

Quality Standards Specialist Group

**Minutes of the meeting held on 5 June 2015
Home Office, 2 Marsham Street, London, SW1P 4DF**

1.0 Opening and welcome

1.1 The Chair, Dr Gillian Tully, the FSR (Forensic Science Regulator), welcomed those present to the meeting, and listed the apologies received. See Annex A for the list of attendees and apologies.

2.0 Minutes and matters arising

2.1 The minutes of the previous meeting were agreed as accurate, with no changes needed.

2.2 Progress on the previous actions was reviewed as follows:

- Action 1: FSAC repositioning under the Home Office Science Advisory Council (HOSAC) committee: Work on this proposal had been postponed pending a decision on the proposed statutory powers for the FSR.
- Action 4: The Fingerprint Standards documents were recently formally launched at an FSR event.
- Action 6: This direction on blood screening had been completed. For blood screening, Low Power Microscopy (LPM) facilities would be required to be available.
- Action 8: Work on the Digital Validation guidance was ongoing, and a National Police Chiefs' Council (NPCC) group would contribute to the final document.
- Action 9: The photocopying case files issue had been passed to Glyn Hardy at the Legal Aid Agency.
- Action 10: The FSR business plan was an agenda item..
- Action 11: Consultation on the business plan with forensic stakeholders had taken longer than expected, and General Election purdah restrictions modified the timetable.

2.3 The other actions were either cleared or were agenda items for the meeting.

3.0 FSR risks overview

3.1 The FSR welcomed comments on the paper listing the main risks to FSR work:

- On Interpretation Standards, the FSR and Jeff Adams had met the Lord Chief Justice (LCJ), and Jeff Adams would be working with Forensic Science Providers on a draft. It was expected that likelihood ratios could be used. Data differing in quality and with varying limitations would be considered.
- The risks relating to lack of understanding of the accreditation framework could lead to innovation being stifled. However, the Criminal Justice System (CJS) had now agreed to the use of its samples for pilot studies.
- The FSR was meeting the Care Quality Commission to discuss the collection of forensic samples from victims, and regulations for medical support to victims of crime.
- A meeting on Streamlined Forensic Reports (SFR) would be held on 16th June. There were issues of the SFR process being implemented in a variable way by different police forces. To improve on this, the Crime Prosecution Service (CPS) aimed for thorough criminal case preparation to be completed within four weeks of the case being assigned to Crown Court.
- A query was raised on the names of the members of the Firearms Working Group.

Action 1: Jeff Adams to provide QSSG with the Firearms Working Group membership list.

3.2 The distribution of police forces was approximately 50/50 between those working as a partnership with their forensic providers, and those having framework customer–supplier agreements with them. The Metropolitan force was developing long-term plans for forensics.

3.3 In a recent Sheffield Crown Court case, an issue relating to traces of drugs detected on cash arose. The judge criticised the database used to assess these traces. However this happened because the evidence given in court was unclear, so did not indicate a problem with these drugs traces databases.

3.4 The reduction in the number of the forensic providers was a long-term risk, which could affect a few of the smaller forensic disciplines.

3.5 DCC Nick Baker of Staffordshire Police was providing good leadership with the Digital Forensics Portfolio Group, and had agreed that the first stage

towards accreditation would be validation of the imaging of computer hard drives.

3.6 The meeting agreed the FSR risks paper. The FSR would send it to Amanda Cooper, Police Science and Technology Unit, in due course.

4.0 FSR Strategic Priorities

4.1 The FSR explained the high priorities for delivery listed in the paper for the current year (2015/16), followed by the medium priorities, then the high priorities for the following year. Comments on the priorities were made and queries answered.

