

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

### **Note of the meeting held on 26 November 2020 via teleconference.**

#### **1. 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. Minutes of the last meeting**

- 2.1 The representative from UKAS requested discussion of the Forensic Capability Network (FCN) guidance on Streamlined Forensic Reports (SFR) noted in the minutes of the previous FQSSG meeting. The FCN SFR guidance document included examples in which the accreditation references were not in compliance with UKAS requirements. The UKAS representative wished to highlight that a briefing note had since been published to clarify how accreditation should be represented and organisation were reminded to be specific about with what was and what wasn't accredited activity within an SFR. UKAS had noted a lack of compliance with this in their assessments. Further information could be found at the [FCN webpage on SFR](#).
- 2.2 Following a correction, the minutes of the previous FQSSG meeting were approved as an accurate reflection of the discussion held and the secretariat was asked to publish them.
- Action 1:**
- 2.3 The Secretariat to publish the minutes of the FQSSG meeting held on 11 June 2020 on GOV.UK.

### **3. Actions and Matters Arising**

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

- a. Action 5: Representatives from the FCN, TF and HOB to discuss requirements for an accreditation pack for IDENT 1 update. This was still on the FCN workplan but given the delay to delivery of the new matcher platform this would be looked at in 2021.
- b. Action 8: Bureau tool to be presented at the next FQSSG meeting. The FEL, CSI and bureau tools would be presented at this meeting.

3.2 All other actions were complete.

### **4. Accreditation Updates**

#### **UKAS**

4.1 The representative from UKAS informed the group that two new staff had been recruited and adverts were out for a forensic assessment manager and forensic section head.

4.2 In October UKAS had recommenced carrying out accreditation visits although the second lockdown has affected some of these. Assessments were being carried out in a blended way, some online, some on site, depending on the customer's and local restrictions. Surveillance visits had been able to progress, however challenges with CSI assessments which required onsite assessment.

4.3 Technical assessor workshops had continued remotely and had covered every technical area and been really useful. UKAS wanted to look at interfaces such as CSI and bureau fingerprint enhancement.

4.4 The group were informed that Bedfordshire, Hertfordshire and Cambridgeshire Police had successfully achieved accreditation for crime scene assessment. More crime scene assessments were booked in for 2020 and many more for 2021 depending on restrictions resulting from the pandemic

4.5 UKAS had run a workshop on preparing for 17020 accreditation and this may be re-run, if so this would be promoted on the UKAS website.

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4.6 The Chair asked if adherence with the standard for CSI was better than UKAS had observed during assessments for fingerprint comparison assessments. The representative observed that in general it had been similar and UKAS were raising a significant number of findings. The Chair wished to highlight the need for provision of support for accreditation.

**NPCC – Bureau**

4.7 Meetings had been paused up until recently when a meeting on lessons learned from the pandemic was held. The main issue raised at this meeting was remote working and access to IDENT1. This was taken to the National Fingerprint Board (NFB) and it was noted that remote access would be considered as part of future contracts.

4.8 An update was given on issues relating to the move to the new IDENT1 algorithm; roll out was expected to be November 2021, however as there was an ongoing issue with one company this may be subject to a further delay. The next strategic board would be held in February at which the Home Office was expected to confirm some go-live dates.

4.9 A meeting of the IRM had been held and the main topic of discussion was the delay to the new algorithm for IDENT1. It was noted that there were diverse approaches to the accreditation of IDENT1, with some bureaux already accredited and some working towards accreditation for the existing algorithm, while other bureaux were waiting for roll out of the new algorithm before seeking accreditation.

4.10 The NPCC Fingerprint Lead, Rachel Swann, highlighted at the national fingerprint meeting that a decrease in the collection of biometrics had been observed during the pandemic. CC Swann would be writing to chief officers to highlight this issue and express her concerns.

4.11 The representative from the Metropolitan Police Service (MPS) commented that during the pandemic work on fingerprint comparison had been performed outside of the bureau using validated procedures. The representative asked whether this work would be considered in the scope of accreditation given that the bureau was the accredited environment. The NPCC Bureau representative

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agreed and noted that the issue had been discussed and identified as important to consider, however remote access to IDENT1 would not be possible until contract renewal. The representative from the MPS noted that while access to IDENT1 remotely might not be possible, as there might be a need to have staff off-site for the foreseeable future (shielding etc) accreditation for agile working for other elements of fingerprint comparison needed to be considered.

