



Forensic Science Advisory Council (FSAC)

Minutes of the meeting held on 9 September 2016
at Home Office, 2 Marsham Street, London SW1P 4DF

1. Welcome and apologies

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

1.2 The Regulator welcomed in particular Assistant Chief Constable (ACC) David Lewis, who had recently joined FSAC and was representing the National Police Chiefs' Council (NPCC) Performance and Standards Group. The Regulator thanked Ann Priston, who was standing down after this meeting, for her contributions to FSAC.

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

2.1 The minutes of the last FSAC meeting had already been reviewed by members via e-mail and published on the website of the Regulator.

Matters arising

2.2 The actions from the FSAC meeting on 29 April 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:

- Action 7: Jeff Adams to investigate whether there were research papers within the Forensic Archive which could be retrieved that would be of benefit to the forensic community. This item was in progress and Jeff Adams was waiting for a reply from the Archive.
- Action 9: Tom Nelson to ask members of the Association of Forensic Science Providers whether they would be willing to host a visit from the Minister. It had been agreed that LGC Forensics would host a visit from the Minister however it was not known whether or not this had taken place.

3. Codes of Practice & Conduct update process

3.1 FSAC was informed that a review of the Forensic Science Regulator's Codes of Practice and Conduct (Codes) was in progress and that members would be invited to review a draft of the revisions at a later date. At this meeting, FSAC

was asked to consider the specific issue of how to include provisions within the Codes to handle the risk of withdrawal from the market of a Forensic Science Provider (FSP). It was added that any inclusions within the Codes would have to be assessed during audits and a balance was required between protecting the Criminal Justice System (CJS) and not creating an overly burdensome accreditation process.

3.2 Clarification was provided that it was not only the release of case files from a FSP that was of concern, but also the supporting documentation for those cases files, such as standard operating procedures (SOPs) and validation material, which are essential if those case files were to be used in the courts. The supporting documentation could be considered an asset by a FSP and therefore, the FSP might be reluctant to hand over this material to other FSPs. It was queried whether the material could be handed over to an impartial party, such as the Regulator, the courts or be stored in the Forensic Archive. The latter option was considered unlikely, as the Forensic Archive is decreasing in size with the aim of closing down over a period of time.

3.3 It was queried whether FSPs might have a liability to make available the supporting documentation for case files as the case files are unusable without this documentation. It was suggested that when contracts are drawn up with FSPs, requirements ought to be included within the contract to ensure that all supporting documentation should be made available if an FSP were to close.

3.3 The Council held the view that there wasn't anything which could be included in the Codes that would strengthen the requirement on providers, which could also be the subject of an audit. Therefore, the Regulator suggested an alternative approach which was to highlight the issue with the NPCC Performance and Standards Group and suggest that all police forces' risk register should include business continuity plans to cover the possibility of the closure of a FSP and for the importance of this issue to be considered during contracting of forensic work.

Action 1: Regulator to highlight with the NPCC Performance and Standards Group the risks of withdrawal from the market place of a FSP.

3.4 A further specific issue was discussed in relation to the review of the Codes. The Regulator sought opinions from FSAC as to whether subsequent versions of the Codes ought to be published prior to there being a requirement for providers to be accredited to the new version. Concerns were held that if a Code was published which didn't come into effect for a period of time it could create confusion in the courts as to which version of the Code should have been applied to a forensic examination. An alternative would be to announce that the Regulator is minded to change the Codes and provide the rationale but not to have the subsequent version of the Codes take effect until October 2017. The document could be issued as an advance document to ensure that FSPs are aware of changes they could expect. It was agreed that an advance version of the Codes should be made available which provide clarity as to the changes to expect, but not to published the final version of the Code in advance. The Regulator informed

the Council that new versions of the Code would be published to commence in either April or October in line with better regulation governance rules.

3.5 FSAC heard that the subsequent version of the Codes would include language changes and the adoption of the term Forensic Units as an alternative to FSPs to provide clarity that the Regulator's Codes apply to units within police forces.

Action 2: Regulator to make the next version of the Codes available as an advance notification version (making clear that the text has not been finalised) and to publish the final version with an October 2017 commencement.

