



Forensic Science Advisory Council (FSAC)

Minutes of the meeting held on 26 April 2017
at the Home Office, 2 Marsham Street, London SW1P 4DF

1. Welcome and apologies

1.1 The Forensic Science Regulator (Regulator) Gill Tully welcomed those present to the meeting. See Annex A for the list of attendees and apologies.

2. Minutes of the last meeting, actions and matters arising

2.1 The minutes of the previous FSAC meeting had already been reviewed by members via e-mail and would be published on GOV.UK.

Matters arising

2.2 The actions from the FSAC meeting on 7 December 2016 were reviewed. A number of the actions were either complete or on the agenda to be dealt with in the meeting. The remaining actions were discussed as follows:

- **The Regulator to raise the issue of adequate funding of forensic science at the CJS forum.** The forum had not yet been convened, but the Regulator was in conversation with the Chair of the forum to help establish the first meeting.
- **David Lewis to co-ordinate a response from the NPCC Performance and Standards Group on the revision of the Codes and feedback to the Regulator.** David Lewis indicated that he had not yet taken this action forward but would do so now.
- **FSAC members to feedback any further issues with defence requests for excessive disclosures on forensic evidence to the Regulator to review.** The Regulator indicated that guidance had been issued but there had been no feedback as to how it was working in practice. The action would be marked as complete.
- **The Regulator to publish the report of the Sexual Assault Referral Centre (SARC) Unit contamination finding in the New Year.** This item had been delayed due to other priorities. Once the report of the SARC was published the Regulator would consider the use of wider audits for SARCs.

- **The Regulator to write to the Independent Police Complaints Commission (IPCC) to make them aware of the issues from a forensic regulatory perspective.** The Regulator was working alongside the IPCC on a review of this issue.

3. Data Manipulation

3.1 The Council was updated on an incident whereby staff employed in a forensic toxicology laboratory had manipulated quality control data to give the impression that the quality control checks had passed acceptable criteria, when this was not the case. The Regulator informed the Council that samples previously tested at the laboratory where the incident occurred would be re-tested at an independent laboratory and that the laboratory where the incident occurred was not currently processing samples for the Criminal Justice System (CJS) . The Regulator noted that this issue did not solely affected the CJS but also testing which had been undertaken for the civil courts.

3.2 The Regulator had made recommendations about the handling of samples and forensic cases where the incident had occurred and indicated that going-forward, the Crown Prosecution Service (CPS) would need to formulate a national response to the increased scope of the incident. The Regulator had obtained the numbers of cases which could be affected by this incident and indicated that sets of disclosure guidance would be required for the different scenarios which might arise.

3.3 It was noted that the re-testing of samples presented a number of problems. In some cases, the chemical being tested degraded over time whilst in other cases the chemical could degrade into another controlled chemical, and consideration of this would need to be taken into account during re-analysis of samples. There were also issues of capacity for testing in other forensic toxicology laboratories.

3.4 The Regulator invited the Council to consider how she could be assured that the incident which occurred was a one-off and not a systemic issue across the forensic toxicology discipline. The Regulator indicated that a letter would be sent to all forensic science providers (FSPs) which provided a significant forensic toxicology service as part of their UK accreditation service (UKAS) schedule of accreditation, to undertake a vertical audit of random samples from toxicology cases including examination of raw data. The Council was supportive of this approach and agreed that it would provide assurance to the CJS. The representative from the Criminal Case Review Commission (CCRC) indicated that the CCRC would be grateful if they could be kept updated on progress to allow for future planning.

Action 1: Regulator to write to all FSPs which provide a significant forensic toxicology services and ask them to undertake a vertical audit of random samples from toxicology cases including examination of raw data.

3.5 The Regulator went on to seek views whether the Medicines and Healthcare Regulator Authority (MHRA) data integrity guidance should be incorporated into the Regulator's Codes. She queried whether this was a proportionate response and whether it would be possible to audit against this. It was suggested that the results of the vertical audit of all forensic toxicology laboratories would provide a steer as to whether this would be a proportionate response. It was noted that the vertical audit would highlight if there was a systemic issue across the industry but not a one-off manipulation of data. The latter would be almost impossible to identify and prevent. It was noted that equipment providers had indicated that there might be mechanisms which could be implemented to flag the manipulation of data files.

3.6 The representative from UKAS indicated that the incident would not have been picked up during proficiency testing as proficiency tests did not involve the examination of raw data. UKAS would be using this incident as an opportunity to identify lessons to be learnt in relation to how they assessed validation data and to shed light on systems which were more vulnerable to manipulation. The use of more spot checks by UKAS was one possibility being considered.

