

Fingerprint Quality Standards Specialist Group (FQSSP)

Note of the meeting held on 23 September 2010 New Scotland Yard, 10 Broadway, London SW1H 0BG

Present:

Gary Pugh (Chair)	Director of Forensic Services, Metropolitan Police Service
Prof. Jim Fraser	Centre for Forensic Science, University of Strathclyde
Lisa Hall	Metropolitan Police Service
June Guinness	Forensic Science Regulation Unit
Chanda Lowther-Harris	Directorate of Forensic Services, Metropolitan Police Service
Andrew Ritchie	GMP, Forensic Services Branch,
Karen Squibb-Williams	Crown Prosecution Service
Merv Valentine	Head of Procedural Standards (Crime), Greater Manchester Police
Soheel Joosab	Forensic Science Regulation Unit (Secretary)

1. Welcome, apologies and Minutes of last meeting

Gary Pugh welcomed those present to the second meeting of the FQSSP.

Apologies were received from:

Andrew Rennison	Forensic Science Regulation Unit
Richard Small	West Midlands Police

Minutes of the last meeting were agreed as accurate.

2. Introduction

2.1 Mr Pugh advised colleagues that the first meeting of the group was a useful one with open discussion on what the issues might be in establishing fingerprint standards, setting the landscape and early steps. This was the second meeting of the group but the first with almost a full attendance. He felt that this meeting will continue to scope and clarify the issues in setting a standard for fingerprint examination and for the third meeting we should aim to discuss the structure and content of a standard.

3. Presentations

3.1 Overview of Fingerprint Standards in Australia

3.1.1 During the last group meeting discussion took place around current landscape and it was agreed that examination of the Australian model may prove beneficial. Accordingly, drawn from material provided by the Victoria Police, Chanda Lowther-Harris provided the group an outline presentation on the Victoria Police model incorporating the application of ISO17025.

3.1.2 The key points were:

- Fingerprint and crime scene accredited to 17025
- Majority of fingerprint examiners are civilians
- A two check and two expert system is applied
- There is no requirement under the Accreditation model of ISO 17025 for making comprehensive notes. Although the decision is recorded, it is at the discretion of the expert to retain an audit trail of the decision thought process (this would appear contrary to the UKAS accreditation practice whereby they would wish to see an examiners notes and how the expert reached their conclusion)
- A new general form is to be introduced which can be included in a case file as notes taken at the time of performing identification (levels of details etc). However, the detail of the form is predominately based on 'observations', and, therefore, one set of latent prints may be seen differently by one expert that of another.
- Fingerprints are not retained if an individual is not subsequently convicted or granted an absolute discharge.
- There is no single DNA database
- The model demonstrates a significant investment in competency training. For example, fingerprint examiners will preferably have a university degree in forensic science. There is intensive training which includes oral and written exams, on-going competency tests (not just dip-sampling), court & scene monitoring, feedback from associated stakeholders.
- In giving expert testimony, all court appearances are recorded and used for possible (re)training purposes. However, training programmes may differ across the territories.

3.1.3 As the Victoria Police fingerprint bureau quality management model is accredited to ISO17025, the group agreed that it would be informative to establish what the accreditation process might entail. Given this, Jim Fraser advised the group that he would be visiting Victoria on a business matter in December and would be happy to try and arrange a meeting with the Victoria fingerprint bureau to discuss such subjects as accreditation.

3.1.4 The group welcomed the offer and would accordingly consider further areas on which Prof. Fraser might discuss with the Victoria Police. One

question suggested was to ask whether any other forces across the territories are accredited to 17025 and, if so, are the assessments identical.

Action: All

3.1.5 It was also agreed that it would be beneficial to research the Australian accreditation organisations (such as the National Association of Testing Authorities, Australia) to examine the operation of their accreditation regimes.

Action: June Guinness

3.2 Overview of Research into Fingerprint Examiners' Decision Making

3.2.1 Mr Pugh opened this item by saying that this was an area of work which was to develop a better understanding of the decision making process in fingerprint examination and the extent of the variation between fingerprint examiners, and, by so doing, feed into and strengthen fingerprint examiners recruitment and training practices.

3.2.2 Mr Pugh added that there is ongoing work with Cambridge University which is looking at the extent of variation in decision making based on the medical field, e.g. radiologists, with an aim to map decision making processes and contrast them against fingerprint examiners decision making processes.

3.2.3 Key points of the presentation:
(Full details of the research methodology and findings can be found in the handouts circulated at the meeting):

- a) The research is to identify what contributory characteristics, e.g. interpretive skills, a fingerprint expert may possess and to examine what makes a fingerprint expert a consistently good one.
- b) Research findings will articulate the variances in the decision making processes
- c) The findings will identify other possible research avenues
- d) The research will be contribute in the recruitment process to better filter those, at an early stage, who may demonstrate less aptitude for fingerprint work than others.
- e) The use of the research as a possible recruitment filter will only identify those considered who are best able to develop as competent fingerprint examiner.
- f) In considering chronology of judgements in the identification of complex marks (distorted or smudged through rotational movement or obscured by superimposition), a run of fingerprint aptitude tests have been administered with a purpose to determine experts differing variance in identification - 'tipping' points. This will identify where additional training may be required.