4.12 The representative from UKAS responded that UKAS were receiving a lot of questions regarding agile working. It would be possible to include agile working within an accreditation, but this would need to be assessed given the issues of security, confidentiality and connections. The Chair sought clarification on activities that could be carried out off-site, the representative from UKAS stated that writing reports was not an issue provided laptop policies were in place, however issues arose from “testing” activity such as fingermark comparison which would be in scope and needed to be carried out in an accredited location.

4.13 The representative from the FSRU commented that the Regulator had been pragmatic about requiring the accreditation of IDENT1 given the expectation of a new algorithm. However, given the long delay before the roll out of the new IDENT1 algorithm the representative suggested that the Regulator be asked whether the requirement to be accredited for IDENT1 may need to be reassessed. The NPCC bureau representative had warned his group that the accreditation position may change given the delay.

4.14 The representative from UKAS confirmed that three bureaux had IDENT1 in scope and that no further bureaux were progressing applications for an extension to scope for IDENT1 with UKAS. There may also be issues with statutory requirements and accreditation for IDENT1. It was discussed that an extension to scope may be remote or site based depending on existing scope, previous assessments, and available technology for remote assessment.

**Action 2:**

4.15 FSRU representative to speak to the Regulator regarding advice to forces on accreditation for IDENT1 given the delay to the new matcher platform.

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**NPCC – CSI workstream**

- 4.16 The Forensic Capability Network (FCN) representative informed the group that the FCN had begun to provide some remote support for CSI around accreditation and this had been well received. Two assessments for forces had been completed and a further one was in progress. The assessments included a review of the documentation and gave forces an opportunity to raise any issues or concerns. FCN were also running new drop-in sessions on a Friday with time allocated with quality and validation specialists, for anyone to drop in and discuss issues with the FCN or each other. The drop-ins were advertised on the FCN website.
- 4.17 The Transforming Forensics Workstreams were being refreshed taking into account major crime and what support can be offered going forwards, particularly in terms of decision making.
- 4.18 The Chair recorded his thanks for the provision of the drop-in sessions and the support and skill development provided.

**5. Quality/Scientific/Development Updates**

**HOB**

- 5.1 The Home Office representative provided the group with an update. The initially predicted three-month delay for the roll out of IDENT1 was expected to be a much longer delay. The issues were identified during operational performance testing which had shown problems with the throughput rate on the platform the algorithm sits on and so a search of the records would take too long to complete. Fujitsu had initially been assessed and deemed able to take on this work however there were significant problems emerging and the Home Office expected a go-live date of November 2021 although there was a risk this might extend into 2022. Testing of the accuracy and the matcher was continuing with data being loaded from December with testing beginning from January to March.

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- 5.2 Transition of IDENT1 and IABS service management to Leidos had been delayed to January 2021. The issue was with resources to undertake the knowledge transfer from the previous service management supplier.
- 5.3 The HOB team had been focusing on support for validation work for the new IDENT1 algorithm. The team had been working with the three police forces with IDENT1 already in the scope of their accreditation and creating separate containers of records for ground truth data on the platform. There was a slight delay in that data had been shipped for loading to the platform but was lacking a unique reference to load. In due course other police forces could be given access to this ground truth data and would be able to seed in their own.
- 5.4 The Prüm fingerprint searches had commenced and exchanges were taking place with Germany and there had been a number of hits. The strategic DNA matcher had gone live and while there were some initial issues this was going well.
- 5.5 The Chair clarified the position with Fujitsu in terms of roll out of the new IDENT1 algorithm. The representative from HOB noted there was not much further assistance they could provide to Fujitsu and they were, unfortunately left waiting for Fujitsu to be able to meet the requirements.
- 5.6 The representative from the FSRU recorded her thanks for the work assisting forces with validation of the new algorithm. The representative also noted the impact of the algorithm delay on police forces as they may be required to achieve accreditation for the existing IDENT1 platform and then incur additional costs for accreditation to new algorithm when it was rolled out.

