuity of evidence, the management of case-files and the storage of exhibits. Compliance with this high-level standard is an assurance of overall quality and, of necessity, requires that all the lower-level ‘standards’ are also applied.

I do think that we can bring in other ISO standards, for example 27001 on information security, and possibly others to create an amalgamation of international standards, clearly set out in my manual and with guidance, that delivers a bespoke set of standards for forensic science that forensic providers and practitioners could

be accredited against. Nested within that could be protocols covering the validation and verification of methods in accordance with accepted scientific principles.

Another issue is one of validation. The Science and Technology Committee were critical, rightly, of the absence of an agreed protocol for the validation of scientific techniques prior to their being admitted in court. This criticism was echoed by Mr Justice Wier in a high profile case in Northern Ireland.

I will, through the specialist groups, develop a protocol for the validation of forensic science methods. Method validation is defined in the standard ISO/IEC 17025 as, "The confirmation by examination and the provision of objective evidence that the particular requirements for a specific intended use are fulfilled." Method validation therefore provides documented objective evidence that a test method measures what it is intended to measure, with an acceptable level of performance. By following six straight forward principles, forensic suppliers will be able to ensure that their methods are fit for purpose, that they can easily demonstrate the validity of a method to the end user (the courts), and that they can achieve consistency with results obtained elsewhere.

The six principles are:

- testing should satisfy an agreed requirement,
- tested methods and equipment should be used,
- qualified and competent staff should be employed on the testing processes,
- independent assessment of performance should be obtained,
- results should be consistent with those obtained in other establishments, and
- good quality control and quality assurance procedures are adopted.

I am ahead of myself here in that I am setting out a validation approach in advance of the work to be done by the specialist groups who know far more about these matters than I do. There is, though, a point to be made which is we are not approaching any of this work from a position of zero knowledge or understanding. There is, without doubt, a good deal of expertise in other scientific fields that we can draw upon. The six principles quoted a minute ago are drawn from the National

Measurement System Valid Analytical Measurement (VAM) Programme, sponsored by the Department for Innovation, Universities and Skills.

I should also point out that forensic providers are now operating in a unique environment. They will, quite rightly, want to retain commercial confidentiality, but are working in the certain knowledge that any method they employ will have to open to full disclosure in the courts. The CPS have made it very clear that they will not entertain any prosecutions based on scientific evidence that cannot be fully disclosed or explained.

Again, these issues are not new, or strictly unique. The Eurachem Guide: The Fitness for Purpose of Analytical Methods, A Laboratory Guide to Method Validation and Related Topics was written by a group of European scientists. The UK input was linked to the VAM programme. The guide is aimed at laboratories needing to validate methods but working in isolation, with no immediate possibility of participation in collaborative trials. It aims to direct the reader towards established protocols where these exist and where they do not, give a simple introduction to the processes involved in validation and provide some basic ideas to enable the reader to design their own validation strategies. This gives the specialist group that will look at validation methods a good start.

9 Forensic Practitioners

Competency standards for forensic practitioners is a topical discussion point. I have recently commissioned a complete review of practitioner quality standards. It was not part of my initial plan for this year but has been brought into focus because of circumstances affecting the Council for the Registration of Forensic Practitioners (CRFP). I have pulled together a specialist group to review the available options for the accreditation of practitioners involved in forensic science. Accreditation in this context involves establishing competency and proving on-going competency. The focus will be on practitioners whose work is committed to forensic science, at any stage in the forensic process. Some will, at the end stage, give expert opinion on their analysis and interpretation of results and can apply for registration.

CRFP provides a mechanism for experts, who I would not consider to be full-time forensic practitioners, to register. Some of you in this audience may well have used that facility and have chosen to be registered with the CRFP.

The original recommendation for the establishment of the CRFP came from a well researched and reported piece of work in 1997. The Forensic Science Working Group. Chaired by Lord Lewis, looked in detail at all the options for ensuring and safeguarding standards of professional competence and integrity among forensic practitioners. They concluded that their scope covered everyone involved in the forensic process, not just the forensic scientists.

The principles the working group adopted remain valid, they were clear that any structure set up must:

- serve justice
- set and maintain high standards of competence, practice, discipline and ethics (maintenance and development of professional skills essential)
- build on and incorporate existing expertise and infrastructure and utilise the present experience of a wide range of existing professional bodies
- be adequately flexible to evolve as required over time
- be self-regulating and independent with input from users, and
- be cost effective.

The system had to be voluntary. They concluded that the best option was for a registration council. They cited the Registration Council for Scientists in Healthcare as the only example of an existing voluntary registration process.

