



Report for the Scottish Fingerprint Inquiry

30 April 2009

Andrew Rennison

Forensic Science Regulator

Introduction

1. The post of the Forensic Science Regulator was announced by the Parliamentary Under-Secretary of State for the Home Department (Meg Hillier MP) in July 2007, she included the statement¹:
2. “..... 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.”
3. 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 arise².

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<http://www.publications.parliament.uk/pa/cm200607/cmhansrd/cm070712/wmstext/70712m0002.htm#07071262000011>

² The National DNA Database is a registered trademark owned by the Secretary of State for the Home Department

- Provide advice to Ministers, CJS organisations, suppliers and others as seems appropriate, on matters related to quality standards in forensic science.
 - Deal with complaints from stakeholders and members of the public in relation to quality standards in the provision of forensic science services.
4. The Regulator will identify where standards are needed; commission new or revised standards; assign priorities; monitor effectiveness, performance and compliance; and work with other organisations to achieve these goals.
 5. The scope of regulation spans the whole investigative and judicial process from the supply and use of suitable materials, through the crime scene, collection and analysis of forensic exhibits, to the presentation of evidence in court. It will encompass standards for organisations providing forensic science services, the competence of practitioners and the validation of methods.
 6. The Regulator has set some high level principles governing the regulation of quality and standards³:
 - Providers and practitioners must recognise their overriding obligation to the CJS and, at all times, act in the best interests of the CJS.
 - Providers should be accredited by a recognised independent body to accepted standards.
 - Practitioners should be able to demonstrate, through an independent process, their on-going competence and development.
 - Responsibility for quality and competency standards rests with senior managers of provider organisations as well as with individual practitioners.

³ See the Regulator's Manual of Regulation

- Each method (product or service) should be based on sound science supported by both sufficient data to justify its use within the CJS and a robust, transparent, balanced and logical interpretation model, and, where possible, validated according to accepted scientific procedures.
 - Records of accreditation, competence and validation must be accurate, retained and available for disclosure through the court process.
 - Providers and practitioners must deal with the Regulator in an open and cooperative way, and must disclose to the Regulator anything relating to quality standards of which the Regulator would reasonably expect notice.
7. The Forensic Science Advisory Council (FSAC) is an independent body established to advise and support the Regulator in the exercise of his duties. The FSAC was established by Ministerial Statement on 10 January 2008⁴ and its members are drawn from key stakeholders, delivery partners, practitioners and expert bodies as well as other parties with a particular interest in the provision of forensic science services to the CJS. The role of its members is to advise and support the Regulator; they do not represent the interests of their parent body.
8. Specialist groups have been established by the Regulator to provide advice and expertise in key areas. They are the principal workforce for the development of standards that are fit for purpose. The membership of these groups is drawn from practitioners, domain experts and stakeholders across the full spectrum of forensic activity, people best placed to advise on and develop quality standards. There are currently six standing groups:
- **Quality standards** with a strategic role to develop high level standards and generic validation protocols;

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<http://www.publications.parliament.uk/pa/cm200708/cmhansrd/cm080110/wmstext/80110m0001.htm#08011061000014>

- **The user requirement** for forensic science from the court perspective (end user group) – to identify the needs of the courts with regard to forensic science and to ensure that standards are structured to meet those needs;
 - **DNA profiling** to develop quality standards and interpretation models for all forensic DNA profiling methods;
 - **Digital forensics** to develop quality standards and interpretation models for the forensic examination of computers and telephones;
 - **Forensic pathology** to monitor standards currently in place; and
 - **Practitioner quality standards** to review practitioner competency standards and related processes.
9. As work progresses and resources allow, the Regulator will form new groups to look at other specific areas, for example fingerprint analysis, fire scene standards and the forensic recovery and examination of CCTV images.
10. The Regulator has also established a process to manage complaints about forensic science quality standards. There has, until now, been no mechanism to deal with concerns about quality standards other than concerns about an individual practitioner.