- On End-to-End issues, work would be undertaken in areas such as fragmentation with two or three forces.
- European Network of Forensic Science Institutes (ENFSI) had published a guidance document on evaluation and interpretation of forensic evidence.
- The Central Elimination Database unfortunately did not yet meet the elimination database standards.
- Dr Patrick Gallagher (a non-forensic pathologist) had just accepted the position of chair of Forensic Pathology Specialist Group. The annual pathology audit had proved effective, and so audits might be considered for other forensic areas.
- It was suggested that the work to develop a quality standard for gait analysis should involve the College of Podiatry.
- On forensic work in other countries, the Organisation of Scientific Area Committees (OSAC) was the larger USA equivalent to the FSR's specialist groups. Australian standards were being developed through a new International Standards Organisation (ISO) committee, but the corresponding European standards committee was producing alternative standards, so the FSR was encouraging them to work together. Work on quality standards for DNA analysis was proceeding with the DNA Working Group within ENFSI.
- Facial recognition was likely to become a higher forensic priority.

4.2 Work was proceeding on a fully resourced plan, for the FSR priorities listed in the paper.

5.0 Firearms classification

5.1 Firearms classification had proved a difficult area. To address this it was proposed to permit police forces one year to set up a quality control alternative to ISO17025 for dealing with simple firearms classifications. This

simple firearms classifications would exclude technical assessments such as measuring barrel length of a shotgun, or ballistics measurements. If forces agreed to set up the process for the simple firearms classifications, then the FSR would relax the date for full firearms accreditation. Otherwise the accreditation date would be enforced as it stood. ISO17025 was still the requirement for all other firearms examination. The meeting agreed this approach to firearms classification accreditation.

5.2 Comments were invited on a definition for firearms lethality. No organisation was currently known to be working on this topic.

5.3 It was reported that a second firearms working group had been set up working independently of the existing one. These needed to be coordinated.

Action 2: The FSR to approach ACC Mark Hopkins about the two current uncoordinated firearms working groups.

6.0 Cognitive Bias Guidance

6.1 Following the cognitive bias consultation, many comments had been received and incorporated. The draft would be sent to technical examiners for review. It would be issued one or two months later.

7.0 Cannabis Yield Determination

7.1 Jeff Adams of FSRU outlined the paper on Cannabis Yield Determination, and the proposed method to estimate yields. The existing practice involved a significant degree of variation and existing guidance was not sufficiently prescriptive. There was a need for various safeguards, on the competence of individuals to assess Cannabis plants as mature, on ensuring that measuring scales were calibrated, and other standard issues.

Action 3: Jeff Adams to submit the Cannabis Yield Determination guidance for consideration at the next QSSG meeting.

8.0 Legal Limits Guidance

8.1 The issue of comparing analytical results from samples against legal limits had arisen in relation to the new drugs driving offences. The government had listed sixteen drugs for which driving with a certain minimum level in the blood would be an offence. In practice, measurement of these levels of drugs had associated uncertainties. Repeated measurements of the same blood sample would give analytical results varying within a certain range. The distribution of results should follow a statistical model which depended on the standard deviation of the analytical method. Consequently it was necessary to report a measured level higher than the legal limit, to limit the risk of a false positive result for a drugs driving offence to a known, and acceptable, level.

8.2 Previously for drink driving, the limit for the measured amount had been set at three standard deviations above the legal limit. However, the actual model employed was more complicated. The drugs covered under the new offence are larger molecules than alcohol and present at very low concentrations, and thus the variability in the measurements was greater than for alcohol, giving a larger difference between the specified legal limit and measured value at which the reported value is over the legal limit with a specified degree of confidence.

8.3 Blood alcohol levels were tested using a 10 ml blood sample. It had been agreed to use the same amount also to test for drugs, but this could be insufficient, because some drugs were large molecules in very low concentrations. The Department for Transport were reviewing drug driving in September, so an agreed method for the analysis was needed by then. It was important that there was no variation in outcome in a case depending on which FSP analyses the sample, so reporting thresholds had been set, based on the an agreed acceptable measurement uncertainty.

Action 4: Jeff Adams to submit the Legal Limits guidance to QSSG, at its next stage.

9.0 Primers

9.1 The Lord Chief Justice had requested that a primer on the agreed science in forensics be drafted, aimed at judges and intelligent jurors. He had specified the format to be a two-page paper, or a presentation, with printed slides that jurors could take into the jury room. Creativity in producing the primer was recommended.