**Dstl**

- 5.7 A Dstl representative provided an update for the group. Home working was expected to continue for some time and provision of the new labs had been delayed as a result of the pandemic to February/March 2021.
- 5.8 During the home working period Dstl had been working on an update to the fingerprint manual and were aiming for publication in December 2021. There would be updates to, or new processes for, powder suspensions, indandione, the RECOVER process, various superglue processes, reflective UV, analytical

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methods, physical developer. The update to the manual would also include methods for new substrates including bank notes, biodegradables and fingerprints on walls. There would also be an appendix on the expectations for fingerprint visualisation. The update would also include information on publications describing the composition of fingerprints and evidence that they are not made mostly of water.

- 5.9 Dstl were also updating the source book, which supported the validation behind the techniques recommended in the manual. Steve Bleay, the author of the original source book, had been recruited as a contractor for Dstl and would be working on the update.
- 5.10 Dstl had published two newsletters since last meeting covering some of the processes for the manual update.
- 5.11 Dstl had also updated and reissued a report on the RECOVER process for the MPS. The update included results from older marks. Information on this process was available to forces, firstly in the newsletter that was published in summer 2020, but if more information was required this could be requested from Dstl. Two papers on this process were expected to be published next year.
- 5.12 The new [Dstl forensic resource website](#) was live and a link had been shared with the group.
- 5.13 Dstl were also working with the FCN to support batch testing of fingerprint powders, the procedure appeared fit for purpose and once agreed would be shared on the Dstl website for general access.
- 5.14 Dstl had recommenced research work into fingermark development on polymer bank notes and biodegradable plastics. Initial work was literature based however, academic groups were being brought together to carry out some laboratory work.
- 5.15 The representative from the MPS mentioned work that the MPS was doing with the Home Office on recovering fingermarks from drugs packaging as the force had noted a significant decrease in the amounts of marks recovered. The representative felt that further research into recovery of marks on plastic materials was needed. A Dstl representative commented that they had noted

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differences in fingerprint recovery from recycled plastic and would engage with the MPS representative on this.

5.16 The group were given an update on the collaborative exercise, all responses on both parts of the exercise had been received from participants and Dstl were in the process of writing up the findings. The representative commented that this had been a useful exercise and initial findings suggested good results.

5.17 The representative from the MPS commented on the collaborative exercise and noted they had used it to test a number of processes, including remote working. They noted an issue with one set of marks where left and right hands were switched, this was a particular issue with digital comparison as because the screen would be zoomed in it was not immediately obvious that the hands were switched. The Dstl representative confirmed that credit would be given if labelling was incorrect and the use of this style of test mark would be reviewed during analysis of the results.

5.18 The representative from the FSRU asked whether Dstl had confirmed funding for the proposed additional work. A Dstl representative responded that a meeting had been held with Home Office commissioning and it had been noted that some elements of the work would push into the next financial year. Dstl were fairly confident that funding would be supported, particularly for the manual.

5.19 The group were informed that Dstl had created a list of existing and intended areas of research which would be sent to HO commissioning. It was suggested that this list could also be sent to the FQSSG for review and prioritisation. This was agreed by the Chair. In addition, the representative from the FSRU proposed that the list was also sent to the National Fingerprint and Footwear Board for review from comparison and enhancement groups.

**Action 3:**

5.20 Dstl to share research wish list with the FQSSG.

5.21 The representative from the FSRU had given a summary of some of the recent results from the collaborative exercise at the CSFS conference and a report on these results would be prepared for the regulator. In terms of disseminate the



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learning there was a question about how the results should be shared with the participants. Although the test was anonymous forces had asked for specific feedback on their own results. The FRSU representative would like to liaise with Dstl to provide forces with their own results. Forces could then also see the full report in March giving anonymous results from all participants. The FQSSG, a number of whose members had participated in the exercise, were asked what results they needed.

5.22 A Dstl representative commented that the comparison element of the exercise was closer to a PT whereas the enhancement side was more of a development exercise and forces were not provided with exactly the same test material. Dstl proposed sending out the Ground Truth Data for the comparison trial which would allow forces to see how they did but comparison to other participants would not be possible. There were more variables in the enhancement exercise and so it was not easy to compare forces and there was no real 'right' answer. Feedback on the enhancement element would be included in the general report, expected in February 2021. There would also be a workshop to support the enhancement findings.

