



Fingerprint Quality Standards Specialist Group (FQSSG)

Note of the meeting held on 29 June 2017 at Room 013/014, GMP HQ, Central Park, Northampton Road, Manchester, M40 5 BP.

1.0 Welcome, Introduction and Apologies

1.1 The Chair, Gary Holcroft, welcomed all to the meeting. A full list of attendees and apologies is provided at Annex A.

2.0 Minutes of the last FQSSG meeting on 23 March 2017

2.1 The previous FQSSG minutes were approved as an accurate reflection of the discussion held and the Secretariat was asked to publish them.

Action 1: The FQSSG Secretariat to publish on GOV.UK the minutes of the FQSSG meeting held on 23 March 2017.

3.0 Actions and Matters Arising

3.1 The production of a technical assessors guide had not been included in the list of actions from the previous meeting. It was agreed that the FQSSG would produce this guide and the production of it should be added to the work plan.

Action 2: Add the production of a fingerprint technical assessors guide to the work plan for the FQSSG.

3.2 *Action 8: Graham Camm to share the standard used in immigration that outlined the requirements for livescan prints prior to loading to a reference dataset.* The standard had already been distributed to the FQSSG. Graham Camm indicated that he would welcome feedback from the FQSSG on the fingerprint specifications to feed into the next version of the HOB interchange standard document.

3.3 *Action 9: June Guinness to determine whether the Codes of Practice and Conduct contained sufficient level of detail on the quality requirements for reference databases, that would apply to ten print sets loaded to the reference data set.* It was agreed that once the fingerprint appendices were published these would sign post to the relevant sections of Codes of Practice and Conduct .

3.4 All other actions from the previous meeting were either complete or were included as agenda items in the meeting.

4.0 Accreditation Workshop for Fingerprint Comparison

4.1 The FQSSG heard that the workshop had been well represented by the police forces and overall positive feedback had been received. The presentations had been sent out to delegates and no follow up questions had been received for the FQSSG to consider.

4.2 A timeline had been produced which mapped out the progress each police force had made in relation to gaining fingerprint comparison accreditation. In addition, the FQSSG heard that Assistant Chief Constable Rachel Swann, had requested an update from police forces as to the progress they had made to gain accreditation and she would be encouraging forces to meet the deadline. However, it was suggested that police forces might require further support in this process, especially in relation to the comparison of fingerprints, due to lack of any manual to guide bureaux.

4.3 The FQSSG raised concerns that many police forces would not have gained accreditation by the October 2018 deadline and the group agreed to write to the Regulator to express their concerns. They would highlight potential dangers associated with police forces being rushed into gaining accreditation, the risks to the reputation of the police forces if they failed to meet the deadline and that police forces required support through this process.

Action 3: Chair to write a letter to the Regulator expressing the FQSSG's concerns in relation to fingerprint bureaux meeting the October 2018 deadline for gaining accreditation.

5.0 FSR-C-127: Fingerprint visualisation and image capture

5.1 The FQSSG heard that the documents: Code of Practice and Conduct on Fingerprint Visualisation and Image Capture (FSR-C-127); Code of Practice and Conduct on Fingerprint Comparison (FSR-C-128) and the Fingerprint Examination – Terminology, Definitions and Acronyms (FSR-C-126), were all with the Regulator for review.

5.2 The FQSSG discussed FSR-C-127 and it was noted that one of the main changes was the insertion of a footnote on imaging within the section on Image Capture. The FQSSG suggested that within section 12 'Control of Data' there should be a reference to the Regulators Codes of Practice and Conduct which contained greater details on this topic.

5.3 Under section 17 'Reporting of Results' a paragraph had been included about recording relevant information. This had been included due to concerns raised at the accreditation workshop that fingerprint experts were not always keeping a record of information which was used in interpretations and the formation of opinions. The following line had been included in section 17, which highlighted that examination strategies needed to consider the

relevance of other types of forensic work: 'the distribution of visible blood staining or the recovery of DNA from smudged fingerprints are relevant to the individual case prior to employing chemical treatments'. It was suggested that 'smudged fingerprints' should be changed to 'general contact marks'.

6.0 FSR-C-128: Fingerprint Comparison

6.1 The FQSSG considered document FSR-C-128. Section 11.2.4 had been added which stated that 'As the reporting outcome is an opinion then the requirements set out in LAB 13 *Guidance on the Application of ISO/IEC 17025 Dealing with Expressions of Opinions and Interpretations* apply. This had been added following the accreditation workshop where it was apparent that delegates were not aware of this requirement. The addition and wording was accepted by the group.