4. CCTV/Video viewing guidance

4.1 The Regulator informed FSAC that issue 3 of the Codes provided details of the video processes which needed accreditation to ISO 17025. The Codes included a permitted viewing route for CCTV outside of accreditation. The expert network of the NPCC Digital Forensics National Portfolio had proposed a flow chart to assist with explaining the scope. Overall, anything that transformed the original image or involved processes beyond a basic download using the video's own export facility was an accreditable process under ISO 17025. The activity of viewing CCTV and recording what can be seen was out of scope of accreditation. In addition, if an individual was identified from CCTV and that individual does not dispute the identification, that process was also out of scope of accreditation. However, if that individual disputes the identification and the issue will be discussed in the courts, then the process needs to be accredited. It was clarified that only specialist CCTV downloading was within scope of accreditation. Members were invited to provide advice on the approach which had been proposed.

4.2 It was queried whether difficulties might arise in distinguishing between disputed and non-disputed cases and whether a case might progress along the non-accredited route and then need to switch at a later stage to the accredited route. Whilst this was considered plausible, it is preferable to having a requirement where all CCTV viewing needs to go through an accredited route. In these situations, it is expected that the master version would be available to be used for the accredited route. The Regulator expected that CCTV viewing Units should have minimum standards in place to ensure the integrity of the master copy of the CCTV and to ensure that data are not lost when uploaded from a system. The necessity of producing a clear definition of a master copy was highlighted. Karen Georgiou and David Lewis agreed to raise this issue with the NPCC Performance and Standards and Digital groups and identify who would ensure that standard operating procedures are in place across police forces.

Action 3: Karen Georgiou and David Lewis to raise with the NPCC Performance and Standards and Digital Groups the necessity for minimum standards to ensure the integrity of the master copy of the CCTV and to identify who will ensure these standards are in place across police forces.

4.3 The flow chart was discussed and it was suggested that the box 'viewing for investigative process' should either be deleted or renamed to prevent creep of the scope.

4.4 Discussions were held about the dissemination of the flow chart and emphasis was placed on ensuring the community was aware of the approach to be taken so that they could develop their own standards in the required areas. It was noted that a consistent communication was required across the police community and therefore Karen Georgiou and David Lewis agreed to take a lead in ensuring the police community was aware of the guidance once it is published. The private providers would also need to be made aware.

Action 4: Simon Iveson to produce a final version of the flowchart and send it to Karen Georgiou and ACC David Lewis for dissemination.

5. Facial imaging position paper

5.1 The Regulator had begun work drafting a standard for facial image comparisons. A working group had been convened and a list of potential issues drafted, indicating areas which were in or out of scope for the standard. Validation and verification would be within the scope of the standard as would the limits of the research and scientific basis and reporting of the results. The Regulator noted that it had been made clear that automated recognition systems and the standards used for measuring their performance would not be applicable for forensic comparisons of uncontrolled images with varying angles lighting and other aspects. The Regulator informed the Council that she had written to the Home Office Biometrics Programme to make it aware of the need for validation for facial comparisons and other biometric systems.

5.2 Super-recognisers were discussed and the Council heard that case law was ambiguous in this area. Certain case law existed which suggested that facial comparison could be regarded as expert evidence, however, in other cases it had been ruled that super-recognisers were not expert evidence. Either way, the Regulator clarified that super-recognisers were not forensic scientists as their work was not based on scientific methodology and the hypotheses set out at the beginning were different from those used in forensic science. An error rate of 30% was quoted for super-recognisers. FSAC agreed that there were dangers associated with super-recognisers being classed as experts and it was agreed that this was an escalating problem which needed addressing. A carefully worded judgement in regards to the position of super-recogniser evidence in court was deemed desirable.

5.5 A meeting on facial comparison had been arranged at the end of September, so rapid progress on this work was expected.