3.7 Whilst not within the remit of the Regulator, members expressed their view that the root cause of the incident needed to be investigated and it was suggested by a Council member that one potential cause could be related to flaws in the procurement processes with businesses attempting to undercut competitors and procuring work at non-profitable margins, leading to a pressure for the business to cut corners and this pressure being passed down to those working within the laboratories. It was suggested that during procurement, a greater weighting in relation to pricing rather than quality created risks. The Regulator indicated that these assumptions could not be substantiated and it may be possible to examine the root-cause once the criminal investigation had concluded.

3.8 The Regulator noted that this issue had a broad impact across various government departments and the senior judiciary, Chief Coroner, the Department for Transport as well as Home Office Ministers, were being kept informed.

Action 2: Adrian Foster to provide the Regulator with a suitable contact with the Crown Prosecution Service for her to discuss the issue of data manipulation within forensic toxicology and her recommendations for handling forensic casework which is affected.

Action 3: Regulator to write to the Minister to provide an update on the issue of data manipulation within forensic toxicology.

4. Digital Forensics

4.1 The Regulator informed the Council that whilst it was expected that only 10% of FSPs which provided digital analysis would have gained accreditation for all tests within their scope of accreditation (there would be a greater number of FSPs which gained accreditation for some, but not all of the tests, within their scope of accreditation), by the October 2017 deadline, the deadline for gaining

accreditation would not be changed and Ministers were supportive of this position. The Council heard that the police forces and large private FSPs which undertake digital analysis were all supportive of gaining accreditation and were working hard to achieve the standards. However, the view was put forward that there were some small forensic units which were not working towards gaining accreditation, which added weight to the requirement for the Regulator to acquire statutory powers.

4.2 The Council discussed the difficulties that digital forensic providers were facing. These included providers failing to start the process to gain accreditation sufficiently early, a focus on meeting demand rather than basic quality standards due to the rapid growth in the market and that a lot of individuals involved in digital forensics did not have a scientific background and were unfamiliar with validation of methods.

4.3 The importance of identifying errors and ensuring there were processes in place within FSPs to learn from errors was highlighted. Errors should also be raised with the Regulator which had not happened on occasions.

5. Legal Aid Funding

5.1 The Regulator updated the Council that she had written to the Chief Executive of the Legal Aid Agency (LAA) to raise the issue of ensuring that forensic science funded by the LAA met the required standards. The response to this letter had been copied to Ministers in the Ministry of Justice. A survey had also been undertaken of defence practitioners, to establish experiences with respect to legal aid funding. Half of the respondents to the consultation who had indicated that they had explicitly applied for funding for peer review had not been granted this funding, which indicated that legal aid was not properly valuing peer review as a tool. Inconsistencies in funding decisions had also been highlighted with the most common inconsistencies reported as: reduction in hours for no stated reason (or not); travel costs refused (or not); choosing the incorrect rate for the work (e.g. DNA analyst rather than forensic scientist) and prosecution versus defence costs.

5.2 The Regulator indicated that she would continue to engage with the LAA in order to get it to note the issues which had been raised and to push for an appropriate fee structure. It was noted that in the healthcare setting, success had been achieved in this area by variable tariffs for diagnostic services, which were set according to the standards of accreditation adhered to by providers.

6. Fingerprints

6.1 The Regulator presented the final drafts of three fingerprint documents for the Council to sign-off.

6.2 The first was a post-consultation appendix to the Regulator's Codes of Practice and Conduct (Codes) for Fingerprint Visualisation and Image Capture

(FSR-C-127).

6.3 It was queried whether the document included smudged fingerprints found within crime scene stains, as these could help differentiate between contact DNA and DNA contamination. The Regulator reminded members this was a visualisation standard, not a recovery standard, but would engage further with the Forensic Science Regulation Unit (FSRU) on this matter.

Action 4: The Regulator and FSRU to consider including smudge prints in the fingerprint visualisation and image appendix.

6.4 As a result of the new fingerprint visualisation and image capture document, the related fingerprint comparison appendix (FSR-C-128) had also been updated and presented to members.

6.5 In addition, the Regulator's Fingerprint Examination – Terminology, Definitions and Acronyms (FSR-C-126) document had been updated to cover the updated appendices.

6.6 All three documents were approved by the Council for publication.

7. Code of Conduct

7.1 The Council heard that the incorporation of a new section (Part 19B) into the Criminal Practice Directions (CPD), which supplemented many, but not all, parts of the Criminal Procedure Rules for England and Wales, was likely to require a reference to a Code of Conduct. It was therefore an appropriate time to review the wording of the Regulator's Code of Conduct, and the members were presented with an updated version of this document for discussion. The Regulator introduced some of the updated wording.