7.0 FSR-C-126: Terminology

7.1 The FQSSG considered document FSR-C-126. Views were sought from the group as to the phrasing of section 1.1.3 which stated: 'The document avoids where possible terminology used in international standards and legal definitions (other than to translate meanings applicable to fingerprint examination'. It was suggested that this should be re-phrased to: 'This document does not use terminology used in international standards and legal definitions other than to translate meanings applicable to fingerprint examination'.

7.2 The three documents, FSR-C-127, FSR-C-128 and FSR-C-126 would be published at the end of July/beginning of August.

8.0 HOB Fingerprints Update

8.1 An update was provided on the Home Office Biometrics (HOB) Programme and the HOB fingerprint matcher. The FQSSG heard that the HOB fingerprint matcher was the new fingerprint algorithm which was currently being procured by the Home Office. Procurement had started and an Invitation to Tender had been put out to the market. Two suppliers of algorithms were being sought. The first to provide ten-print and latent matching and the second to provide an orthogonal based matcher. The algorithms would be able to re-rank and optimise candidate lists and also would be useable on low quality marks. Biometric accuracy testing would be undertaken later in the year and it was thought that five potential suppliers would participate in this testing.

8.2 Issues around creating datasets for testing purposes were discussed. There were issues that to produce datasets for testing required data to be weeded in order to comply with the Protection of Freedom's Act 2012. However, the weeded data would then become static and less representational of true data. These concerns have been considered by the

Forensic Information Database Services Strategy Board and the HOB programme had been given permission to go ahead with a static data set for testing purposes. It was noted that the data would still contain live fingerprint data and it was expected that the testing would highlight previously unidentified matches. Fingerprint experts would be required during the biometric accuracy testing, in order to provide a view as to whether the system had correctly identified a match. Further, additional support was required of fingerprint experts to rate the quality of a set of marks used in the testing processes.

8.3 The FQSSG heard that work had begun on re-engineering live-scan. The hardware had been refreshed and new applications had been added. The fingerprint capture process would stay the same with the same sequence and details captured but there was the potential for different thresholds to be applied.

8.4 Work had also started on the refreshment of new fingerprint analysis and comparison tools which the fingerprint bureaux currently had access to through IDENT1. The timeline for procurement of the new tools was anticipated to be next year. Prior to this date, HOB would be engaging with a wide range of representatives from various bureaux in order to understand the user requirements of the tools as well as efficiency, productivity and usability. It was highlighted that the assessment of usability and productivity would be subjective and therefore a number of views on this would be sought. Members put forward the view that the FQSSG should be cited on the functionalities of the bureaux tools in order for the group to be able to provide feedback on the tools being delivered and so that the FQSSG could advise on the competency testing that would be required for staff.

8.5 The FQSSG heard that a separate training system and database would be developed which would be accessible to existing bureaux. Concerns were raised that currently it was not possible to train new users due to it being cost prohibitive to train them on the existing IDENT1. The group heard that investigations were taking place to determine whether a trainee account could be established.

Action 4: HOB representative to provide the FQSSG the standards and competencies in relation to the HOB fingerprint matcher and the functionalities of the bureaux tools for comment in the future. .

9.0 NPCC Update

9.1 An update was provided on a recent meeting on 'Transforming Forensics'. An outline business case had been prepared which was supported by police officers and the National Police Chief's Council which included a number of options for the future. It had been agreed that a full business case would be developed which further investigated a position falling between 'a fully-national governed service' and 'an approach with super regional hubs which included both national and regional functionality'. It had been made clear at the meeting that this was a police-led programme but with input and

support provided by the Home Office. Police forces had been asked to sign-up and commit to developing the business case. Whilst a number of police forces had signed-up, most had indicated a willingness to sign-up but with caveats that they wanted to know more details of the business case before they fully committed. For those police forces who had opted not to be part of the process to develop the business plan, it was made clear that they would not be disadvantaged by this decision in the future and would still have access to the HOB programme and the outputs of the transforming forensics programme.

9.2 It was noted that a proposal had been put forward to disband the national fingerprint register, in part due to the regulators quality standards framework providing a much greater steer on quality and competency requirements. Assistant Chief Constable Rachel Swann had requested written details of the implications if the register were disbanded.

10.0 CAST

10.1 An update was provided from the Centre for Applied Science and Technology (CAST). CAST would merge with the Defence, Science and Technology Laboratory (DSTL) in the future and the joint organisation would fall under the Ministry of Defence (MOD). There would also be a geographical re-organisation, with all CAST sites moving to Porton Down. Due to the geographical move, it was likely that a large number of staff would leave. In the future, the new organisation would have a forensics and identity section and recruitment campaigns would be launched for new staff, where required.

