



Fingerprint Quality Standards Specialist Group (FQSSG)

Note of the meeting held on 10 May 2018 at Regional Scientific Support Services
Yorkshire and the Humber, Wakefield.

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 the last FQSSG meeting on 08 February 2018

2.1 The previous FQSSG minutes had been approved by correspondence and were published on the Forensic Science Regulator's website.¹

3.0 Actions and Matters Arising

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

3.2 Action 2: To seek clarification from the FIND Strategy Board the Governance around loading pseudo sets (ground truth) to the national fingerprint database. The MPS representative agreed to provide a paragraph for the Regulator to appropriately frame the query. This action had been superseded. The FSR/ FSRU had provided feedback on the FINDS data assurance strategy circulated ahead of the FIND SB meeting on 28 April. The requirement for the use of known source/ground truth data operationally as part of quality assurance was accepted. A member requested clarification since permission to use pseudo sets in IDENT1 had been confirmed. Pseudo sets are ground truth datasets loaded onto the finger print database and then removed after 24 hours. A number of police forces were at the stage of assembling ground truth databases. They needed to obtain consent from the donors, and it was suggested information should be sent out to the police forces to confirm this. It was felt the forces may be in the process of designing their own permission forms which may not include specific information on the use of pseudo sets.

Action 1: FSRU to liaise with FINDS regarding information which can be shared with police forces about the use of pseudo sets

3.3 Action 4: The Regulator to have further discussions on categorical identification in SFRs at the National SFR group. This action was in progress. The Forensic Science Regulation Unit (FSRU) representative confirmed that there was currently no clear view whether changes would be made to the current streamlined forensic reports (SFRs) regarding categorical identification. It was unclear how the National SFR group was

¹ Available from: <https://www.gov.uk/government/organisations/forensic-science-regulator/about/membership#fingerprint-quality-specialist-group>

progressing on the issue. The Regulator confirmed she had spoken to the National SFR group lead so they were aware of the issue.

3.4 In the previous meeting the group had discussed the potentially misleading use of the term 'identification' in SFRs. The West Yorkshire Police (WYP) representative confirmed they have met with the small working group and assembled a draft paper which reviewed by that group before being shared with the Fingerprints Strategic Network (FSN). The paper also included recommendations that the SFR's are reviewed to include the definition of the word identification in terms of fingerprint analysis. FQSSG members would see this paper before the next meeting.

Action 2: West Yorkshire Police representative to share paper on the term identification with the FQSSG

3.5 Action 6: FSRU to facilitate small sub-group of the FQSSG to scope research opportunities in fingerprint interpretation. This group had been initiated and members included representative from the MPS, East Midlands Special Operations Unit (EMSOU) and the University of Lausanne. A teleconference for the group had been held on 28 March 2018. A list of research opportunities was discussed also discussed research currently undertaken by the NIST Organization of Scientific Area Committees (OSAC). The group would send out questionnaires to a small group of practitioners from the areas of policing, academia, and the judiciary who conduct fingerprint research. These practitioners could help identify what kind of research they would like to see going forward. A wider questionnaire would be developed by the working group around research priorities. Once complete it would be submitted to the FQSSG for review and sign off. A member asked when the questionnaire will be ready for release. Completion was anticipated within the next few months. A member mentioned there was a FIT-IN Research Symposium workshop in June.

Action 3: FSRU representative to email members about the FIT-IN Research Symposium in June

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

4.0 Terms of reference update

4.1 There had been minor changes to the terms of reference (ToR); one being the new name for Defence Science and Technology Laboratory (Dstl). Other minor updates had been highlighted within the document. Members were asked to send suggestions for any further changes to the FSRU. Pending no further changes the ToR would be signed off and published.

Action 4: FQSSG members to provide feedback on the FQSSG Terms of Reference to FSRU representative

5.0 Accreditation updates

5.1 a. UKAS

5.2 Members heard that 10 accreditation visits to fingerprint bureaux had been conducted. Of these visits, seven had resulted in no offer for accreditation. This meant those forces would need to go through the full assessment process again. There were

concerns that these seven forces will not get another time slot to apply before the October deadline. Three of the 10 visits had resulted in offers for accreditation, one of which had been granted, and the other two were in progress depending on actions that need to be completed before accreditation could be granted. Five cases had a 'No-Go' decision at Readiness Review and therefore UKAS had not confirmed the visits in the slots assigned to these forces. Some forces had requested their visit was moved to a later date as they were not ready for the accreditation visit. Six visits were planned before October 2018, and a further five in October and November 2018.