Background

11. The history of quality standards regulation is important to understand and helps to set the context in which a new standards framework is to be established and explains why the post of Forensic Science Regulator was created.
12. The initiatives for the establishment of standards regulation which would set down and implement consistent high standards of competence and integrity in forensic science had its genesis in public concern over the part

played by forensic science in miscarriages of justice as far back as the 1970s⁵.

13. The House of Commons Home Affairs (Select) Committee First Report on the Forensic Science Service⁶ (FSS) concluded in 1989 that a statutory body to regulate standards was premature in the light of the limited development of forensic science outside the Forensic Science Service. At this time the FSS was a division of the Home Office and not an Agency and was responsible, through the Chief Scientist, for setting and maintaining quality standards within the forensic science sector.

14. The Royal Commission on Criminal Justice⁷ which reported in 1993 recommended a Forensic Science Advisory Council. This followed a recommendation to establish an Advisory Board and a register for forensic scientists made earlier in 1993 in the Report on Forensic Science by the House of Lords Select Committee on Science and Technology⁸.

Conclusion 8 of this report recommended:

"...a system of individual registration of all forensic scientists. Scientists should be registered according to speciality, and at one of two levels. Anyone should continue to be allowed to practise, but it should be an offence to purport to be registered when not, and expert evidence from unregistered persons should become exceptional. Registration should depend on qualifications, experience, references and a casebook; it should be subject to review and withdrawal. It should be administered by the Government, with the help of a small Board, and delegated to the appropriate professional body wherever possible".

⁵ These miscarriages are described in Appendix 5 of the Report on Forensic Science by the House of Lords Select Committee on Science and Technology. See footnote 4 below.

⁶ House of Commons Session 1988-89. Printed 13 February 1989.

⁷ Report of the Royal Commission on Criminal Justice. Cm 2263. Published July 1993

⁸ House of Lords Session 1992-93 5th Report. HL Paper 24 Printed 3rd February 1993

15. Professor Brian Caddy's Report on Contamination at the Forensic Explosives Laboratory at Fort Halstead⁹ published in December 1996 recommended the establishment of an Inspectorate of Forensic Sciences. As an alternative model of control, the report advocated consideration of the registration of individuals with an Institute for forensic science practitioners.

16. In its response¹⁰ to conclusion 8 of the House of Lords Select Committee Report, the Government undertook to consider its recommendations in the context of the Royal Commission's recommendations.

17. In its response to the Royal Commission's recommendations¹¹ on the setting up of a Forensic Science Advisory Council, the Government said:

"...it did not see the need for an Advisory Council with as broad a remit as recommended by the Royal Commission. Many of the tasks recommended could not be fulfilled effectively without some form of statutory regulation which the Royal Commission itself did not see as justified. It nevertheless saw some value in the establishment of a non-statutory body. Before coming to a final view on the precise role, composition and powers of such a body, the Government wished to take account of recent changes in the forensic science industry, including the merger on 1 April 1996 of the Forensic Science Service and Metropolitan Police Forensic Science Laboratory, and the finding of the enquiry into the contamination at the Forensic Explosives Laboratory."

18. In its response¹² to Professor Caddy's report, the Government said it would consider the establishment of a Forensic Science Inspectorate. It noted that the Royal Commission on Criminal Justice did not see the need for statutory regulation, but proposed instead the establishment of a

⁹ Assessment and Implications of Centrifuge Contamination in the Trace Explosive Section of the Forensic Explosives Laboratory at Fort Halstead by Professor Brian Caddy. CM 3491 Published December 1996

¹⁰ House of Lords Session 1992-93 6th Report HL Paper 24-III Printed 5th May 1993

¹¹ Final Government Response. Published June 1996. Government statement Hansard col 185 27.6.97. House of Commons

¹² The Government Response. Published December 1996

Forensic Science Advisory Council with a range of functions similar to those of the proposed Inspectorate. The then Home Secretary Rt. Hon. Michael Howard QC MP said in his statement to the House of Commons¹³:

"I shall now consider both proposals before deciding how to proceed. In this context, I welcome the proposals that are under consideration to set up a professional body for forensic science. I understand that preliminary meetings have now taken place involving representatives from various forensic science and other organisations. Lord Dainton - the Chairman of the Science and Technology Committee in another place, which reported on forensic science - is leading the initiative as president elect. I believe that this could be a useful initiative, and I shall therefore take a close interest in the progress made".