5.23 The representative from the MPS agreed with this approach as the key requirement from the results was to be able to assess the examiners to see if they had got the right results as if practitioners had not made a correct identification this needed to be dealt with quickly. Comparison with other participants and specific feedback on documentation was not necessary.

**Action 4:**

5.24 Dstl to provide ground truth data to forces who participated in the comparison collaborative exercise.

5.25 The representative from UKAS asked whether UKAS would be aware of who had taken part in the exercise as it was not classed as a PT it may not be included on forces PT schedule. This would be important as forces would need to consider what actions were required following the exercise. The FSRU representative noted that UKAS could be informed which forces had taken part.

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5.26 The UKAS representative also asked whether a lessons learned document was planned on the exercise. The new Codes specifically mention being aware of lessons learned and these documents were a great way to ensure that UKAS can look at the issues raised and the forces' response. This would also pick up the response of forces who did not take part in the exercise. The FSRU responded that the Regulator would like a lessons learned document drawn from the final Dstl report. A representative from Dstl responded that all of the enhancement exercise was learning as they were challenging marks on challenging surfaces.

**Action 5:**

5.27 Add production of a lessons learned document from the Dstl collaborative exercise to the FQSSG workplan.

5.28 It was highlighted that this had been an excellent piece of work and would support the work of the FCN.

**NPCC – Transforming Forensics (TF)**

5.29 The national CSI consumables contract was in force and the majority of forces had signed up. This contract included an escalation process for non-conforming consumables and batch recall.

5.30 Following up on the batch testing of fingerprint powders commissioned through Dstl the representative from TF informed the group that a batch testing protocol would be published through the FCN and Dstl.

5.31 TF had carried out an audit of Scene Safe consumables and the report on this would be shared with the community following a final review.

5.32 SFR documentation guidelines had been published and a session held on Teams from the FCN science pillar. Following feedback from UKAS a further document was published with additional guidance. If any further guidance was needed this would be reviewed in January 2021.

5.33 The new eQMS solution was developing well and a new deployment user group was to be set up to provide support for roll out.

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- 5.34 The FCN were compiling a PT catalogue on all available PT across all forensics. A gap analysis was being carried out and FCN were working with providers to improve provision with input from stakeholders.
- 5.35 An interlaboratory comparison pilot was recently carried out and FCN had offered support to forces who would like to set up a fingerprint ILC following the pilot.
- 5.36 The FCN was commissioned to establish a user group to investigate the need for a central fingerprint GTD and how it could be established. Initial information had been gathered and the FCN were looking at requirements to report back to the National Fingerprint and Footwear Board.
- 5.37 A representative from the FSRU asked whether the FCN was looking at existing GTD requirements, were future needs also being considered such as probabilistic interpretation. This was an area being considered by the FSRU. The TF representative agreed that it would be important to look at future needs and could share TF's findings on GTD requirements with the FQSSG.

**Action 6:**

- 5.38 FSRU representative to share with FCN representative information regarding future needs for a shared ground truth database (GTD).

**Action 7:**

- 5.39 FCN representative to share FCN outline of needs for a shared GTD with the FQSSG for comment.
- 5.40 The central validation of the new IDENT1 printers had been carried out. This work would prove the concept of 'validate once verify many'. Validation documents could be shared with forces.
- 5.41 The development of the data set for the strategic matcher was on hold pending the government spending review and because of delays on delivery of the matcher.

**NPCC – NFFSB and Enhancement Labs**

- 5.42 A written update had been provided to the group ahead of the meeting as the representative was unable to attend. The main points of the update were:

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- 5.43 The Fingerprint Enhancement Labs (FEL) group had been unable to meet as a result of pandemic restrictions, however queries, requests and good practise had been shared electronically.
- 5.44 The IRM had raised the concern that there were limited opportunities for fingerprint experts to carry out their role remotely given the restraints of IDENT1 and self-isolation and social distancing had affected productivity. The group sought to establish if there was agile capacity within IDENT1 to consider future agile working practicalities.
- 5.45 All requested footwear recommendations/decisions needed from the National Footwear and Fingerprint Strategy Board (NFFSB) had been approved including consolidation of groups; commitment to engage with the FCN on a survey of the value of footwear evidence; agreement for a draft access and use policy for databasing, reinvestment, retention and disposal of footwear evidence; agreement that research applications for the NFD/NFRC would be considered and authorised by the NFFSB and National Footwear Operations Group; draft policy and process document for bureaux receipt of Prüm fingerprint matches.
- 5.46 The written update included the following FCN activities in addition to the updates from the NPCC/TF representative:
- production of guidance on voluntary attendance would be incorporated into the planned future fingerprint and footwear capability roadmap;
  - a literature review on file formats had been conducted and the outcome was a recommendation to commission a larger scale study on digital image capture, conversion, compression and transfer;
  - National Guidance on seizure, retention, storage, and destruction was being finalised and publication was expected before the end of 2020.