5.3 UKAS summarised there did not appear to be any improvements in the number of police forces obtaining accreditation. The issues that had been highlighted were: validation competence, record keeping, notes, and the systems being used.

5.4 The Regulator asked whether there was anything further the Regulator could do to support the police forces in obtaining accreditation. It was felt that the FQSSG had provided as much support to the forces as they can, by conducting workshops for example. The West Yorkshire Police representative suggested that pre assessments would be helpful, to the police forces seeking fingerprint accreditation. The Regulator mentioned there will be pre assessments for crime scene investigation accreditation in 2020.

5.5 b. NPCC - Bureau

5.6 The Regulator had attended a NPCC performance and standards meeting where an issue arose around the deadline for accreditation. New legislation to implement the EU Prüm Convention would be coming into force, which would mean accreditation would be legally required from October 2018 for fingerprints and DNA. There was some discussion on what this would mean for those forces that are not compliant. It was explained that the statutory instrument to make that secondary legalisation go live will need to be submitted by October 2018. If it was not submitted by this date, the UK would be at risk of EU infringement action, which could result in a fine of 9.2 million Euros. If the EU decided to proceed with that infringement, a day-by-day charge will also be applied. There may be a grace period until the end of the year before the EU can decide whether to bring infringement proceedings against the UK. If the UK is not shown as implementing the legalisation, the UK could still be subject to these large fines. The Regulator believes by the end of the year it would be likely that the Home Secretary would impose the legalisation, and may contact the police forces who are not compliant to inform them they are no longer compliant under the law, and they could be prohibited from conducting fingerprint comparison.

5.7 The Regulator informed the members that representatives from Germany would be conducting a Prüm compliance audit on the UK. This would have to be completed before they could recommend the UK to go live with Prüm for fingerprint comparison. The Regulator hoped most forces would be accredited by October; however this would not be the case. There is a concern in criminal court cases, where the police could be challenged by lawyers that they are unlawfully carrying out fingerprint comparison. The Regulator thought the UK would be ready to start its first Prüm exchanges between April-June 2019. Any police force that does not have accreditation for fingerprints by then would not be able to take part in Prüm.

5.8 A member asked what would happen to police forces that do not have accreditation and how would Prüm work for these forces. It was explained anything that was produced before October 2015 would be accepted based on the national system used at the time. It

is unclear what would happen to the finger marks that were produced after this date in terms of searching on Prüm. Going forwards, anything marks created when the UK goes live with Prüm under the code 172025 would be accepted.

5.9 c. NPCC - Crime Scene

5.10 The Regulator provided the members with an update on crime scene accreditation. Two dry-runs had been carried out by UKAS, whereby UKAS spend a few days with the forces, to see how they do things and how this fits into the accreditation requirement. Dry-runs were useful exercises as it provided forces with an indication on what they need to work on before the official UKAS accreditation visit. With the dry-runs no accreditation is granted at the end of the process. The first dry-run had gone well, based on which accreditation would be divided into simple crime scenes and complex crime scenes. It was confirmed no feedback had been received on the second dry-run. A possible challenge that could affect gaining accreditation for crime scene is the taking of contemporaneous notes.

5.11 The Regulator highlighted that with the legalisation for Prüm, crime scene investigators (CSI) doing fingerprinting back at their offices, needed to ensure these locations, and any other locations apart from the crime scene were accredited. A member asked how staff in attendance of a crime scene was dealt with. It was explained Lab staff assessing a scene are covered by ISO17020. If lab staffs are required to carry out enhancement work on a particular item, then that work is covered by ISO17025.

6.0 Quality/ scientific/ development updates

6.1 NPCC – Enhancement Labs

6.2 The members heard an update on fingerprint enhancement labs. It was explained at the Fingerprint Enhancement Laboratory (FEL) meeting no risks had been raised. A spreadsheet has been created to show all forensic treatments for which police forces have gained accreditation, and those for which they have not. The spreadsheet had proved beneficial for information sharing between forces. An example provided was a force who had intended to cease utilisation of a particular treatment. After checking the spreadsheet it was realised only one other force offered that particular treatment, so the force in question removed the request to stop operation.

Action 5: EMSOU representative to share fingerprint accreditation spreadsheet containing treatment information with Chair

6.3 At a recent conference, the Regulator had learned of an issue of concern. An enhancement lab had conducted a live trial using a new reagent, however had not informed the bureau of this. The fingerprint marks had been submitted without information that they had been part of the trial. The FSR fingerprint visualisation appendix² had been drafted to encourage better feedback and communication between the lab and the bureau.

