

# FORENSIC SCIENCE ADVISORY COUNCIL

## Note of the meeting held on 6 July 2011 Home Office, 2 Marsham Street, London SW1P 4DF

Present:

Andrew Rennison	Forensic Science Regulator (Chair)
Jeff Adams	Forensic Science Regulation Unit
Jane Beaumont	United Kingdom Accreditation Service
Stan Brown (via telecon)	FSNI
David Charlton	Guest
Roger Derbyshire	AFSP
Ian Evett	Guest
John Fletcher	ACPO
Julie Goulding	Criminal Cases Review Commission
Kath Mashiter	Lancashire Police
Tom Nelson	Scottish Police Services Authority
Ann Priston	Forensic Science Society
Basil Purdue	British Association in Forensic Medicine
Roger Robson	Forensic Access
Charles Welsh	Skills for Justice
Iain Williams	Home Office Science Secretariat
Derek Winter	Council for the Coroners Society of England and Wales
Soheel Joosab	Forensic Science Regulation Unit

### **1. Welcome and apologies**

1.1 Andrew Rennison welcomed those present to the meeting, with a particular welcome to Derek Winter attending his first meeting as a recently appointed member of the FSAC.

1.2 Apologies were received from:

Andrew Goymer	Judiciary
Alan Woods	Skills for Justice (Charles Welsh attending)

### **2. Minutes of the last meeting**

2.1 There were no minutes as the last meeting was a workshop on observer bias in fingerprint examination.

### **3. Cognitive effects: Follow-up to the FSAC workshop on addressing issues of observer bias**

3.1 Following the workshop held in March, Mr Rennison invited Prof. Jim Fraser (who facilitated the workshop) to provide the Council with a summary of the discussions that took place.

3.2 Members were advised that the purpose of the workshop was to draw out the abstracts, rather than the specifics, of observer bias relative to fingerprint examination. Key points were, but not limited to:

- It was highlighted by all the speakers that fingerprint examination is not an exact science, but, in many cases is entirely dependent on examiners subjective interpretations, and therefore open to human error and/or bias.
- Individuals commonly apply such terminology to bias as perceptual, motivational and cognitive and there is a need to deconstruct these meanings from an examiners perspective, i.e. perceptual (preconception) and motivational (desire to do good job and not a desire to seek a specific outcome).
- There needs to be a mindset (possibly introduced in training programmes) that acknowledges observer bias is not a sign of incompetence or a perceived notion of being overtly influenced.
- The issue of human error in matching a print may not just be about bias, but also include cognitive human behavioural elements.
- Bias is not intentional and is without awareness and cannot be turned 'on or off' on impulse.
- The role of motivation, which is a positive attitude in wanting to do one's best. However, motivational bias may also encourage a desire to achieve a 'particular' outcome despite the evidence, i.e. have an unconscious incentive to reach a certain conclusion or perceive things in a certain way.
- There have been a number of cases when expert witnesses have found themselves in a position, while in court and being cross-examined, where they have found it difficult to rationalise how they reached their conclusions. There was consensus that there is a need to challenge such a mindset which can lead to declarations of this type.

3.3 In working toward a possible solution, Prof. Frasier suggested that this might be broken down into three, manageable, constituent parts.

i) **Operational procedures and structural roles:** the clear differentiation of operational roles. For example, the possibility of introducing 'blind' testing or sequential unmasking- with only essential contextual information provided to the examiner and the verifier to complete a comparison - i.e. does the forensic examiner/verifier need to know all the circumstances of case ahead of forensic analysis.

ii) **Information flow:** A case manager model might be applied whereby a manager would work with the police and the forensic (fingerprint) examiners, but only the manager would have the full picture of all the circumstances/details relating to the case, i.e. DNA (and other evidence), can coordinate, contextualise and support the presentation of autonomous non-biased lines of evidence.

iii) **Education/ training and quality assurance:** Given that all have a built in predisposition toward bias in some form, perhaps this should be contextualised and built into training structures, with a greater emphasis on peer review. Additionally,

- Outside of Harperley Hall, there is disparate ongoing training and development across fingerprint bureaux. For the future it must be ensured that any development in this area should be on a national basis of collaboration (perhaps in hand with the Forensic Science Regulator, UKAS and the Skills for Justice).
- It was suggested that perhaps there might be value in carrying out an undemanding audit to establish what processes/structures are currently being applied nationally.