7.2 Members suggested that section 7 should include a requirement to provide disclosure in writing. The Regulator agreed this was a good idea and the Code of Conduct would be updated accordingly.

Action 5: The FSRU to update the Code of Conduct to require the disclosure, as part of the report, of work which may have been done which could have affected the conclusions provided in the report.

7.3 Members also discussed section 10 of the updated code of conduct, which required that a practitioner should 'be prepared to review any casework if any new information or developments are identified that would significantly impact on your findings'.

7.4 It was suggested that this section should also include a requirement to disclose any evidence of value that was not made available to the practitioner.

7.5 The Regulator intended to publish guidance on section 10, and highlighted that it only applied to evidence that was essential to a case.

Action 6: The Regulator to provide further guidance on reviewing casework in the light of new evidence in her next newsletter.

7.6 Section 9 of the Code of Conduct, concerning undertaking casework within the quality standards set by the Regulator, had been updated to include the caveat 'subject to minor deviances'. This caveat was to prevent legal difficulties for practitioners if they deviated from the Regulator's Code of Practice in a very minor manner. This change was not to provide practitioners with a way by which to ignore quality standards.

7.7 Some members felt this issue was better addressed in the declarations made by expert witnesses as part of the Criminal Practice Directions (CPD). This point was discussed later in more detail (see point 8.3)

8. Criminal Practice Declarations

8.1 The Part 19B amendment of the CPD required a series of declarations to be included in the expert's report. This was to ensure compliance with the provisions of Rules 19.4(j) and 19.4(k) of the Criminal Procedure Rules (CrimPR). The introduction of the list of declarations raised questions about the wording of the declarations to be made.

8.2 Council members were presented with a paper for discussion that included the current declarations set out in Part 19B, the Academy of Experts Code of Practice, and a proposed set of declarations to comply with Part 19B and to take account of potential issues identified by the FSRU. In addition, a restricted and simplified set of declarations was presented for possible incorporation at the start of expert's report.

8.3 The proposed declarations included a statement concerning non-compliance with the Code of Conduct (declarations section 17). FSAC members suggested removing the caveat from section 9 of the Code of Conduct (see points 7.7 and 7.8) and instead add this flexibility into section 17 of the declarations. Example wording of 'to the best of my knowledge I have complied with the Code of Conduct' was suggested. It was thought this would keep the duty to comply with quality standards high, whilst also allowing flexibility for expert witnesses.

8.4 Police representatives expressed concern that the disclosure of non-compliance in the declarations could be used to undermine expert witnesses in court. It was suggested that the MG6 disclosure forms submitted by the police were sufficient for highlighting non-compliance. Other members took the view that presenting non-compliance openly in the declarations would promote transparency and facilitate a more efficient assessment of the evidence, which would be welcomed by the prosecution and defence.

8.5 The Regulator reminded members that the non-compliance statement allows expert witnesses to clearly explain why any non-compliance was justified.

8.6 Police representatives asked that NPCC Criminal Justice Portfolio lead be consulted on the declarations. The Regulator agreed but reminded members that a guidance document would be prepared for publication as soon as possible after the upcoming general election.

Action 7: Police representatives to engage criminal justice leads on the proposed declarations and feedback to the Regulator.

Action 8: The Regulator to draft the proposed statements of declarations for publishing after the General Election on 8th June.

8.7 Members also questioned how these requirements would affect practitioners, whom are not required to make declarations if not acting as an expert witness in court. It was clarified that an annex would added to the guidance document on declarations, setting out what was expected of practitioners.

Action 9: FSRU to add an appendix to the declarations document explaining the expectations placed upon practitioners not acting as expert witnesses.

9. Footwear Coding

9.1 The Regulator invited Council members to discuss a pilot project by the Metropolitan Police Service (MPS) which would semi-automate or assist the coding of footwear in custody suites. The Codes of Practice required footwear screening to be accredited, and thus a decision was required on whether assisted coding should be accredited, and if not what standards should be in place.

9.2 Members were shown a flow chart provided by the MPS explaining the workflow and processes involved in the assisted coding of footwear.

9.3 The group heard that the study had been performed in a MPS custody suite equipped with a walk-on footwear scanner. In total 1011 scans were conducted, of which 55% could be coded in this way, with 43% of footmarks correctly identified against the footwear database. Of the footwear marks that could not be coded by the machine, forensic practitioners could code the majority of remaining cases. Of the 1011 scans, 258 produced a link to other offences. In total 3 cases were solved that included a contribution from automated footwear coding. The Home Office was supportive of the project.