6.4 HOB – Fingerprints

² Available: <https://www.gov.uk/government/publications/fingermark-visualisation-and-imaging>

6.5 A presentation was provided by a representative of the Home Office Biometrics Programme (HOB) on the HOB fingerprint programme. Since February, mobile ID had rolled out devices used by the West Yorkshire Police with Lancashire Police following a few weeks later. It was expected that another 20 forces across the country would roll out the system by the end 2018. The mobile ID technology enabled frontline officers to confirm subject identities against IDENT1 and IABS in less than one minute – saving police time and reducing costs. Positive feedback had been received from forces which had the new system in operation.

6.6 The LiveScan3 rollout was reaching its final stages with only the Metropolitan Police left to transition to the new Livescan3. The new system featured an upgrade of previous hardware with additional upper palm capture ability. The system was also being rolled out in Northern Ireland and in Scotland.

6.7 Work continued with Transforming Forensics (TF) on the roadmap for 2018-19. The HOB programme had been working with TF to assess tactical changes which could be delivered through IDENT1 and the Biometric Services Gateway.

6.8 The latent mark search capability had been launched to allow latent mark searches to be automatically launched against the Immigration and Asylum Biometric System (IABS) from IDENT1. The process had previously been carried out manually and was very time consuming. The serious crimes cache would be the first to be addressed.

6.9 Biometric accuracy testing was being carried out for the new HOB Matcher, which was a key project of the HOB programme. The project would provide a Biometric Matcher Service delivering biometric search, identification and verification capabilities across multiple biometric modalities and for multiple data sets (immigration, citizenship, law enforcement etc). The suppliers awarded the contracts for Lots 2 and 3 of the Matcher platform would be announced shortly.

6.10 Under action 5 in February 2018 a query had been made regarding whether the contract with the Matcher provider allowed for research possibilities. It would be necessary to understand the type of research that is being proposed by the FQSSG. A number of test environments existed in the new Matcher system, which would allow some degree of research. A separate question existed about whether the provider could carry out any bespoke research. If it was desired that the supplier carry out research, a change control process was in place to allow the Home Office to engage them in a piece of work provided they were the right party going forward. The FSRU representative asked how commissioning would work for research. This could be direct into HOB from TF or policing. This would be evaluated and the results fed-back directly. It was important for police to know whether HOB would be commissioned or whether it would be necessary to go directly to the supplier. HOB would be able to advice on this.

6.11 All of the central matching capability was being upgraded initially which would be followed by local capability. It would be important to understand how this would impact on forces' existing accreditation to 17025. A dry-run to determine what steps may need to be carried out was recommended. SPA and EMSOU were currently accredited so they could be used as a model for what forces will need to do.

6.12 Any new fingerprint software used by police forces would have to go through a validation process and so it would be essential to ensure that validation is built into the

HOB Matcher programme. Work would thus be required on a validation plan to feed into the HOB process plan. The chair suggested that a sub-group of the FQSSG was formed to set out these requirements and create a validation plan. The sub-group would have representation from the Scottish Police Authority (SPA), the East Midlands Special Operations Unit, the Metropolitan Police, Dstl and the FSRU. It would be necessary to check with the HOB programme whether there were any programme timescales that it would be necessary to coordinate with. It would be important to determine whether the ground truth data sets to enable the testing were in place.

Action 6: FSRU to establish a sub group to produce a validation plan for the matcher project

Action 7: HOB representative to share presentation slides with FQSSG members

6.c NPCC – Transforming Forensics (TF)

6.13 An overall programme update was provided for TF. A new Senior Responsible Owner for the TF programme had been appointed following the retirement of the previous post holder. With respect to the business case for TF, 18 forces had responded in support of the programme. One force had opted out and one had provided qualified support. The programme director was currently liaising with colleagues around the delivery vehicle options. TF and HOB had submitted two requests for changes to the programme. Dependencies existed between the programmes so linkages between representatives were important.

7.0 Work Plan

7.1 The latest version of the work plan was discussed. It would be necessary to update the work plan to take account of the validation plan for the matcher project.

7.2 A review of the current state-of-play in probabilistic evaluation was required. The academia (University of Lausanne) representative agreed to provide an update on this at the next meeting of the QSSG.