6. Interpretation of complex DNA mixtures

6.1 The Regulator had commissioned a piece of work on DNA mixture interpretation software validation standard and guidance and the committee were provided with a report on this piece of commissioned work. Members of the Council were invited to read the report and feedback their views at this stage however the paper would still go through the usual advisory process, including review by the DNA Specialist Group and Quality Standards Specialist Group. The aim of the report was to produce a clear definition of how mixture interpretation software should be validated. Further work had also been commissioned by the Regulator to determine whether it was ever appropriate for qualitative evaluation of mixtures to be undertaken, and if so, what should be the limit of these analyses.

Action 5: FSAC members to provide their feedback on the report 'DNA mixture interpretation software validation standard and guidance'.

6.2 Members were informed that the United States President's Council of Advisors on Science and Technology would be publishing a report later in the month which is expected to include interpretation of complex DNA mixtures.

7. Casework review project

7.1 The Council was provided with a report on a pilot study which had been commissioned by the Regulator to consider whether cases brought to the Regulators attention were representative of issues on a larger scale that may impact on the quality of forensic science provided to the CJS. The report summarised issues identified amongst thirteen sexual offence investigations from two police forces from report of the offence to case closure.

7.2 The importance of having a well thought-out forensic strategy based on the circumstances of the case and dedicated personnel to develop the strategy was highlighted. The involvement of FSPs in developing the forensic strategy was discussed. With the majority of cases analysed during the pilot, the FSP was not involved in developing the forensic strategy. There were extremes reported amongst police forces as to the degree with which they involved the FSPs in the forensic strategy, with some forces adopting a detailed collaborative approach and other forces preventing FSPs having discussions with the Investigating Officer on a case. Whilst it was suggested that most police forces did have the expertise to develop their own forensic strategies, members could see advantages of involving scientists from FSPs in the development of the strategy, but acknowledged that this would likely lead to additional costs.

7.3 Members expressed disappointment about a number of issues which were highlighted in the report, including examples where decision making was not recorded and examples where the Officer in the Case had developed the forensic strategy without any dialog with Senior Forensic Practitioners within the force.

7.4 The involvement of the CPS in developing the forensic strategy and directing the cases was discussed. A representative from the CPS informed

members that the CPS had very little involvement in the early stages of cases unless the case is a murder inquiry.

7.5 UKAS accreditation of police forces was discussed and it was suggested that all forces should be accredited to ISO 17025 for the forensic work that they undertake. It was hoped that police forces would be aware of the scope of their accreditation and the limitations of their knowledge and therefore know when to pass work to the FSPs. Potential weakness might exist in that UKAS could only assess institutions on the scope of their accreditation which had the potential to result in discrete areas of good practice, both within policing and FSPs but selected areas which were not accredited nor being assessed for good practice.

7.6 Suggestions were put forward as to who the Regulator could liaise with in respect to the issues identified in the report. These included the National Police and Crime Commissioners (NPCC) crime coordination committee which is likely to have a group examining sexual offence investigations. In addition, contact should be made with the College of Policing which is the guardian of standards and training for the police service. Concerns were raised that the College of Policing was stopping its training for sexual offences in the future and whilst this might provide the opportunity for partners to come together to raise standards, there was also the risk of consistency issues and whether sufficient providers would step forward to provide the training required.

Action 6: David Lewis and Karen Georgiou to contact the NPCC and College of Policing to find out what work they are undertaking to raise standards within the area of sexual offences.

7.6 It was agreed that the report provided the rationale for the FSR to commissioner a wider case review and it was suggested that as more problems were identified from the cases which were selected randomly, than those which were chosen by the police force, that the wider case review should include randomly selected cases. The Regulator had already sought feedback from the two police forces which provided the cases and from the CPS and requested detailed feedback on the report from the committee. It was agreed at the next FSAC meeting that members would consider the requirements for a wider case review and whether a summary of this report should be published more widely to enable lessons to be learnt.

Action 7: FSAC members to provide detailed feedback on the Case Process Review Pilot report and for a wider case review to be discussed at the next FSAC meeting.

8. Introduction of new methods

8.1 The committee heard about an issue which had arisen in police forces who were attempting to attain UKAS forensic accreditation whilst new forensic methods were being adopted. The forensic methods in use needed to be properly embedded before UKAS accreditation could proceed. The Regulator planned to

produce a simple flowchart to address this issue, which would refer to other documents with further details.