**Action 8:**

- 5.47 Members to send any questions or comments on the update from the NPCC – NFFSB and Enhancement labs to the secretariat.

## **6. Professional Updates**

### **R&D/ENFSI**

6.1 The ENSFI was not active at the moment and all activity had been cancelled apart from a collaborative exercise on detection that had been launched.

### **College of Policing**

6.2 A written update had been provided to the group ahead of the meeting as the representative was unable to attend. The main points of the update were:

6.3 The following work had been completed on the Fingerprint Comparison learning programme since the last update:

- Stage 1 (Core professional skills) module had been launched and was available on the College learning environment for force delivery under licence.
- Completion of Stage 2 (Specialist professional skills) and Stage 3 (Courtroom skills). Discussions had been held about delivery of national assessments with Yorkshire and the Humber, EMSOU and FCN. A representative from Yorkshire and the Humber Regional Scientific Support Services had kindly agreed to lead on this and set up a working group.

6.4 The following work was planned for the next quarter:

- Hand over work on national assessments for Stage 2 (practical comparison/evaluation assessment) and Stage 3 (court assessment).
- Final College proofreading and diversity checks.
- Final sign off by Forensic Performance and Standards Group.
- Prepare Licence schedules.
- Upload to College learning environment
- Launch by end of quarter.

### **Action 9:**

6.5 Members to send any questions or comments on the update from the College of Policing to the secretariat.

## **CSFS**

6.6 The group were informed that the CSFS had held a virtual conference that had been very successful with more than 350 participants.

## **7. TF presentation**

7.1 The members received a demonstration from the CSI product owner for Transforming Forensics of the FCN Xchange tools that were being developed, the CSI web app, and the FEL app.

7.2 These apps presented a means to submit photographs of fingermarks and contextual images directly to a fingerprint bureau via the FCN Xchange with no loss of quality.

7.3 The members raised the following queries about the FEL app that were addressed by the product owner:

- The potential for manual entry errors when inputting case details was identified. It was explained that manual entry was necessary as the app would not be linked to force-based systems, at this stage. Errors could be corrected by a supervisor in the CSI Webapp, except where errors occurred in examinations containing fingerprint exhibits that would be directly submitted to the bureau so the bureau would need to be informed. The ability for the bureau to reject these submissions was being considered as a system change.
- Whether there was an activity log to record changes. The group were informed that reasons for changes made by a supervisor were logged.
- Whether the fingerprint treatment list was fixed or could be edited. It was explained that the aim of the treatment list was to standardise the abbreviations used for treatments. The list was created from the Dstl fingerprint manual and newsletters and agreed by the NFFB. The exhibit references could be edited.
- Whether data could be shared across forces. The representative from TF explained that data could be shared but was held in silo so that only a force or collaborative group of forces could see their own images.

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- Whether images could be sent directly from a scene. The group were informed that the mobile app could be used to send directly from a scene, this could be run on an android tablet and internet connection would only be required for upload of images to the FCN, or a laptop and the CSI Webapp, which required internet connection throughout use.

7.4 The group were also provided with a demonstration of the bureau tool by the bureau product owner. This tool would be used to receive digital fingerprint images, with the aim of improving the quality of fingerprint images submitted to bureaux and remove the need for scanned or photographed lifts.

7.5 The members raised the following queries about the bureau app that were addressed by the product owner:

- Whether it was possible to record manual notes on each of the features that were marked on the fingerprints. The group were informed that the tool did not allow notes to be linked to individual features that had been marked, however this would be amended in the future given the direction of fingerprint comparison note taking.
- The roll out plan for the app. The presenter explained that EMSOU were testing with the tool with a small group and the app would be released to the south west force collaboration and EMSOU. The TF team were working on roll out and business readiness for other forces.
- Whether the tool was flexible enough to cope with changes in the future in terms of terminology. It was explained that this was possible.
- The need for strong product support and the need for forces to support for the FCN product. It was noted that seven subject matter experts were helping with development of the app which was excellent for development and the software company was also very supportive.