Action 8: University of Lausanne representative to provide an update on probabilistic evaluation at the September meeting of the FQSSG

7.3 The FSRU agreed to update and circulate the work plan ahead of the next meeting for comment.

Action 9: FSRU to update and circulate the FQSSG work plan ahead of the September 2018 meeting of the FQSSG

8.0 Professional Updates

8.1 College of Policing

8.2 An update was provided on the training package from the College of Policing. Good progress was being made on crime scene resources and so focus could now be given to developing fingerprint products. A package had been compiled for ten print operators that would soon be licensed. This was purely a technical document specifying how to operate

IDENT1. This would be supported by an introduction to a friction ridge detail module which would include information about the standards and codes that apply in that area.

8.3 On Fingerprint Enhancement Labs (FELs), the first practitioner workshop had been held to discuss the learning standard for Forensic Laboratory Officer (FLO) foundation in March. The resulting learning standards had been circulated to forensic leaders for comments, which would be received by the end of May. A second workshop would be held around the standards for crime scene skills required in mid-June.

8.4 A large College Of Policing project currently was around professional role profiles. A draft role profile for forensic disciplines had been agreed by the performance standards group. These would be uploaded to the College's professional development platform imminently. This is a public-facing programme and so the documents would be held on that platform for a period of 6 months for consultation, after which any resulting feedback will be taken and final versions would be signed off.

Action 10: College of Policing to circulate the link to professional role profiles draft document to FQSSG members

8.5 Chartered Society of Forensic Sciences (CSFS)

8.6 A CSFS committee meeting of the fingerprint division was held. Richard case would be taking over as chair of this committee in November 2018.

8.7 A number of workshops and seminars organised by the CSFS would be taking place over the coming months. These included a FIT-IN research symposium which would be taking place in June in Birmingham. It had been agreed earlier in the meeting that the FSRU would circulate details on this.

8.8 The annual conference would be taking place in November, during which fingerprints would be one of the topics covered. A series of workshops would run alongside the conference. Details could be found on the CSFS website.

8.9 c Defence Science and Technology Laboratory (Dstl)

8.10 All CAST employees had now moved over to Dstl. Next year's core forensics programme was under discussion. There were currently four strands under consideration which included: general research on key FEL techniques including validation, where pseudo operational tests were being carried out on about 900 items using this technique. One-step superglues were also being assessed to understand where the best areas of use and how they compare the standard two-stage fume and then dye. Work was also being undertaken to assess the LFT techniques which was being commercialised by Dstl. An academia/ industry workshop was planned to capture current fingerprint research and assess future trends.

8.11 The other areas of work included assessment of how the different areas of forensics across the Dstl organisation could link up, updating the finger mark visualisation manuals to take account of new development techniques, and finally providing support to other organisations for accreditation. This work would be driven by the needs of the FQSSG and other FSR committees, such as compiling the information held by Dstl that could be used to aid the CSI accreditation process. Two newsletters a year would be produced by Dstl to update the community on these deliverables.

8.12 The unit were still providing bespoke advice and those who would wish to use the service could go through the existing channels that they were aware of, or for more substantial pieces of advice, through the Home Office commissioning hub.

8.13 The unit would remain involved in the European Network of Forensic Science Institutes (ENSFI). It was the intention of the ENSFI fingerprint working group to run at least one collaborative exercise for proficiency testing that year. One was intended to be on visualisation and one on comparison. It was recognised that it would be good to do something around imaging. It was asked whether participation would be widened to non-ENSFI members. Attendance of the group and participation in discussions as an observer was open to anyone, however only members would be able to vote on any measures. It was currently unclear whether external bodies could join the proficiency testing exercise. It was thought that it would be useful for staff from fingerprint bureaux to attend the proficiency testing events. The next meeting of the fingerprint group would take place in Lausanne in September 2018. The University of Lausanne representative agreed to share the details of the meeting with FQSSG members.

Action 11: University of Lausanne to share details of the next ENSFI fingerprint working group meeting with the members of the FQSSG

9.0 AOB

9.1 The WYP representative reported that Sheffield Hallam University had developed a new fingerprint visualisation technique which used a spraying method instead of a brush, where there existed the potential for contamination. WYP would carry out an initial assessment of whether the technique would be valuable.

9.2 The next meeting of the FQSSG would be held on 18 September in Westminster.

Annex A

Organisation Representatives Present:

Scottish Police Authority (chair)
The Forensic Science Regulator
The Chartered Society of Forensic Sciences
College of Policing
Dstl
East Midlands Special Operations Unit (EMSOU)
Greater Manchester Police
Home Office - Biometric Programme (HOB)
Home Office – FSRU
Home Office - Science Secretariat
Metropolitan Police Service
Transforming Forensics
University of Lausanne
West Yorkshire Police

Apologies:

Crown Prosecution Service
UK Accreditation Service
West Midlands Police