9.2 The Chartered Society of Forensic Sciences could assist with the production of the primer. The Scottish Police has produced a DVD explaining DNA analysis, and another source of inspiration could be primers used in the Patent Court.

9.3 The FSR would consider how to proceed on drafting this, consulting with Sue Black and Niamh Nic Daéid of Dundee University. Drafts would be sent to the Royal Society for review, and tested with non-scientists.

Action 5: The FSR to contact Dr Vicky Morton to obtain a copy of the Scottish Police Authority video on DNA.

10.0 AOB and dates of future meetings

10.1 There was discussion of the issue that two different forensic processes from separate laboratories might gain accreditation, but could have potentially markedly different success rates. Innovation would always cause differences in performance, so the issue was how to achieve the best forensic results for all forensic science providers without stifling innovation. The FSR had sponsored inter-laboratory trials in the past. Such trials shone a light on

performance differences. The issue of obtaining the best forensic results is to be considered at a future QSSG meeting.

10.2 There had been an Issue in the USA relating to hair examiners and DNA analysis. The questioned hair examination technique had never been relied on in the UK, The DNA issue appeared to involve mixture interpretation. The DNA Specialist Group would review this issue, in case there was a risk of similar challenges in UK. Generally, the issue of perceived bias in police forensic laboratories was considered to be the most important of the recent forensic issues emerging in USA that might affect UK.

Action 6: Katherine Monnery to provide a short paragraph on how accreditation deals with impartiality.

10.3 A request was made and subsequently agreed, that QSSG meetings would start later, at 2pm. Future meetings would also preferably not be held on Fridays, and would be four-monthly, although there would be a longer interval before the next QSSG meeting because of room availability.

Action 7: The Secretariat to set dates for the year, for QSSG meetings, at four-monthly intervals, to run from 2pm to 5pm, avoiding Fridays.

10.4 FSRU would arrange a meeting with Jo Taylor at College of Policing (who was on the UKAS Forensic Science Technical Advisory Committee) .

Annex A

Present:

Gill Tully	Forensic Science Regulator (Chair)
Simon Iveson	Forensic Science Regulation Unit
Jeff Adams	Forensic Science Regulation Unit
Stephen Bleay	Centre for Applied Science and Technology, HO
Adrian Craven	Centre for Applied Science and Technology (for Jonathan Vaughan)
Ian Elkins	Crown Prosecution Service
Katherine Monnery	United Kingdom Accreditation Service
Sandy Mackay	Expert Witness Institute
Nuala O'Hanlon	Forensic Science Northern Ireland
Brian Rankin	The Chartered Society of Forensic Sciences
Peter Harper	Orchid Cellmark Ltd
Chanda Lowther-Harris	Metropolitan Police Service
Beth Joule	Lancashire Constabulary
Sandra Stanley	Greater Manchester Police
Karen Smith	Thames Valley Police
Craig Donnachie	Scottish Police Authority (by phone)
Mike Taylor	HO Science Secretariat

Apologies

June Guinness	Forensic Science Regulation Unit
Jonathan Vaughan	Centre for Applied Science and Technology, HO
Lynne Townley	Crown Prosecution Service
Gary Peace	Forensic and Policing Services Association
Glyn Hardy	Legal Aid Agency
Francesca Weisman	Legal Services Commission
Kevin Sullivan	Independent
Nigel Meadows	Coroners' Society of England & Wales
Zoe Scott	Skills for Justice
Martin Hanly	LGC Forensics
Mike Bell	Crown Office and Procurator Fiscal Service
Anthony Heaton-Armstrong	Criminal Bar Association
Jane Higham	Glaisyers Solicitors
Ewen Smith	Criminal Cases Review Commission
Shirley Bailey-Wood	British Standards Institute
Matthew Marshall	British Standards Institute
Teresa Cunningham	British Standards Institute
Martyn Bradford	Avon and Somerset Constabulary
Ian Brewster	South Wales Police