



## **Fingerprint Quality Standards Specialist Group (FQSSG)**

Note of the meeting held on 12 February 2019 at UKAS, Staines-upon-Thames.

### **1.0 Welcome, Introduction and Apologies**

1.1 The Chair welcomed all to the meeting. A full list of the attendee organisations and apologies is provided at Annex A.

### **2.0 Minutes of last meeting – 26 November 2018**

2.1 The previous FQSSG minutes had been approved by correspondence and would be published on the Forensic Science Regulator's website. The need for timely feedback from members on the minutes prior to publication was emphasised.

<https://www.gov.uk/government/organisations/forensic-science-regulator/about/membership#fingerprint-quality-specialist-group>

### **3.0 Actions and Matters Arising**

3.1 The following matters arising from the previous FQSSG meeting were discussed:

3.1.1 *Action 1: East Midlands Special Operations Unit representative to provide feedback on the thinking of the Gold Group in respect of the effects of the secondary legislation. An update was provided on the accreditation status of police forces across England and Wales. Rapid progress was generally being made in gaining accreditation. Despite this there were some forces who had stated their intention to continue fingerprint work outside of accreditation, but this was an internal matter for those forces and the FQSSG could not take any further action on this.*

3.1.2 *Action 4: West Midlands Police Service representative to circulate landscape document to the group. This would be circulated imminently.*

3.1.4 *Action 5: West Midlands Police Service representative to arrange a visit to Dstl and to include representatives from HO commissioning team and TF. (Replaces action 4 from previous meeting). The visit had been agreed and dates were being finalised for the visit.*

3.1.5 *Action 6: Defence Science and Technology Laboratory (Dstl) representative to forward newsletter and publication link to FSRU for circulation to the group. This would be circulated imminently.*

3.1.6 *Action 7: East Midlands Special Operations Unit representative to feedback to the meeting on University of Lausanne representative visit. This had been a very successful visit and had promoted thought provoking discussion regarding probabilistic analysis amongst fingerprint practitioners. Feedback had been received by those who had taken*

part in the day which would be shared with the Regulator and the University of Lausanne representative. Once accreditation for fingerprinting had been gained by all forces, this issue would be revisited at the FQSSG.

The Regulator said that she would not pursue the issue of the term 'identification' until after bureaux had gained their UKAS accreditation. The Metropolitan Police Service (MPS) representative said that if bureaux were given the tools to facilitate changes, then they would do so.

**Action 1: East Midlands Special Operations Unit representative to share written feedback from fingerprint practitioners from University of Lausanne representative visit to East Midlands Special Operations Unit - Forensic Services.**

3.1.4 All other actions were complete or would be covered under later agenda items.

#### **4.0 Work Plan**

##### **a. Validation guidance**

4.1 The 'Validation: Friction Ridge Detail (Fingerprint) Search Algorithm guidance' had been redrafted and needed to be finalised. It would be important to determine who would be responsible for each task. After the last meeting feedback had been received regarding the need for a tiered risk approach after which the guidance was re-structured.

4.2 The MPS representative felt that the suggested tests in the guidance were not practical for use in practice, and described the Biometrics Accuracy Testing (BAT) testing being undertaken by the MPS in collaboration with the Home Office Biometrics Programme as an alternative, which it was felt were more representative of the processes that would be carried out by fingerprint practitioners on a daily basis. The Regulator replied that the document was originally intended to simply set out what the testing was trying to achieve; if this was not clear in the guidance then it should be modified accordingly. Once this baseline was set then the constraints and timing could be assessed.

4.3 The UKAS representative felt that the document did not make sufficiently clear who was carrying out testing and validation at each step, e.g. the developer, the supplier, the practitioner etc. It would be useful to set out each group's responsibility in a flow-chart to demonstrate what key tests are carried out at each stage.

4.4 The MPS representative agreed that a draft version of the MPS/ HOB testing protocol would be shared with the Regulator and the FSRU, who would consult this when writing the guidance. The Regulator summarised that the guidance document would focus more on what is expected from each stage, what information must be written up and available for scrutiny. The FSRU would also draft a paragraph to be included in the guidance on pre-validation processes.

**Action 2: MPS representative to share draft MPS/HOB testing and validation protocol with the Regulator and the FSRU.**

4.5 A member felt that it would be important to distinguish which part of the guidance relates to validation of the algorithm, and which relates to the user. The key element to focus on would be delivery of fingerprint services in local bureaux and ensuring they

deliver at the same quality as is done on a national level. Long-term monitoring of the system which can be described and audited would also be required. The guidance should make clear the message that reports must be published or made available so that they can be scrutinised from a quality assurance perspective.

4.6 The FSRU would update the guidance based on the discussion but asked FQSSG members to send any additional points of feedback to them within a week.

**Action 3: FQSSG members to send any further comments on the fingerprint validation guidance to the FSRU within one week.**

4.7 The MPS representative would liaise with UKAS on validation and how to present documentation from a UKAS-perspective. It would be useful to agree a template for reporting.

**Action 4: MPS representative, United Kingdom Accreditation Service (UKAS) representative and FSRU to develop a fingerprint validation reporting template.**

#### **b. Questionnaire**

4.8 A questionnaire to collate information on research and development for fingerprint interpretation had been produced by a working group of the FQSSG. This would now be sent out for feedback and then adapted before being distributed more widely to gather information. When completed, the resulting questionnaire would be collated and shared with Transforming Forensics, the Home Office Commissioning Hub and the Home Office Chief Scientific Advisor, who was working with UK Research and Innovation (UKRI) to build a picture of priorities in fingerprint research.