- g) In recording that there is variance between examiners, this may well underscore to bureaux that variation exists (and quite possibly at differing levels across different bureaux).

3.2.4 Summary of the research was:

- i) Number of matching characteristics judged to be greater for marks with superimposition, and decreased with mark difficulty.
- ii) Positive identifications most likely on marks with reduced pressure, and decreased with mark difficulty (as would accuracy)
- iii) Performance was poorest when examining marks affected by rotational movement
- iv) Could improve performance through training on different type marks, varying in difficulty.

3.2.5 In considering the differing levels of experts' competencies (in relation to a fingerprint standard), the group acknowledged that bureaux may well have experts who specialise in the use of IDENT 1.

3.2.6 It was agreed by the group that Framework of the Fingerprint Identification Model used in the research would also help as a model which would present well, for accreditation purposes, an audit trail of decision making process (the Framework could similarly be used for DNA identification processes as the identification steps are not dissimilar to fingerprints)

3.2.7 As the term 'nominated' was used in the presentation, Mr Pugh iterated that nominated refers to a comparison between a fingerprint and a single suspect as opposed to 'complex' referencing the comparison of several suspects or a difficult print to identify.

3.3 Summary Paper of UK Fingerprint Policies and Standards

3.3.1 Merv Valentine introduced the paper and provided a brief overview of the past and present fingerprint standards and guidance (Mr Valentine drew from a number of papers which have been circulated to the group for their reference).

3.3.2 In summary,

- a) Mr Valentine said that there have been, over a number of recent years, many ideas put forward as to how to achieve improved quality, consistency and coherence in fingerprint practices. However, this has progressed little as many of the key individuals involved have subsequently moved on and so the work has slowed or stopped
- b) The last update to the National Fingerprint Training Manual was in 2006.

- c) The National Crime Scene Investigation Manual (Issue 1) was published in 2007. It was created to enhance strategy, policy, standards, processes and best practice in relation to crime scene investigation. The sections on Quality Standards and Quality Processes are designed to meet the requirements of the International Quality Standard ISO 9001:2000. It was envisaged that content would be updated frequently to take account of any changes or amendments to processes. However, it is believed that few organisations are aware of the Manual, where it can be located, or whether it has indeed been updated.
- d) Aside from national guidance (e.g. Nation Fingerprint Manual), many bureaus have developed their own guidance, training manuals. To this point the group agreed that it was not within their mandate to produce manuals, but to focus in the regulatory process of setting standards.
- e) To conclude, the group were advised that it seems there is a lack of clear direction as to where practitioners might go to find contemporary published guidance, policies, training and advisory documents. It was suggested that a central repository of information needs to be established.

3.3.3 In considering the key points of the presentation, the group felt that there seems to be considerable fragmentation of the fingerprint landscape and which could well be an impediment in introducing fingerprint standards. In taking forward this work, one approach would be to ensure that the group is fully engaged with such organisations as the NPIA (Forensics 21 Business Change Group); although it has no mandate to compel forces to adopt new policies/standards, it can support change and delivery.

3.3.4 Given that the group has been established with an aim to develop a current and fit-for-purpose fingerprint standards framework to be applied across the criminal justice system, the group discussed the possible issue of governance. If, for example, a fingerprint standards framework was developed and a number of stakeholders chose not to accept it, what can be done to encourage and motivate adoption?

3.3.5 Given also that the National Fingerprint Board was disbanded in 2008, the group would seek from Andrew Rennison, as Forensic Science Regulator, guidance on the proposed governance of the delivery of a fingerprint standard model, how the standard would be published and managed and how to best ensure buy-in from stakeholders.

Action: Andrew Rennison

4. Collated actions from previous meeting(s) and matters arising

4.1 Actions from the meeting (and previously outstanding actions) are attached in the FQSSP actions log (Annex A).

5. Synopsise of Current Official Guidance on Fingerprint Uniqueness Criteria

5.1 June Guinness advised the group that she had commissioned a member of the FSRU to undertake research into the subject. However, initial findings indicate that although the development of fingerprint techniques is well charted, the validity of fingerprint uniqueness criteria currently remains inconclusive. Based on available material, a paper is currently under draft and will shortly be circulated to the group for their information.

Action: June Guinness (ongoing)

6. Draft Framework of Potential Work for the FQSSG

6.1 Mr Pugh said that he would continue work on an outline of what a fingerprint standard might look like on; the basis of the foregoing discussion it should include competencies and processes (ISO 17025).

6.2 June Guinness suggested that, as a template to draw from, the Regulators DNA draft standard might prove useful.

7. Any other business

7.1 Karen Squibb-Williams suggested that in developing a fingerprint standard model that, if possible, there should be a judicial input to consider what the 'end-end user' (in this instance the courts) would expect. This was agreed; Karen Squibb-Williams to pursue.

Action: Karen Squibb-Williams

7.2 Following a recent meeting with his FBI counterpart, Mr Pugh said that he would have circulated to group members a copy of an article produced by the FBI on ACE-V and the Scientific Method.

¹Action: Gary Pugh/Secretariat

8. Date of next meeting

8.1 The next meeting will be held on Thursday 25 November, 14:00-17:00, room 764 (Victoria Block), New Scotland Yard, 10 Broadway, London SW1H 0BG

¹ Action completed