3.4 This was agreed in principle by the Council. Andrew Rennison and Prof. Jim Fraser agreed to use this as the basis for further work. Andrew Rennison thanked Prof. Fraser for his help with this.

3.5 Stan Brown advised the Council that the FSNI presently apply a number of the procedures discussed, and that he would be happy to talk through these at some later date with Mr Rennison.

#### **4. EU Framework Decision: Discussion Document (209/905/JHA)**

4.1 Jeff Adams introduced the discussion paper. He advised that on 30 November 2009 that the Council of the European Union adopted a Framework Decision (2009/905/JHA) in relation to accreditation of forensic science providers carrying out certain laboratory activities. As it is Mr Rennison's responsibility, as the FS Regulator, to provide advice to Ministers, the CJS and service providers/users on quality matters relating to forensic science, the matter of the interpretation of the framework decision was raised for discussion.

4.2 The Council was advised that because of the way the Decision had been drafted, there were ambiguities with regard to a number of key areas within it and the lacking detail on others, particularly around transposition into domestic legislation.

4.3 A few of the examples were highlighted:

- There is not a clear definition of 'Forensic Science Provider (FSP)'. The decision is written to suggest that a FSP is any organisation that carries out service provision for a law enforcement or judicial authority. However, it also omits to include individuals and does not seem to cover those who provide services to an organisation which only does defence work.
- It avoids defining the term judicial authorities
- Given the ambiguity, there is a question of one country's approach being different to that of another in forensic provision and standards.

- There is also an absence of geographical limits in the requirements, for example the FSP does not have operational facilities in the UK, but is being used by a law enforcement/judicial authority. There is, therefore, the question of whether the UK is required to – or can – enforce accreditation. Would there be an obligation on that organisation to work to UK standards.
- Central to this, would be the fact that if this EU Directive were not properly applied/implemented by the Home Office, there could be the possibility of financial penalties.
- As currently drafted, there is an ambiguity in the accreditation requirements placed on those organisations providing services to the police and the CJS and those providing services the defence.
- There is an issue with the term ‘laboratory activity’ (Found under Article 3) in that there is no accompanying definition, e.g. in generating a NDA profile a part of that process may be carried out in a location that may not conventionally be considered to be a laboratory.

4.4 The Council overwhelmingly agreed that the identified anomalies (as fully set out in the discussion paper) required that appropriate definitions should be included within the Decision. Mr Rennison advised that would discuss the matter with Chief Constable Chris Sims and the Forensics 21 Board. Additionally, he said that, together with Jeff Adams, would produce a draft ‘interpretation’ paper – or a statement – with an aim to formally set out concerns regarding the ambiguity within the Decision and the associated lack of definitions, and circulate for comment.

**Action: Andrew Rennison/Jeff Adams to produce a draft response to the Decision.**

## **5. R v T [2010] EWCA Crim. 2439**

5.1 Jeff Adams informed the Council that the decision in the Court of Appeal, *R V. T* [2010] EWCA Crim, 2439, resulted in the acquittal of the defendant. As the judgement raises a number of issues relating to the interpretation of evidence, in particular, the use of Bayesian, the considerations of the Council were accordingly sought.

5.2 The Council was advised that the Court, throughout the judgement, stated that the judgement only applied to footwear evidence. However, a number of statements were made that seemed general in nature and appeared to with give guidance beyond the area of footwear evidence.

5.3 Accordingly, three principle questions open for consideration were:

- i) Does the judgement only apply to footwear evidence;
- ii) Is the judgment concerned only with footwear evidence based on the database of footwear held by the FSS; and
- iii) Does the judgement have wider implications?

5.4 The Council therefore discussed whether, and how, the FSAC might respond, if at all, to the possible implications of the judgement. It was agreed that a response should be made with the intention to clarify the position of the forensic science perspective relative to that of the judiciary perspective.