7.6 A summary of the presentation of the tools can be found in Annex B.

## **8. Work Plan**

### **Agree and sign off additions**

- 8.1 A representative from the FSRU took the group through the workplan.
- 8.2 The group had completed and published all of the documents on the workplan and the representative from the FSRU noted her thanks to everyone in the review groups who were under pressure to work to challenging time scales to meet the publication deadlines.
- 8.3 A new item had been added to the workplan which was to develop guidance for recovery of fingerprints at crime scenes by crime scene investigators. The group were asked how development of this guidance should be taken forward in 2021.
- 8.4 The group agreed that a subgroup would be set up with representatives from CSI and FQSSG, terms of reference and nominations for members of the subgroup would be sought in late January 2021.

### **Action 10:**

- 8.5 Workplan to be updated to include a new sub-group to develop FSR-C-127 appendix. Working group to include representatives from FQSSG and CSI. Terms of reference and nominations for new group planned for January 2021.
- 8.6 As release of the IDENT 1 searching algorithm would be delayed to November 2021 the workplan would be updated to reflect that this work would continue to winter 2021.
- 8.7 The research and development document had been published and this had been picked up by the FCN and incorporated into their roadmap.
- 8.8 Work on the Identification, Evaluation, and Interpretation guidance document would start as planned in start spring 2021.
- 8.9 The watching brief on the TF Bureau Tools was complete as the group had received a presentation on the tools, see item 7.
- 8.10 Quality and Scientific issues remained as a routine item, with no additions.



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8.11 An item would be added to the Dstl collaboration workstream to note the need to produce a lessons learned document (see action 5) and this would be completed by summer 2021.

## **9. Covid impacts**

9.1 The Chair asked the group for general comments on bureau efficiency during the pandemic.

9.2 The representative from Regional Support Services, Yorkshire and the Humber (RSSS Yath), noted that there was less work coming to bureaux as fewer submissions were being made by Crime Scene Investigators. There was nervousness about ability to social distance in the work place and managing annual leave has been a challenge with fewer staff taking leave than normal. Efficiency levels were unaffected.

9.3 The representative from Greater Manchester Police noted that there was little impact on efficiency, however mental health issues were becoming a concern as a result of the length of time under restrictions. The representative also noted that remote UKAS assessment had been effective.

9.4 It was noted by the group that where space was not a constraint, bureaux were able to continue working effectively using social distancing. Where there were space constraints other approaches had been used effectively, such as split shifts and weekend working.

9.5 The group were asked whether any FSRU documents or standards needed to be updated as a result of learning from the pandemic.

9.6 The representative from UKAS highlighted that clarity on security requirements in FSRU documents would be beneficial given requirements to work from home. The representative also commented that some remote elements of assessments had been helpful both to UKAS and its customers and would be maintained in future as part of a blended approach.

9.7 The group agreed that homeworking would continue after the pandemic restrictions were lifted.

### **Action 11:**

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9.8 Add a review of FSRU documents from the perspective of security and homeworking to workplan.

**10. AOB**

10.1 The Chair informed the group that the SPA was working with a PhD student at the Leverhulme Trust in collaboration with Dundee University. A paper had been circulated to the group with the research questions. The Chair also encouraged others to support research in their organisations.

10.2 The academic representative asked whether work could be initiated on training packages for fingerprint comparison experts specifically on how to manage comparisons between very close fingerprint matches. Given the efficiency of the new IDENT1 algorithm some of the results generated would be very, very close to the questioned mark but not from the same source and there was a risk of accepting these matches. The representative suggested that it would be useful to develop training packages that deal with these close matches and these new risks. Delays to the delivery of the new matcher would allow this to be done before it was implemented.

10.3 A representative from the FSRU welcomed this suggestion and asked for more information on the ground truth data (GTD) that would be required so that this could be fed into the GTD discussions. JG – thanks CC for raising this.

10.4 The representative from Greater Manchester Police suggested that the IRM could look at this training as lots of practitioners would be coming together. This was agreed by the RSSS YatH and FCN representatives.