Council for the Registration of Forensic Practitioners

19. The meetings the Home Secretary referred to were those of forensic science providers and representative bodies in November 1996 which resulted in a small working group (The Forensic Science Working Group) chaired by Lord Lewis BSc, MSc, PhD, CChem, FRSC, FRS and comprising Lord Dainton CChem, Hon FRSC, FRSE, FRS, Mr Peter-Cobb CChem, FRSC and Mr Alan Hall OBE, CChem, FRSC which was set up 'to examine whether a system of self-regulation could be devised which would ensure and safeguard standards of professional competence and integrity for forensic scientists'.
20. The initial purpose of the meetings was to discuss the setting up of a professional body for forensic science whose primary concern was an oversight of quality and standards in forensic science. This in turn led to discussion about a professional body and a register of professional forensic scientists. The working group developed this further and decided to confine its work to devising a system of self-regulation through a

¹³ Government statement Hansard cols 767-775 17.12.96. House of Commons

registration system for participants; this was based on the principle that professional bodies are established to represent the interests of their members, not the wider public's interest.

21. In essence, the calls at the time for regulation of standards in forensic science were addressed through the recommendation by the working group for a registration council for forensic practitioners. The regulation of forensic science quality standards was, at that time, intended to be managed through the single dimension of practitioner registration.
22. The report of the Forensic Science Working Group was a well researched and informed piece of work, many of the principles established in the report hold true today¹⁴.
23. The working group concluded that a well structured registration system would be welcomed by all parts of the profession. It went on to say that any system recommended needed to satisfy a number of criteria:
 - It must be virtually self-financing at a reasonable cost to registrants. This is a practical response to the facts of life - there would be no funds from the public purse on a continuing basis. The cost to individual registrants should not be so high as to deter registration.
 - It must set high standards of competence and integrity. The standards of competence must be high on entry to the register and there must be clear commitment to maintenance of that competence which must be tested regularly. With respect to integrity there would be a need for strict code of conduct and disciplinary powers which would extend to exclusion. For the latter reason this register must be "the only game in town" if it is to be credible.

¹⁴ Report of the Forensic Science Working Group. Published November 1997. ISBN 0 85404 905 3.0

- The register must cover all the principal individuals with their diverse activities in the forensic science process i.e. from crime scene to court.

24. These recommendations led to the birth of the Council for the Registration of Forensic Practitioners (CRFP) with initial government funding and targets to register the majority of forensic practitioners and to become self-financing.

25. Jack Straw, Secretary of State for the Home Department, announcing the establishment of CRFP in May 1998, said:

“The setting up of the Registration Council will be a significant step forward in further raising quality and standards in the forensic science industry. Taken together with the other measures already taken by the industry, the Council will do much to enhance the standing of forensic science in the criminal justice process. It is important that any new arrangements for oversight command the support not only of forensic practitioners but also the end users of their services.”

26. In 1999 CRFP became the government’s response to tackling and regulating quality standards in forensic science. CRFP adopted a UK-wide role. CRFP set a target to register the majority of forensic practitioners through an application and assessment process to measure competence. The process was paper based and relied on applicants submitting written evidence of their work that was then assessed by a CRFP assessor who was not connected with the applicant. CRFP covered a broad range of forensic disciplines with assessors trained to assess competence within their own specialism.

27. CRFP established a fitness to practice regime that could lead to a registrant being removed from the register. However, as a voluntary registration process removal from the register was no bar to remaining as a forensic practitioner.