It is interesting to note that the Registration Council for Scientists in Healthcare was, in 1999, absorbed into the Council for Professions Supplementary to Medicine at which point registration was mandatory. It has all since moved under the wing of the Health Professions Council with statutory requirements for registration.

Back to the CRFP. The recommendations of the working group were based on the premise that about 10,500 practitioners would be able to register, through which the Council could become self-funding, independent and cost effective. This has never

been realised and despite their best efforts the CRFP have never achieved this and have been reliant on financial support from the Home Office, and latterly the National Policing Improvement Agency. They have never, and are never likely to, achieve the numbers of registrants hoped for. The result is that we continue to have many practitioners who are not and have no plans to register.

The world has moved on since the formation of the CRFP. We now have a Regulator who is concerned at the patchwork approach to establishing competency standards at the practitioner level. Skills for Justice have rapidly emerged into the forensics field and have developed a good set of National Occupational Standards for forensic practitioners that are receiving wide support and acclaim. The National Policing Improvement Agency has developed extensive competency training, with new training facilities at Harperley Hall, and is working with the Association of Chief Police Officers on an ambitious programme of work under the Forensics21 banner; a key part of that is forensic competence of police officers and staff. The Forensic Science Society has become a professional body. I could go on.

The point is, I now have to, and want to, review the whole arena of accreditation of competency of forensic practitioners. This must involve some expert witnesses and I may end up recommending a model that offers a route to all expert witnesses to establish and register their competency. I will be back soon to consult in more detail with your institute.

10 National DNA Database Ethics Group

Ethical input is now available through an independent NDNAD Ethics Group. I sponsor and provide support to the group and act as a conduit for them to deliver advice to Ministers. The purpose of the group is to advise ministers on ethical issues concerning the NDNAD. The group is made up of a Chair with ten members, all of whom have been appointed through open competition. The Chair is Peter Hutton who is Professor of Anaesthesia and Honorary Consultant at the University Hospital, Birmingham, and Birmingham Medical School. He was appointed in July last year, his group has met several times and is just producing its first annual report. I am extremely pleased with the way the group is developing and with the enthusiasm and energy Professor Hutton brings to his role. He has a seat at the NDNAD Strategy

Board.

11 Expert witnesses

This institute's functions are to encourage, train and educate expert witnesses and to improve and maintain their standards and status. It is abundantly self evident that you want to promote high standards in the delivery of impartial, independent expertise for justice (to borrow your strap-line from your web site). You join the long line of organisations that wants to work, hopefully with me, in delivering high quality standards in the delivery of expert scientific evidence.

Your web site quotes Dame Elizabeth Butler-Sloss who stated "Expert witnesses are a crucial resource. Without them we (the judges) could not do our job". Can I add to that a quote from the former Attorney General who in his speech to the Academy of Expert Witnesses in January 2007 stated "I cannot conceive a modern justice system which did not involve frequent recourse to expert evidence". In his evidence to the House of Commons Science and Technology Committee in November 2005 he said "It is clear that such widespread use of forensic science expertise is an integral part of convicting the guilty and acquitting the innocent; providing everybody involved understands their role and the necessary processes support them in this".

I have deliberately brought the designation 'expert witness' into the forensic arena. Many expert witnesses give evidence in circumstances that are beyond my remit to regulate. However, many give expert evidence as forensic practitioners, these are, in my view, within my field of regulation. I have a role to deliver quality standards that we should reasonably expect forensic practitioners to achieve.

Having said this, the review of practitioner quality standards will have to consider when and how expert witnesses who are involved in any form of forensic science can demonstrate their competency. This will include people working in areas that are beyond my boundaries in terms of the standards I will set.

I look forward to some detailed discussions with you on this.

12 The future

It will take time to fully establish the regulation of standards in forensic science. The future will contain a coherent framework of standards that will work for the Criminal Justice System. Some of the specialist groups are seen as open ended, for example the quality standards group will continue to monitor the standards long after they have been agreed and established. Continued support from stakeholders is an on-going and important aspect of regulation.

13 Conclusions

Thank you for your attention and in anticipation of the helpful discussion we will have following this talk. There is plenty that I want to discuss and I value your involvement. As you can see, I have some ambitious objectives. I can only achieve those objectives with the commitment and support of stakeholders and delivery partners. So far, I have received nothing but support. The fact that you invited me here tonight is very much appreciated and clear indication that we can and will work together to do the very best we can for the benefit of criminal justice in the UK.

Thank you