**Action 12:**

10.5 The representatives from Regional Scientific Support Services at Yorkshire and the Humber and from the FCN to raise with IRM the need for training in dealing with the very near fingerprint matches that will be generated by the new matcher platform. IRM to take ownership of this and feedback to FQSSG.

10.6 The representative from UKAS drew the group's attention to a European Accreditation document on [Guidance for Small Inter-laboratory Comparisons](#) and this may provide some advice to help with PT discussions.

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10.7 The date of the next meeting was to be confirmed and would be held over video conference. The Chair was interested to hear the members views of the videoconference approach for future meeting planning.

**Action 13:**

10.8 All members to provide feedback on the virtual meeting format for planning of meetings going forwards.

10.9 This meeting was the last FQSSG meeting that would be attended by the current Forensic Science Regulator whose term would end in February 2021. The group wished to acknowledge the excellent work of the Regulator and support of fingerprint quality and standards.

## **Annex A**

### **Organisation representatives present:**

The Chartered Society of Forensic Sciences (CSFS)

Dstl

Fingerprint Associates Limited

Forensic Capability Network (FCN)

Forensic Science Regulator

Forensic Science Regulation Unit (FSRU) (2 representatives)

Greater Manchester Police (GMP)

Home Office Biometrics (HOB) Programme

Home Office Science Secretariat (HO)

Lausanne University

Metropolitan Police Service (MPS)

Regional Scientific Support Services Yorkshire and the Humber

Scottish Police Authority (SPA)

Transforming Forensics (TF)

United Kingdom Accreditation Service (UKAS)

### **Apologies:**

College of Policing

Crown Prosecution Service (CPS)

East Midlands Special Operations Unit - Forensic Services

## **ANNEX B**

### **Presentation of Transforming Forensics tools.**

The CSI app product owner for Transforming Forensics, presented the CSI and FEL apps. Both systems were a method of getting images of fingerprints to the bureau using a digital means with no loss of quality. Other scene images could also be uploaded.

### **FCN Xchange CSI Web app.**

- The app opened with tiles for individual examinations.
- By clicking the 'Add examination' button an examination could be added, there were minimal fields to enter as the app was not a case management system.
- Creation of a new examination would default to the current date, it was not possible to set a date in the future.
- The drop-down list of 25 crime types had been agreed at the board.
- There was a toggle to choose between volume and major crime.
- Cases could also be marked as restricted.
- The examiner would add the case details; operation, force, examination type. The crime reference could be any format.
- A memory card could be used to upload images.
- A preview of images would be displayed before accepting images to add.
- The examiner could create fingerprint exhibits containing contextual images and fingerprint images to be sent for comparison. Multiple images could be assigned to the same exhibit.
- The examiner could add a description to each of the images and images could also be categorised, for example as scene or footwear.
- The examiner could click images to add into an exhibit and could edit to change the exhibit reference, description, to remove images or add contextual images.
- Contextual images had a banner on the image to show they were contextual.
- The app would not allow the images to be submitted to the FCN if there were no images or no fingerprint images within an exhibit.
- A new exhibit reference was needed for the overarching images, like that used for an album.
- Once a submission to the bureau had been made it couldn't be edited.

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- From the app individual images or all images in a closed examination could be downloaded. If all the images were not categorised it would not be possible to download them, this was because the examination was in progress and the images may move categories.
- Officers could view and download scene images but not fingerprint images.
- The app could be searched by FCN number, case management number, or crime number. An advanced search could also be carried out using any of the terms used when completing the examination details e.g. CSI user number, examination date (range).
- Restricted cases could only be accessed by the owning CSI or a supervisor.

**FEL system**

- The FEL app had a similar appearance to the CSI system with the same home screen.
- Exhibits may already have an FCN number associated with them so filling in the FCN number would auto populate the other details on the form.
- The FCN had taken out the incident reference number from the FEL form as FEL didn't work with this info.
- The other difference to the CSI app was the way to add fingerprint exhibits, which included options for fingerprint treatment. The format of the exhibits would be the abbreviated treatment name plus numbers e.g. BV201. The user could add more details e.g. BV/201/JLG/01
- The FEL and CSI apps would accept jpeg and tiff images although there was no preview with tiff.
- Images could be moved between exhibits and contextual.
- The FEL tool would not allow upload of duplicate images.
- Images could be categorised as 'scene' or 'footwear', as part of a 'fingerprint exhibit' or as 'do not use' (taken in error).