9.4 There was an error rate of 10% in those instances where coding was assigned, which was to be expected given the subjective nature of footwear coding. These errors would contribute to the false positive matches to marks recovered at crime scenes and missed potential matches (false negatives). During the pilot these errors were identified through assessment by forensic practitioners, however once rolled-out, forensic practitioners would not be checking all the output of the assisted coding, although these footwear prints would be labelled as 'unverified' on the system. Furthermore, any scans used during criminal justice proceedings would be manually coded by an expert.

9.5 Members agreed that the error rate was not a major risk to the criminal justice system as this technology was for intelligence gathering only, rather than for identification.

9.6 The view was put forward that acquiring ISO17025 for the semi-automated foot wear coding approach in custody suites across multiple sites would be problematic and costly. In addition, due to the early stages of the technology, accreditation might identify that the error rate invalidates the technique before it is fully functional.

9.7 Members concluded that accreditation was not appropriate, but that a proportionate standards framework or guidance document would still be required to ensure a level of quality control and consistency.

Action 10: The Regulator to write to the MPS to explain what standards will be required for semi-automated footwear coding.

10. Infrequently Used Methods & Occasional Experts

10.1 The Council heard that the Codes of Practice required expansion in relation to infrequently used methods and occasional experts. Infrequently used methods were described as forensic practices that were performed relatively rarely, whilst occasional experts were experts in a niche forensic area that was often not their usual job. The Council heard that it was difficult to apply accreditation to infrequently used methods and occasional experts, however both had validity in forensic science.

10.2 References in the Codes of Practice and Conduct to infrequently used methods as being out of scope may have inadvertently discouraged their use, which was never the intention. Members were presented with a draft text for the next version of the Codes of Practice and Conduct in relation to infrequently used methods and occasional experts and were asked for feedback.

10.3 The definition of 'infrequent' was discussed. It was debated whether a specific number should be used in order to give clearer guidance, or if the assignment of a number was arbitrary and might affect whether forensic units decided to perform such methods (e.g. if exceeding the limit meant accreditation was required). The UKAS representative informed the group that UKAS had drafted a policy statement for consultation on infrequently used methods, and had decided to avoid defining a specific number as 'infrequent' given that different disciplines interpreted this term differently.

Action 11: UKAS to share the draft policy statement on infrequently used methods with the FSAC.

10.4 The group was informed that a definition of infrequent would be useful for fingerprint methods in order to clarify which methods require accreditation under EU guidelines.

10.5 It was highlighted that 'infrequent' can be used to refer either to the number of times a specific organisation performed a technique, or the number of times a technique was used across the Criminal Justice System. This was considered to be an important distinction.

10.6 Members were invited to provide further feedback to the Regulator on infrequently used methods and occasional experts within the next two weeks.

Action 12: FSAC members to provide the Regulator with further feedback in relation to infrequently used methods and occasional experts within two weeks.

11. AOB

11.1 The Regulator informed the group that a former FSAC member, Dr Sheila Willis, was retiring. The Regulator would pass on the good wishes of the FSAC to Dr Willis.

12. Date of Next Meeting

12.1 The date of the next FSAC meeting would be Thursday 7th September 2017.

Annex A

Present:

Gill Tully	Forensic Science Regulator (FSR) (Chair)
Stan Brown (via phone)	Forensic Science Northern Ireland (FSNI)
Martin Evison	The Chartered Society of Forensic Sciences (CSFS)
Adrian Foster	Crown Prosecution Service (CPS)
Anya Hunt	The Chartered Society of Forensic Sciences
David Lewis	Dorset Police
Andrew Rennison	Criminal Cases Review Commission (CCRC)
Roger Robson	Forensic Access
Karen Smith	Dorset Police
Lorraine Turner	UK Accreditation Service (UKAS)
Mark Wall	Judiciary

In attendance:

Jeff Adams	Forensic Science Regulation Unit (FSRU), HO
Emma Burton-Graham	Science Secretariat, HO
Simon Iveson	Forensic Science Regulation Unit (FSRU), HO
Thomas Vincent	Science Secretariat, HO

Apologies:

Mark Bishop	Crown Prosecution Service (CPS)
Mohammed Khamisa	Mishcon de Reya
Tom Nelson	Scottish Police Authority
Mark Pearce	Association of Forensic Science Providers
Derek Winter	Coroners' Society of England and Wales