Fingerprint Quality Standards Specialist Group (FQSSG)

Note of the meeting held on 27 January 2011 New Scotland Yard, 10 Broadway, London SWIH 0BG

Present:

Gary Pugh (Chair)	Director of Forensic Services, Metropolitan Police Service
Prof. Jim Fraser	Centre for Forensic Science, University of Strathclyde
June Guiness	Forensic Science Regulation Unit
Andrew Rennison	Forensic Science Regulator
Richard Small	West Midlands Police
Karen Squibb-Williams	Crown Prosecution Service
Soheel Joosab	Forensic Science Regulation Unit (Secretary)

1. Welcome and introduction

1.1 Gary Pugh welcomed those present to the fourth meeting of the FQSSG.

2. Apologies

2.1 Apologies were received from:

Andrew Ritchie	GMP, Forensic Services Branch,

3. Minutes of the last meeting

3.1 Minutes of the last meeting (25 November 2011) were agreed as accurate.

4. Actions from previous meeting(s) and matters arising

- 4.1 Key actions from the last meeting (and any previously outstanding actions) are attached in the FQSSG actions log (Annex A)
- 4.2 To further supplement the draft standard in the areas of examiner competences, at the last meeting (November) Prof. Fraser was asked to produce a draft form of words which would highlight how an examiner employs an interplay of cognitive and perceptual skills to reach what they feel is a sound decision in identifying, or excluding, a latent fingerprint and through how applying these methods can be left vulnerable to human error.

4.3 Accordingly, a draft produced by Prof. Fraser was circulated to the group for their consideration. It was agreed that the draft well reflected the nature of the dual roles of cognitive and perceptual skills and should be incorporated into the proposed standard.

5. Fingerprint Standard (Draft paper)

- 5.1 Mr Pugh introduced the latest draft of the paper. He advised that Andrew Rennison had added an introduction to the paper which explained that a European Council Framework decision, made in November 2009, requires that all DNA and fingerprint laboratories whether they are government, commercial or police laboratories which carry out activities resulting in the development and interpretation of trace items are to be accredited against the ISO/IEC 17025 standard by 2013 (DNA) and 2105 (fingerprint). In order to achieve compliance with the Framework Decision, the initial focus for police forces will be on their fingerprint enhancement laboratories.
- 5.2 The draft introduction further explained that the ISO/IEC 17025 is the globally accepted standard for forensic science laboratories and that the UK is moving forward in adopting accreditation against that standard in aspects of the laboratory enhancement of fingerprints. The introduction, therefore, proposes that the scope of that accreditation be expanded to encompass all fingerprint bureaux activities, i.e. not just the laboratory enhancement of fingerprints. The inclusion of the evaluation of crime scene standards will remain a matter for ongoing discussions with key stakeholders.
- 5.3 In discussing the draft standard the term 'bias' was occasionally used. It was highlighted that the term in context of competencies suggests a negative subtext (i.e. partiality or preconceived notion). As the draft standard has within it a section headed *Culture*, *Bias and Peer Pressure* (para 5.8), it was recommended and agreed that the term 'bias' be replaced with 'human factors'.
- 5.4 Related to the phraseology of the standard, it was reiterated that a lexicon should be produced so that terminology and definitions would be clear and unambiguous to a diverse readership (e.g. lawyers, jurors etc), and not just for fingerprint examiners. The lexicon, which would be incorporated into the fingerprint standard, should also contextualise terms.
- 5.5 In taking this programme of work forward, it was agreed that the Forensics 21 Business Change Group should be made aware of progress and be invited to input, as and where appropriate. Although it was acknowledged that it is not within the NPIA remit to set formal standards per se, it has a clear role in helping to define and drive them forward. In view of that, Andrew Rennison and Richard Small agreed to approach Jo Ashworth (Forensic Strategy Manager, NPIA) to discuss with her the FQSSG agenda. It was also considered a constructive step would be to approach DCC David Shaw (West

Mercia Police) who within the ACPO Forensic Science Portfolio has lead for forensics databases, i.e. in this context IDENT1, to discuss the proposed fingerprint standards programme.

Action: Andrew Rennison/Richard Small

- 5.6 In reference to the Forensics21 Business Change Group it was highlighted that there is no CPS representation on that group and that this should perhaps be a matter for discussion with Jo Ashworth.
- 5.7 Mr Rennison advised the group that he felt that the draft outline standards paper should not, at this stage, but instead be referred to as a *standard*. He added that, in the context of the Forensic Science Regulator's programme of work, only models of practice which have been accredited to ISO17025 (or working toward it) can be called a standard. He said, however, that he anticipates that the standard will be a foundation document which will, in due course, be distilled into an appendix and once finalised and agreed through consultation will sit within the Regulator's Codes of Practice alongside other associated appendices. Ultimately, there will be a requirement that organisations looking to be assessed against the Codes of Practice (and the appendences therein) will need to be accredited to the appropriate core standard (i.e. ISO17025 or ISO17101).
- 5.8 Given the above, it was recommended and agreed that from the outset a draft fingerprint 'statement' should follow an ISO17025 approach. It should seek to cover areas such as (but not limited to) audit, cultural implications, the ongoing assurance of examiners competencies. The draft statement should also be written in a manner which could be used as a tool for those outside of the laboratory environment so to allow for a quick and succinct grasp of what ISO17025 would mean to them from, for example, a prosecutors perspective and what they might (or should) look for in the presentation of evidence by a fingerprint examiner.
- 5.9 Paragraph 2.1¹, 3rd bullet: remove the word 'definitive'
- 5.10 Paragraph 2.4: As the draft standard refers to expert/professional witnesses, it had been previously agreed that Karen Squib-Williams would produce a draft background note which would set out in more detail what, from an 'end-users' perspective (i.e. the court), are the respective definitions, competencies, duties and responsibilities of such witnesses. As with the overall body of the statement, it was agreed that the draft should be produced in a manner which would allow for a clear and succinct understanding of expectations by both the court and the expert. As an initial step Gary Pugh had produced an early draft and will forward this to Karen Squibb-Williams to further develop.