The Bureau app Product Owner from Transforming Forensics presented the Bureau app.

**Bureau app.**

- The first release of the app was finished.
- The aim of the app was to allow bureaux to receive better quality friction ridge and contextual images to allow digital processing through the entire ACE-V methodology.

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- The app could be used by individuals with different profiles; examiner, reporting examiner, non-competent examiner, allocator. It was possible to be an examiner and an allocator.
- Within the app the 'new' queue showed new dockets received. All new work from the CSI and FEL apps would arrive into this queue. The 'docket' was given a colour based on workflow.
- The docket number would be in the format: year-FCN number-docket number. The case management number would also be shown in the docket.
- The fingerprint icon showed the number of exhibits.
- Persons of Interest were coloured green for elimination and red for suspect.
- Casefiles would show the date received and a due date would be auto assigned, based on crime type. This could be extended but a reason would be required as the turnaround time would be configured in to the system.
- The case files could be flagged as a priority or a priority flag removed.
- The bureau could also create their own dockets.
- The app would show a list of users that would be available for each workflow.
- Work could be self-assigned based on role depending on access, for example a user would not be able to verify their own examination.
- An allocator would be able to see who had work, how many dockets they had, how many exhibits and how many persons.
- The allocator could click on users to assign them a docket.
- The 'action required' queue would allow the allocator to assign work to staff. Docket queues would have structured ordering.
- The 'assigned' queue showed allocated cases and who they were assigned to. Search and filter functions were being added to this page.
- The 'my dockets' tab showed all the work assigned to the examiner logged in.
- When a docket was opened the examiner would get the same information as the allocator, but the date assigned to the examiner would also be recorded.
- The examiner would click on exhibits get to the image canvas, which showed an enlarged image of the fingerprint with enhancement tools available.
- The examiner would start on the edit page. The system forces analysis to be completed before comparison or evaluation can be opened.
- The examiner could set the scale on the fingerprint image. Also, the examiner could extract part of the mark to enhance, alter contrast and brightness in specific areas, flip marks, zoom, rotate (via mouse), change to greyscale and invert.

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- Further tools would be implemented with development of the app.
- The examiner could undo, redo and reset.
- Once all changes were made the examiner would need to save the extract. Once saved the analysis tool would become available.
- The analysis tool included markers and a free hand draw tool. Users had requested more colour options for the marker tool, and this was in development.
- In the analysis tool an examiner could classify a mark as insufficient and give a reason using drop down options or free text. Digit determination and pattern classification could also be assigned from a set menu. Free text notes were also available.
- The extracted image would then show in the docket.
- Suspect fingerprint images could be added digitally and suspect information, including who provided the suspect details e.g. CSI/OIC.
- Suspect data was restricted to a case and could not be moved across the system.
- The comparison section of the app showed an examination matrix with a list of exhibits and comparisons of marks against suspect and elimination prints.
- In the comparison tool the examiner had a number of options; free draw, markers, fold, opacity, flick on and off, lock, rotate, zoom.
- If the fingerprint was identified the examiner would be required to select the digit.
- Once a comparison was completed the examiner could request a verification check. The verification could be open or blind, allowing each bureau to follow their own processes (e.g. all blind or 5% blind).
- Following completion of an examination available workflow states were; verification (open and blind), arbitration, review, complete, and sign off (not all bureau would use sign off).
- For a blind verification no analysis notes would be provided to the verifier. The blind verifier would have to complete the analysis step before a comparison could be completed. Only after having saved an analysis decision would the tenprint images become available for comparison.
- Once the verification decision was made the system would inform the examiners whether an arbitration was needed, if two examiners had a difference of opinion.
- In an open verification, the second examiner would be able to view the first examiner's analysis and conclusions. The verifier could accept the first examiner's analysis or make their own decision, then move on to comparison. The verifier would also see case and docket information.



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- For searching against IDENT1 all searchable marks could be exported, or all marks from an exhibit, or individual marks could be selected for download and search against IDENT1.
- The bureau app would also display a timeline of progress on work.