10.2 Discussions were held about ensuring access to CAST documents following the merger with DSTL. It was confirmed that once it had been signed off, the CAST source book would be published on GOV.UK. Technical validation reports of the science and processes would also be entered into libraries specific to individual techniques. Details about projects which had been undertaken on fingerprint image capture and quality were being pulled together and entered into a digital source book which would be finalised prior to the merger with DSTL. Digitalised material would be made available on DSTL databases and could also be entered onto police archives or College of Policing (CoP) libraries.

10.3 The FQSSG heard that the newly merged organisation would receive work in the future through a commissioning body based in London.

11.0 UKAS

11.1 An update was provided from the UK Accreditation Service (UKAS). The FQSSG heard that UKAS did not have any resourcing issues following a period of recruitment. Four fingerprint technical assessors had been recruited which made a total of 10 technical assessors in this area. It was taking time to get the technical assessors fully competent due to a lack of assessments.

However, using technical assessors as technical witnesses had largely overcome this issue.

11.2 It was highlighted that pre-assessments were a tool which should be used by companies who were attempting to gain accreditation for the first time and their purpose was to recognise major gaps in the organisations processes. It was made clear, that if an organisation already had UKAS accreditation in one particular area, they should not require UKAS pre-assessments when attempting to gain accreditation in a different area as they should already have in place internal quality management system and procedures to assist the new area to gain accreditation. It was emphasised that UKAS would be declining requests for pre-assessments in situations where an organisation already held ISO 17025 accreditation. UKAS did indicate that they would offer desktop reviews to assess readiness for application for accreditation and they would offer further workshops if required.

11.3 It was noted that UKAS would offer pre-assessments for Crime Science Investigations (CSI) to the ISO 17020 standard if an organisation did not already have accreditation to this standard but did have accreditation to ISO 17025.

12.0 Chartered Society of Forensic Sciences

12.1 The Fingerprint Society have now merged and become a sub division within the Chartered Society of Forensic Science (CSFS). The FQSSG heard that the journals would continue to be focused on fingerprints and CSI and would not be as scientific as some of the other CSFS publications. The CSFS was considering how it could in the future cater for the wider community and engage with fingerprint practitioners. The annual conference for the CSFS would be in November 2017 and would be focused on forensic biometrics in the future.

13.0 Fingerprint enhancement laboratories

13.1 Work was underway to determine how police forces could better collaborate and support each other in the future so that every police force didn't need to obtain accreditation for every area of fingermark enhancement .

13.2 The FQSSG heard that there were some chemicals, used in the fingerprint laboratories that were to be banned in the future under environmental legislation. CAST were working to identify alternative fingerprint enhancement methods if certain chemicals could no longer be used or were no longer available. It was envisaged, that the merger of CAST with DSTL could enable access to funding to help resolve these issues.

14.0 Work-plan

14.1 It was highlighted that for the group to continue with purpose it required a programme of work. A work plan had been developed which prescribed the

categories of work that the FQSSG should have either an interest or oversight in. An estimated timeline had been given to the pieces of work. The work plan included on-going monitoring and review of fingerprint bureaux until the October 2018 deadline for gaining accreditation to ISO 17025. It was suggested that the following should also be added to the work plan:

- production of a fingerprint technical assessors guide;
- comment on standards and competencies in relation to the HOB fingerprint matcher and the functionalities of the bureaux tools;
- CSI accreditation for recovery and enhancement of fingerprints; case strategies and the rationale for certain approaches.

Action 5: June Guinness to update the work plan for the FQSSG.

15.0 AOB

15.1 The next meetings of the group would be 3 October in Birmingham and 8 February with the location to be confirmed. Meetings should be booked until 2018 for the FQSSG.

Action 6 : Secretariat to book meetings until the end of 2018 for the FQSSG.

Annex A

Present:

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| Gary Holcroft, Chair | Scottish Police Authority |
| Helen Bandey | Centre for Applied Science and Technology |
| Duncan Brown | College of Policing |
| Emily Burton | Greater Manchester Police Service |
| Emma Burton-Graham | Science Secretariat, Home Office |
| Graham Camm | Home Office Biometrics Programme |
| June Guinness | Scientific Lead, Forensic Science Regulation Unit, Home Office |
| Cheryl McGowan | Chartered Society of Forensic Science |
| Katherine Monnery (via teleconference) | United Kingdom Accreditation Service |

Apologies:

Apologies were received from:

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| Mark Bishop | Crown Prosecution Service |
| Christophe Champod | Lausanne University (R&D, ENSFI) |
| Neil Denison | West Yorkshire Police (Fingerprint Strategic Network) |
| Lisa Hall | Metropolitan Police Service |
| Richard Small | West Midlands Police (NPCC, Transformation Forensics) |