4.9 A member said that there is merit in a document like this questionnaire coming from the Regulator and the question was asked whether consideration should be given to publishing the finished document as an Information document, as this could be used in the supporting material of future relevant funding applications.

4.12 The chair said that the fingerprint/forensic community needs to own this document.

4.9 The College of Policing representative highlighted that the College ran a research mapping exercise showing what forensic research was underway already and where which would help in understanding what fingerprint research was already underway by researchers and practitioners in conjunction with UK universities or other educational institutions.

4.10 FQSSG members were invited to provide feedback on the questionnaire within four weeks, which would be supported by the FSRU sending out a word version of the document for wider circulation.

**Action 5: FQSSG to feedback on the 'identification of R&D opportunities for the fingerprint community' questionnaire within 4 weeks.**

4.11 The Dstl representative informed FQSSG members that the Home Office Commissioning Hub were currently collating a statement of user needs for research funding and suggested that the questionnaire and its results be shared with that team.

**c. Agree and sign off additions to work plan**

4.12 The work plan for the FQSSG had been updated and distributed to members for comment. The FSRU representative ran through updates and members made suggestions for areas where more detail or changes were required. This would be further updated and then re-circulated to members for further comment and a new version would be presented at the next meeting.

**Action 6: FQSSG members to provide feedback on workplan**

**5.0 Accreditation Updates**

**a. UKAS**

5.1 The UKAS representative provided an update on fingerprint accreditation. Good progress had been made since the previous update and UKAS were scheduling as many visits as possible. These visits were generally proceeding smoothly. Seven organisations had been accredited, and 12 more recommended. The most recent recommendations would require a second visit before accreditation could be granted. There were still some core issues and UKAS were still seeing powdering in CSI hubs. It would be very important that any lessons learned from the fingerprint accreditation exercise were taken forward for the CSI accreditation deadline in 2020. It was added that getting accredited is just the first step and it was vital to maintain and expand on those systems including detailed validation plans etc. It was hoped that the community would start to see accreditation as helpful for quality.

5.2 Four applications had been received for accreditation for Crime Scene Investigation and one pre-assessment had been conducted. UKAS needed to understand when further applications were likely to start being put forward so that they could plan accordingly for what was looking to be a tight schedule.

5.3 The chair reported that the NPCC had produced a heatmap of when they anticipated accreditation would be sought and granted which was shared with the FQSSG.

**6.0 Quality/Scientific/Development Updates**

**a. DSTL**

6.1 The visualisation research programme was continuing with work ongoing on the subjects of:

Discovery of fingerprints on metal ammunition and knives;

Validation of a replacement detergent for a particular developer; and Improving powder formulation.

6.2 A trial was underway to assess the quality of images of fingerprints captured using mobile phones and their suitability for use. Recent meetings had also taken place with ENSFI to discuss a European best practice manual for fingerprints.

#### **b. HOB**

6.3 The Strategic Matcher platform design was being finalised and the build was continuing. Work was ongoing to integrate the Matcher into the IDENT1 workflow. Bids to deliver the Strategic Central and Bureau were still coming in and it was expected the contract would be awarded later this year.

### **7.0 Professional Updates**

#### **a. R&D/ENFSI**

7.1 The next ENFSI conference was scheduled to happen in Portugal in July. This would be interesting as it was bringing together people from the fingerprint and document examination communities to explore the possibility of doing joint proficiency exercises and encourage mutual discussion. At last year's conference held in Lausanne, an ENSFI identification subgroup conducted a very challenging collaborative testing exercise to determine wrong 'identification' rates. This rate was very high which underlined the need to improve the level of proficiency testing in forensic labs. It was suggested that updates to the algorithm would likely increase the occurrence of "close non-match" search results. Nobody in the UK participated in the proficiency test and it was agreed that it would be interesting to conduct a similar exercise in the UK. If sufficient budget was available in the next financial year, the Regulator would consider commissioning a similar proficiency test.

**Action 7: The Regulator/FSRU to consider setting up a collaborative proficiency test to identify rates of wrong identification when the 2019/20 budget had been allocated.**

#### **b. College of Policing**

7.2 Work on the College of Policing fingerprint learning programme was ongoing. This would be delivered in two stages, a foundation level and a second level taking practitioners up to reporting officer stage.

7.3 The College of Policing had identified a number of topics to be put out as optional, free standing modules, e.g. dealing with cadavers, which not all bureaux do, or not all staff within a bureau would do. The learning standards for these modules were now in second draft. After receiving feedback this would go out for wider consultation. A draft trainer guide would then be compiled.

7.4 A portfolio of evidence was now available so that all assessment would be done in the workplace. These products would be launched in late summer/ early autumn 2019.

**c. Chartered Society of Forensic Sciences**

7.5 A fingerprint division conference was taking place on 17 May in Birmingham. The CSFS Autumn conference and AGM would take place on 31st October and a student conference would take place in November.

**8.0 Date of the Next Meeting**

8.1 The next meeting would take place on 4<sup>th</sup> June in Marsham Street.

## **Annex A**

### **Representatives Present:**

Scottish Police Authority (chair)  
Greater Manchester Police  
College of Policing  
University of Lausanne (R&D, ENSFI)  
West Yorkshire Police (Fingerprint Strategic Network)  
Forensic Science Regulation Unit  
Metropolitan Police Service  
Transforming Forensics  
Defence Science and Technology Laboratory  
United Kingdom Accreditation Service  
Home Office Biometrics Programme  
West Midlands Police Service  
Forensic Science Regulation Unit  
East Midlands Special Operations Unit - Forensic Services  
Forensic Science Regulator  
Home Office Science Secretariat

### **Apologies**

- The Chartered Society of Forensic Sciences
- Crown Prosecution Service