5.5 In considering the most appropriate route forward for providing feedback to the detail of the judgement findings, it was agreed that the Regulator should produce a guidance paper to contribute toward transparency on how, for forensic providers, might operate within the findings of this judgement.

5.6 Accordingly, it was agreed that a specialist working group (of forensic scientists, lawyers and legal practitioners) should be established to produce such a guidance document.

5.7 As a first step, a planning meeting should be convened to consider the way forward – this will include Julie Goulding and Ian Evett. Mr Rennison said that he was shortly to meet with Lord Justice Thomas, and would discuss with him the possible nomination of a member of the judiciary to sit as a member of the specialist group (possibly to nominate one of the judges who were involved in the associated court of appeal decision).

**Action: Mr Rennison to discuss with Lord Justice Thomas the production of a guidance document based on R v T judgement**

## **6. Home Office Review: Research Development in Forensic Science**

6.1 Iain Williams introduced the item. As a brief introduction he informed the Council that in January 2011 Home Office Ministers commissioned the Prof Bernard Silverman (the Home Office Chief Scientific Advisor) to undertake, with the support of the Forensic Science Regulator, a review of R&D relevant to forensic science.

6.2 The review was informed by consultation with over 80 responses from forensic science providers, laboratories and universities identifying areas of ongoing R&D work relevant to forensic science. A number of key issues were identified, for example,

- There could be more scope for the learned/professional societies and representative organisations to communicate and feed into the development and validation of future R&D,
- Findings showed that, overall, the developed research landscape is varied and in some ways fragmented with a need to improve communication to drive forward innovation.
- Funding was a particular issue for R&D as it seems that early stage funding was difficult to come compared to other scientific disciplines, and that perhaps a more coordinated approach to sourcing funding may be required.

6.3 A full list of the key recommendations can be found at Annex A.

## **7. Any other business**

7.1 Charles Welsh advised that the Skills for Justice had been asked by the Regulator and the UK Commission for Employment and Skills, to articulate partner's vision for UK forensic science 2020. As the Skills for Justice will be speaking engaging with to all stakeholders across the Justice, Community Safety and Legal Services sectors regarding this, Mr Welsh said that he would welcome the views of the Council and would contact members accordingly.

**Action: Mr Welsh to contact Council members regarding forensic science vision in 2020**

7.2 Ann Priston advised that the QAA benchmark for forensic science should be established by approxamely January 2012.

## **8. Date of next meeting**

- 1 November 2011, 11:00am Conference room 6, Home Office, 2 Marsham Street, London, SW1P 4DF

### Forensic Science Research and Development Review

#### Key recommendations

- Forensic science researchers, providers and users should all pay particular attention to appropriate communication within the research landscape, especially in view of the multifaceted nature of research and development in forensic science.
- The Forensic Transition Board should pay specific attention to Section 7.1 of the Framework Agreement for Forensic Science Providers setting out the requirement for providers to carry out appropriate research and development.
- The Forensic Science Regulator, bearing in mind the requirements of the courts, should consult to establish a suitable format for published authoritative reviews of the scientific basis of forensic methods, and to encourage appropriate journals to establish independent robust peer-review processes for their publication.
- The Forensic Science Regulator should act as a facilitator to bring together a consortium of appropriate representative bodies and other parties to organise a regular single cross-disciplinary forensic science conference.
- Representative organisations and their membership communities should work to mobilise voluntary effort (including in leadership roles) to enhance the impact and range of their activities, for example to strengthen linkages and build information resources within the field of forensic science.
- The higher education funding councils' Research Excellence Framework team should remind panel and sub-panel chairs, across the range of relevant disciplines, of the need to appoint assessors able to judge the impact of research on forensic science practice. It should revisit the list of nominating bodies for assessors to include forensic providers other than the Forensic Science Service, either individually or through an appropriate representative body.
- Consideration should be given to the establishment of forensic science as a strategic research priority for the Research Councils. In the first instance, the Home Office should facilitate contacts between Research Councils UK and academics, industry and end users to explore this possibility in detail.
- The Technology Strategy Board should consider whether forensic science could be facilitated through a Knowledge Transfer Network or similar mechanism.