28. By 2004 CRFP had registered 1,220 people and remained reliant on grant-in-aid from the Home Office. The Home Office commissioned an independent assessment of the CRFP strategy and plans by the consultants KPMG, following which in 2005 the government agreed to continue funding CRFP until 2010 by which time they were expected to be self-financing.
29. In May 2008 the CRFP chairman wrote to the Home Office seeking additional funding beyond 2010. This prompted the Parliamentary Under Secretary of State, Meg Hillier, to Commission the Regulator to conduct a review of practitioner registration. The Regulator published his report, with recommendations, in January 2009¹⁵.
30. In advance of publication the Regulator sought approval from Ministers for his recommendations and the Parliamentary Under Secretary of State, Alan Campbell wrote to the Lord Chief Justice, the Attorney General, the Director of Public Prosecutions, the Minister for Justice and other key stakeholders giving his support to the Regulator's recommendations and enclosing a copy of the Regulator's report.
31. Prior to publication, in November 2008, the Metropolitan Police Service wrote to CRFP indicating their intention to withdraw CRFP funding for all their forensic practitioners. Following publication of the report the police lead on forensic science in England and Wales, Chief Constable Chris Sims wrote to all chief officers expressing his support for the Regulators recommended quality standards framework and advised all police forces to consider whether they wanted to continue funding their staff to be CRFP registered. The MPS wrote again to CRFP confirming their decision to withdraw. At this point it became clear to CRFP that they were losing the majority of police support. The police contribution to CRFP totalled about £350,000 pa.
32. By March 2009 CRFP had just over 3,000 registrants out of an estimated total pool of 8,700¹⁶. Of those registered 71% were police employed

¹⁵ A Review of the Accreditation of Forensic Practitioners

¹⁶ A figure estimated by Skills for Justice and the National Policing Improvement Agency

practitioners (crime scene investigators, fingerprint experts and other practitioners). Of the total pool of police practitioners 55% were registered or applying for registration. Some police forces achieved full registration with a sliding scale down to 1 force with only 1 person registered.

33. The total population of UK-wide police fingerprint experts in November 2008 was 803 of which 445 were registered (55%)¹⁷.
34. From its outset CRFP was established as a company limited by guarantee. By 2008 the responsibility for grant-in-aid funding for CRFP had moved to the National Policing Improvement Agency. Following the police indication of withdrawal from CRFP registration the Chief Executive of the NPIA, Chief Constable Peter Neyroud, took advice from the National Audit Office and recommended to Home Office Ministers that he did not pay any further grant-in-aid to CRFP from 1 April 2009, in effect removing the grant-in-aid one year before the funding agreement made in 2005 expired. This was principally because CRFP had no long-term future and was managing rapidly declining registration numbers rather than the increases needed to achieve self-financing. The NAO advice was not to continue paying public money now that CRFP's long-term future was known.
35. On 28 February 2009 the CRFP board of directors passed a resolution to wind up the company and to cease trading with effect from 31 March 2009.
36. The Regulator assessed the risks to the criminal justice system of CRFP closing and took advice from the CPS and his advisory council. He reached the conclusion that the closure of CRFP presented no risks to the criminal justice system. Registration had always been a voluntary process and was not a statutory requirement. Absence of registration was no bar to working as a forensic practitioner or to giving evidence in the UK courts.

Accreditation and certification

37. In 1995 forensic scientists (scientists working in the laboratories as opposed to the wider population of forensic practitioners) across Europe

¹⁷ CRFP data given to the Regulator in November 2008

understood the importance of establishing sound scientific principles for the use of science in the investigation of crime and prosecution of offenders. They formed an organisation known as the European Network of Forensic Science Institutes (ENFSI). Membership of ENFSI was open to forensic science laboratories with 25 or more staff and offering a broad range of forensic expertise. Member laboratories were required to be accredited to ISO 17025, an international standard designed to guarantee the technical competence of testing and calibration laboratories. In the UK accreditation is through assessment against the standard by the United Kingdom Accreditation Service (UKAS).

38. By March 2009 all forensic science laboratories in the UK were accredited to ISO 17025. Some forensic analytical work, such as fingerprint development work, is done internally by police forces in their in-house laboratories. In March 2009 these laboratories were not accredited, though some have now applied for accreditation.