Action: Karen Squibb-Williams

5.11 In relation to expert witnesses, and given that there is to be a draft Bill on expert evidence (following the Law Commission's consultation paper on

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¹ 'Bases for Fingerprint Examination'

the Admissibility of Expert Evidence in Criminal Proceedings in England and Wales), Karen Squib-Williams advised the group that the CPS had written to the Ministry of Justice's Better Trials Unit setting out the CPS position on expert witnesses. A copy of the letter will be circulated to the group for note.

Action: Karen Squibb-Williams

- 5.12 Paragraph 2.6: the paragraph referrers to requirements for validation. As validation is one of the key aspects of the proposed standard, and to ensure that evidence presented to the court is dependable and consistent, it was considered that this area should be looked at in more detail.
- 5.13 The view of the group was that a requirements led research validation exercise should be run this was agreed. Although it is for forensic providers to demonstrate to the court the validity of their evidence, the research exercise should consider expectations of validation and verification from both the end-user and the provider perspectives. Once developed this would provide forensic science providers and the courts, for example, with common reference points to judge whether evidence presented to a court is validated using appropriate, fit for purpose and recognised practices and principles.
- 5.14 Andrew Rennison suggested that as an initial step he would, with Home Office agreement, approach the Research Councils UK to explore the possibility of taking this work forward. It was agreed that Mr Rennison and Prof. Fraser would draft an outline research proposal which would include background, aim, objectives and approach/methodology.

Action: Andrew Rennison/Jim Fraser

5.15 Mr Rennison added that Jeff Adams and Simon Iveson (Forensic Science Regulation Unit) had produced a number of draft papers on validation which would be circulated to the group for their information.

Action: Andrew Rennison/Secretariat

5.16 Paragraph 3²: while the group acknowledged that training (per se) had a role in developing and maintaining practitioner competencies, its role was not an exclusive one. It was agreed, therefore, that to avoid misinterpretation of the term competence in this context, that a form of words should be drafted for inclusion in the standard/statement which sets out and illustrates the elements – beyond the training aspect - which relate to an examiner being considered competent at a sustained level. Gary Pugh agreed to produce an initial draft.

Action: Gary Pugh

5.17 Paragraph 4.3, 3rd bullet: the paragraph states that all fingerprint idents should be the product of at least two independent examinations. It was suggested it would be practical to clarify what is meant by 'independent examinations', e.g. that critical findings are checked independently (within the

² 'Individual Competence'

organisation) through a blind testing approach. The independent examiners would not be told of the method(s) applied by the other, and if there were any differences between evaluations then the case would possibly go to an independent panel of three for consideration.

Paragraph 5.2³: It was agreed that the term 'Outcomes' should be clarified and that a set of descriptors or toolbox should be produced to qualify the term in context of what the potential outcomes of a fingerprint examination might yield; perhaps drawing on the fingerprint terminology toolbox recently circulated to the group. One consideration was that an algorithm might be produced in parallel with the set of descriptors. It was agreed that such descriptors should be drafted in a language which would provide a range of terms and outcome expectations which would be clearly understood by a diverse range of readers, be it a fingerprint examiner, lawyer or juror. Mr Rennison/Mr Small agreed to produce a first draft.

Action: Mr Rennison/Mr Small

5.19 Paragraph 5.5⁴: as this paragraph refers to professional and ethical issues, the word 'Discipline' should be removed.

Action: Gary Pugh/Secretariat

5.20 Paragraphs 5.5 and 5.9⁵ should be combined.

Action: Gary Pugh/Secretariat

Paragraph 5.7⁶: Although 'Statistics and Probabilities are two different 5.21 models in fingerprint examination, they are not mutually exclusive. It was agreed that this should be acknowledged and further developed in a draft to show how these approaches work together. June Guiness and Jim Fraser agreed to produce a first draft.

Action: June Guiness/Jim Fraser

5.22 Paragraph 5.10⁷: In expanding this area it was agreed that an inclusive description be drafted as to what complex prints are and how different examination methods/validation routes applied by examiners can lead to the same positive ident.

Action: Jim Fraser

6. Any other business

Mr Pugh referred to the 'human elements' of information processing in fingerprint examination such as perception which may have, unconsciously, an adverse role in the identification of a latent print. To elaborate on such human elements and the relationship they might have in fingerprint identification, Mr Pugh highlighted that he recently came across an extremely useful paper written by Thomas A. Busey and Itiel E. Dror - Special Abilities

³ 'Outcomes from Fingerprint Examination'

⁴ 'Employment Law Professional Standards and Internal Discipline Processes'

⁵ 'Proficiency Testing of Fingerprint Examiners' ⁶ 'Use of Statistics and Probabilities in Fingerprint Examination'

⁷ 'Definition and Treatment of Complex Fingerprint Comparisons'

and Vulnerabilities in Forensic Expertise and suggested it as recommended reading – a electronic link to the paper would be circulated to the group.

8 Action: Secretariat

Date of next meeting 7.

7.1 Thursday 24th March 2011⁹, 14:00-17:00hrs, room 764 (Victoria Block), New Scotland Yard, 10 Broadway, London SWIH 0BG

⁸ Action completed ⁹ The March and subsequent scheduled meetings were postponed pending the publication of the Fingerprint Inquiry Scotland