8.2 UKAS would be consulted on this flowchart before it was issued, and it would be circulated to QSSG and FSAC for review in the normal way.

Action 8: Regulator to produce a flowchart to share with QSSG and FSAC to address the issue of police forces attempting to attain UKAS accreditation whilst new forensic methods were being adopted.

9. FSR Annual Report 2016 outline

9.1 Initial planning had been undertaken on the Regulator's 2016 annual report. The report would take the same layout as the previous year's report and would include sections on risks and priorities for forensic science, progress on work over the year, investigations and complaints and a highlight of particular issues. The Regulator noted that the issue of resourcing for the Forensic Science Regulation Unit would be highlighted and the impact this is having on making progress.

9.2 The FSR invited suggestions for further issues to be included in the 2016 annual report

Action 9: FSAC members to submit additional issues to be included in the Regulator's 2016 annual report.

10. Issues for escalation in CJS

10.1 The Council heard that the Regulator would write to the Lord Chief Justice to raise a number of issues which were beyond the control of the Regulator. The follow issues were discussed.

Prosecutions based solely on DNA evidence

10.2 Concerns about prosecution cases being based solely on DNA evidence due to the enormous discrimination power of DNA evidence diminishing consideration of the possibility that errors could have occurred.

Toxicology results presented at Family Courts

10.3 Concerns that the Pathology and Toxicology services provided to the family courts were not to sufficiently high standards. As the Regulator's remit does not cover the Family Courts, she was unable to directly raise standards in this area.

Medical evidence from abroad presented at Criminal Courts

10.4 Medical evidence provided by experts from other countries did not necessarily meet the standards of medical experts trained in the UK. Specifically,

in one case the defence had sought the evidence of a US medical practitioner who wasn't a qualified radiologist to contradict the evidence provided by a qualified radiologist in a UK court. It was suggested that amendments to the Criminal Procedure Rules (CrimPR) might address this issue.

10.5 Members heard that whilst other countries were accredited to the ISO 17025 standard for forensics, their interpretation of the standard could differ. ISO 17025 is a generic standard and it can be interpreted in different ways as each country nominates its own accreditation body to interpret the standard. Within the UK, the International Laboratory Accreditation Cooperation (ILAC) document G19 is also applied to forensic accreditation, to improve consistency. As the UK re-adopt Prüm and data sharing, legislation will be drafted which would allow the Secretary of State to issue guidance on the interpretation of ISO 17025 and evidence presented from outside of the UK.

Legal status of super-recognisers

10.6 The concerns about super-recognisers had been noted earlier in the meeting.

Dlugosz -type qualitative evaluations of DNA evidence

10.7 The Regulator was in the process of developing guidance and standards around the use of qualitative opinions for DNA evidence.

11. FSR statutory powers update

11.1 A paper was shared with the Council which had been prepared by the Home Office to allow consideration of the issues involved with the FSR being placed on a statutory basis. The Council heard that the paper had been discussed amongst officials within the Home Office and there was a reasonable level of confidence as to the approach which would be taken. A suitable legislative vehicle was being identified which may allow the statutory basis of the FSR to be enacted. A number of issues would need to be addressed by the legislation including: defining the scope of forensic science; defining the powers of the Regulator and whether the powers would be restricted to the CJS; giving the Secretary of State wide ranging powers to allow the definitions to be modified; addressing the issue of resources if the scope of the Regulator were to increase; defining how information would need to be handled and whether the Regulator would be subject to the Freedom of Information Act 2000. The Council heard that consideration also needed to be given as to how processes would work within the Devolved Administrations. Members were invited to provide their views as to whether any further issues needed to be addressed by the legislation.

Action 10: FASC members to provide their views as to whether any further issues need to be addressed by the legislation which will place the FSR on a statutory basis.