39. The United Kingdom Accreditation Service (UKAS)¹⁸ is recognised by the UK Government as the sole national body responsible for assessing and accrediting the competence of organisations in the fields of calibration, testing, inspection and in the certification of systems, products and personnel. Assessment is against internationally agreed standards and accreditation by UKAS demonstrates the competence, impartiality and performance capability of these organisations to deliver specified services. UKAS is a non-profit-distributing company, limited by guarantee, and operates under a Memorandum of Understanding with the Government through the Secretary of State for Innovation, Universities and Skills. As a company limited by guarantee, UKAS has Members instead of shareholders. The Members represent those who have an interest in all aspects of accreditation, namely: national and local government, business and industry, purchasers, users and quality managers.

¹⁸ www.ukas.com and www.ukas.org

40. UKAS accredits to the standards of the International Organization for Standardisation (ISO). UKAS both accredits laboratories directly and accredits other organisations to be certification bodies.
41. UKAS works with other national accreditation bodies so that certificates and reports by UKAS-accredited organisations are accepted widely. Thus in Europe UKAS is a member of European cooperation for Accreditation (EA) and globally it is a member of International Laboratory Accreditation Cooperation (ILAC) and International Accreditation Forum (IAF). Maintaining this status of mutual recognition is subject to regular peer evaluation to accepted international standards. For example EA carries out audits on its constituent accreditation bodies to ensure that they meet the agreed standards. UKAS is accredited to ISO 17011 in this respect. UKAS thus accepts evidence of competence and traceability of calibration or testing provided by laboratories that have been accredited by another member of one of these international bodies and vice versa.
42. There are many UKAS accredited certification bodies in the UK. These bodies issue certificates to organisations that can demonstrate compliance with standards such as ISO 9001.
43. The International Organisation for Standardisation (ISO) defines accreditation as:
- “Third-party attestation related to a conformity assessment body conveying formal demonstration of its competence to carry out specific conformity assessment tasks.”
44. ISO 17025 is now widely acknowledged as the most appropriate standard, to date, to govern the work of forensic science laboratories but it is a general standard and it has not been tailored specifically to the needs of forensic science. However, UKAS also issues supplementary standards under its LAB series which may include additional more specific requirements made by other bodies. For example, LAB 32 governs “Accreditation for Suppliers to the UK National DNA Database” and includes criteria specified by the Custodian of the National DNA Database.

Furthermore, UKAS also uses published guidance to assist organisations achieving accreditation. For example ILAC G19 (guidance to help in the assessment of forensic science laboratories to ISO 17025).

45. Most commercial forensic providers involved in traditional laboratory based forensic work are accredited to ISO 17025 for their analytical work and a number are also certificated to ISO 9001 for their quality management systems.
46. Increasingly, police forces have quality management systems for their in-house forensic services and are certificated to ISO 9001. All police forces, except for 2 (who are currently obtaining certification), have ISO 9001 certification for their fingerprint functions, 5 forces have extended this to cover all their forensic functions. Some forces are moving towards accreditation to ISO 17025 for their in-house forensic laboratory functions.
47. Certification to ISO 9001 provides evidence that an organisation's management system complies with the requirements of this standard. ISO 9001 is not concerned with the demonstration of technical competence. Assessment of technical competence in forensic science, including fingerprint analysis, is the fundamental difference between accreditation to ISO 17025 and certification to ISO 9001.
48. ISO 17025 is specifically written for laboratories and is concerned with technical competence. It also includes all of the management system components of ISO 9001 that are relevant to laboratories.
49. ISO 17020 is an existing standard governing organisations carrying out "inspection". UKAS and other European accreditation bodies working with the European Network of Forensic Science Institutes (ENFSI) have developed this standard for scenes of crime work and issued, jointly, a guidance document on its application¹⁹.
50. In 2002 the International Laboratory Accreditation Cooperation (ILAC) published guidelines for laboratories involved in forensic analysis and

¹⁹ Ref ENFSI/ UKAS Guidance for ISO 17020 for CSI

examination by providing guidance on the interpretation and application of ISO 17025 for the forensic context. UKAS has adopted the ILAC (ILAC G19) guidelines as part of their accreditation process for UK forensic science laboratories.

DNA

51. The UK National DNA Database was established in 1995. The role of the National DNA Database Custodian was established to ensure high standards of integrity in the management of the database, this was achieved by implementing technical standards, process and validation requirements (that are incorporated into the LAB32 papers produced by UKAS) for providers to be assessed against in addition to the ISO 17025 requirements, in order to be approved to load data onto the National DNA Database.
52. The technical standards and requirements cover a range of areas and activities: environmental requirements for processing, contamination monitoring, technical requirements for accepting and determining the DNA profile, minimum DNA loading criteria, data submission format, duplication and proficiency testing requirements.
53. The Custodian Accreditation Service (CAS) is a team within the Custodian's office that scrutinises the DNA analysis by forensic providers and monitors against the high standards demanded of DNA technology used to supply crime scene and subject DNA profiles for the database.
54. In order to be approved as a forensic DNA supplier to the National DNA Database any new DNA laboratory is required to complete a very comprehensive proficiency testing regime designed to challenge the units proposed range of sample types, with detailed reviews of processes and results.
55. Once approved it is mandatory to participate in the closed proficiency testing scheme run by CAS. The scheme uses both declared trial samples of good quality and undeclared or 'mock' cases, which are designed to ensure that each DNA laboratory has demonstrated that it can produce correct profile results for the range of sample types the laboratory is approved for. The declared trial samples are a batch of 10 samples submitted quarterly. The requirements are that these must be split over different processing batches, streams and staff. The results are required to

be reported by a given deadline to CAS. Some providers use the results to demonstrate on-going/rolling competencies for the staff processing these samples and the results held in their training records.

56. There is emphasis on routine on going process monitoring, mandatory self reporting and process reviews. The routine process control monitoring is achieved by mandatory levels of duplication on every batch of samples processed (5% subject samples and 2% crime scene samples). The duplicate samples are required to have been processed in the previous month and the second sampling is submitted blind and anonymous to the operators, the result is checked against the previous result, any discrepancies and the duplication rate must be reported monthly to CAS and any error rate is calculated from this data.
57. A full process review is carried out on at least two samples annually; duplication samples are selected at random from specific sample types and / or specific periods by CAS, this involves reviewing the results obtained (raw data) and the generated paperwork against the units current standard operating procedures (provided as a mandatory requirement) and the Custodian technical standards. This process identifies issues such as non conformance, any potential technical issues, particularly if a new approved change has been implemented, and the use of any impact significant changes that have not been approved for use.
58. The investigation into any discrepancy or error must be reported to CAS and an assessment is made of the impact, with a review of the actions. This includes dip sample reviews completed in addition to the planned or implemented corrective action, conducted by CAS before the investigation is closed as having been appropriately dealt with. Investigations into any discrepancy or error that has identified both systematic errors, such as a file format error affecting a particular loci value, rare unpredicted events and operator/ practitioner inadequacy is resolved by further training and/or supervision.
59. Once a process has been validated and approved for use, any proposed change to that process, such as changing the extraction process,

automating a step, introducing new or updated software, expansion of the unit, etc. must be notified to CAS and UKAS. The change is evaluated, the validation requirements determined and the validation is reviewed before the new change is approved for loading samples generated using that updated process.

60. The format and criteria for submission of the data to the National DNA Database is part of the Custodian standards and compliance to this is monitored directly by the National DNA Database on submission of the record for loading, any non-compliance will not be loaded and this is reported directly back to the forensic DNA provider specifying the fault for correction and re-submission.
61. The National DNA Database itself has a number of data integrity checks routinely run against the data it holds, of these, two significant checks that readily identify potential errors for investigation are the gender anomaly report, which compares the genetic sex markers recorded in the profile against the gender information provided to the National DNA Database from the Police National Computer (PNC) and the near miss or N-1 match, where pairs of profiles that match except for at one value are identified and sent to the forensic DNA provider(s) to re-check the profile(s). Both these checks have identified sample switches for the former check and profile designation errors where a match has been missed for the latter.
62. The Custodian and CAS co-operates closely with UKAS to monitor standards applicable to forensic DNA technology. The high standards, proficiency testing and close cooperation with UKAS who accredit the supplier organisations set the gold standard for UK forensic science.