12. AOB & date of the next meeting

12.1 The following items were raised.

CSFS pathway for accreditation of sole traders and SMEs

12.2 The Chartered Society of Forensic Science (CSFS) was developing a pathway to assist sole traders and Small or Medium-sized Enterprises (SMEs) to obtain forensic accreditation. To ensure fairness amongst the marketplace the scheme would be open to all FSPs including large companies. The CSFS had been working with UKAS to agree the approach. The aim was to share the costs to develop an agreed set of documents which would be pre-accredited and could be adopted by individual bodies. A number of FSPs had provisionally agreed to take part in a pilot study. The approach so far had successfully identified how the up-front costs for accreditation could be reduced and the CSFS were working with UKAS to identify how the running costs of accreditation could be managed. The committee heard that the CSFS would meet UKAS on 12th September 2016 to discuss this further. It was noted that police forces would be watching closely the outcome of this work as there would be interest amongst police forces in joining together to reduce the burden and costs of accreditation.

Forthcoming report from the US President's Council of Advisors on Science and Technology (PCAST) on Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods¹.

12.4 The committee heard that the US President's Council of Advisors would shortly be publishing a report on various kinds of forensic sciences, including DNA mixtures, bite marks, firearms, footwear impressions and microscopic analysis. Some of the issues raised would be relevant to forensic science in the UK. The FSR would respond, if necessary, on the impact of these issues in the UK.

Digital forensics accreditation

12.5 Progress on digital forensics validation was proving challenging as there was a steep learning curve on digital standards. In addition, training UKAS assessors for digital accreditation was time-consuming. Therefore the Regulator was in dialogue with Deputy Chief Constable (DCC) Nick Baker, the NPCC lead on digital forensics, and would report back on this at subsequent FSAC meeting.

Forensic quality issues

12.6 Several quality issues had recently arisen in relation to particular FSPs. One FSP had their entire UKAS forensic accreditation suspended and a police force had two forensic methods suspended. Other FSPs were at risk of similar UKAS suspensions. One cause of this was the adaption of quality systems for broad scopes of accreditation when they had originally only been set up for small scopes.

¹ The report has now been published and is available from the following link:
https://www.whitehouse.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensic_science_report_final.pdf

DNA primer for courts

12.7 An editorial board had been set up, chaired by Lady Justice Rafferty, to complete the DNA primer for courts. The primer was expected to comprise ten to twelve pages on: background on the science of DNA analysis; specific applications; interpretation of DNA data and current limitations to interpretation of DNA data. The first draft would be completed by the end of October. The committee were informed that an editorial group for a primer on gait analysis had been set up and would be chaired by Judge Mark Wall.

Date of next FSAC meeting

12.9 The date of the next FSAC meeting would be Wednesday 7 December 2016.

Annex A

Present:

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| Gill Tully | Forensic Science Regulator (FSR) (Chair) |
| Stan Brown | Forensic Science Northern Ireland (FSNI) |
| Adrian Foster | Crown Prosecution Service (CPS) |
| Karen Georgiou | Cambs Police |
| Anya Hunt | The Chartered Society of Forensic Sciences (CSFS) |
| David Lewis | Dorset Police |
| Kathryn Mashiter | Lancashire Constabulary |
| Tom Nelson | Scottish Police Authority |
| Ann Priston | The Chartered Society of Forensic Sciences (CSFS) |

In attendance:

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| Jeff Adams | Forensic Science Regulation Unit (FSRU), HO |
| Emma Burton-Graham | Science Secretariat, HO (Secretary) |
| Simon Iveson | Forensic Science Regulation Unit (FSRU), HO |
| Mike Taylor | Science Secretariat, HO |

Apologies:

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| Mark Bishop | Crown Prosecution Service (CPS) |
| Martin Evison | The Chartered Society of Forensic Sciences (CSFS) |
| Julie Goulding | Criminal Cases Review Commission (CCRC) |
| Mohammed Khamisa | Mishcon de Reya |
| Mark Pearce | Association of Forensic Science Providers (AFSP) |
| Roger Robson | Forensic Access |
| Lorraine Turner | UK Accreditation Service (UKAS) |
| Mark Wall | Judiciary |
| Derek Winter | Coroners' Society of England and Wales |