Ad hoc approach

63. The different approaches to regulating forensic science quality standards listed above can be summarised as:
- CRFP registration (35% of practitioners registered).
 - Laboratory accreditation (police in-house laboratories not accredited).

- ISO 9001 certification of police forces (variable certification of forces ranging from fingerprint functions only to all forensic functions).
- National DNA Database Custodian (high standards linked to accreditation, validation and proficiency testing).

64. Taken together these different approaches provide a level of standards that lacks co-ordination and leaves gaps. They also overlap, thus producing some unnecessary duplication in terms of regulation and cost (accreditation to ISO 17025 includes all the aspects of ISO 9001 and individual practitioner competence – accreditation removes the need for ISO 9001 certification and practitioner assessment and registration). This ‘ad hoc’ approach with no clear strategic control is now being challenged by the Regulator who has proposed a single coherent standards framework.

65. One gap in this approach highlighted in the House of Commons Science and Technology Committee Report ‘Forensic Science on Trial’²⁰ is the absence of any validation protocols for forensic science methods.

New Standards Framework

66. The Regulator, with the support of UKAS, the British Standards Institute and the Quality Standards Specialist Group, has developed a set of ‘industry specific standards’ that were published for consultation in March 09. These standards are written to:

- be in a common language that is understood across the UK forensic sector,
- cover the full spectrum of forensic activity (from the supply of equipment, crime scene, gathering of exhibits, examination, analysis, interpretation and reporting),
- encompass all the quality management, laboratory, practitioner and methods standards into one document,

- be used by law enforcement bodies, commercial providers and sole practitioners, and
- be the forensic science standards used by UKAS for assessment and accreditation of organisations, partnerships and sole practitioners.

67. The standards include a section on validation setting out what is expected for the validation of forensic science methods²¹.

68. The standards as published set the generic standards expected for all providers of forensic science services whether they are the police, other law-enforcement bodies, commercial or non-commercial laboratories. The Regulator is currently working on a project plan to develop 60 or so appendices to the standards that give additional guidance for different forensic disciplines, for example crime scene investigation and digital forensics (being the first two appendices to be completed). The Regulator has set a target of 2 years to complete the appendices. As appendices are developed the Regulator will assess the validity of methods.

69. The appendices will include one for fingerprint analysis. The Regulator has not yet undertaken any work on fingerprint analysis other than 2 visits to the Home Office Science development Branch to learn about their development and validation of fingerprint development techniques and 2 visits to the Forensic Science Service to understand their proposals and development of new fingerprint analysis methodology based on probabilistics. The Regulator has asked for, seen and agreed a validation plan for the probabilistic methodology.

70. The Regulator does have initial concerns about the subjective nature of fingerprint interpretation and the absence of a coherent standards framework in place to manage this. A comparison of the standards

²⁰ House of Commons Science and Technology Committee Forensic Science on Trial – Seventh Report of Session 2005 / 05

²¹ Section 14 of Quality Standards for Providers of Forensic Science Services to the Criminal Justice System

framework around DNA technology with that for fingerprint analysis exposes a difference in approaches that needs to be addressed.

71. The standards framework is initially developed for the criminal justice system in England and Wales. Recent discussions with the Scottish government have achieved support for the standards from civil servants, with the intention to submit a report to the Scottish Minister of Justice. The Regulator's aim is to achieve UK-wide quality standards with agreement also reached with the Northern Ireland Authorities.

72. In April 09 the Regulator was involved in a meeting and consultation session on the new standards framework with the Scottish Police Services Authority and groups of SPSA scientists, fingerprint experts and other practitioners.

73. Mr Tom Nelson, who leads for the SPSA on forensic science, is a member of the Regulator's Forensic Science Advisory Council.