Forensic Science Regulator
Overseeing Quality

Digital Forensics Specialist Group

Minutes of the meeting held on 5th February 2018, at the Home Office, 2 Marsham Street, Westminster, SW1P 4DF

1. Welcome and apologies

1.1 The Chair welcomed all to the meeting. Apologies were received from Danny Faith, Mark Bishop, Matthew Tart, Nigel Jones and Steve Dickinson. A full list of attendees is available in Annex A.

2. Minutes and actions of the last meeting

2.1 The minutes of the meeting held on the 22nd September 2017 had been approved by members prior to the meeting and were published on GOV.UK.

Action 5 (June 2017): Danny Faith to scope out options for running a Q&A workshop on gaining accreditation for digital forensics with F3.

2.2 This action had been concluded. Following discussions with F3 it had been determined that the proposed workshop would not go ahead.

Action 8 (June 2017): The Regulator and Tim Watson to discuss approaching the BCS and IET with a view to including digital forensics as a component of their teaching course.

2.3 This action was still in progress. It was agreed that the action should be expanded to include approaching the Forensic Science Society to obtain a digital representative on the group.

Action 9 (June 2017): The Regulator and Jennifer Housego to discuss the potential of engaging with stakeholders through online video content.

2.4 This action was on-going. The DCG Futures Academy was discussed as a potential platform to share content with policing stakeholders.

2.5 John Beckwith informed the group that the NPCC Digital Forensics Portfolio Board were producing bite-size videos on digital forensics to disseminate within the police force. Simon Iveson agreed to engage with John Beckwith during scoping meeting on 14th February to determine if the content can be shared externally.

2.6 Roy Isbell suggested that as Editor in Chief of the publication 'Digital Forensics Magazine', he could facilitate sharing of content with external stakeholders by way of an article published in the magazine.

Action 1: Simon Iveson to engage with John Beckwith during scoping meeting on 14th February to determine if NPCC content can be shared externally.

Action 2: Simon Iveson to engage with Roy Isbell to produce an article for publication in Digital Forensics Magazine

Action 10 (June 2017): DFSG members to provide David Compton with feedback on the reliability of mobile phone extractions within two weeks.

2.7 This action was complete.

Action 1 (September 2017): Simon Iveson to remove remote storage from the Codes of Practice and Conduct version 4.

2.8 This action was complete. The updated versions of the codes can be found on FSR website.

Action 2: Members to provide written feedback to John Beckwith on the Expert Evidence Decision Tree by the NPCC Digital Forensics Portfolio.

2.9 This action was complete; the chair thanked Matthew Tart for his input in absentia. The decision tree was planned to be published in 4-6 weeks.

Action 3: Mark Bishop to seek feedback from colleagues within the CPS on the Expert Evidence Decision Tree by the NPCC Digital Forensics Portfolio.

2.10 This action was ongoing. John Beckwith agreed to take forward with the updated decision tree.

Action 4: The Regulator to have further discussion with UKAS on the accreditation of deployments of kiosks/triage tools to fixed sites, known sites and unknown sites.

2.11 This action was complete. The statement of requirements has been updated.

3. Digital Forensic Tools Test and Validation Database (ValiD)

3.1 A presentation was provided by Dr James Luck on the EU-funded project "ValiD", which was led by the Metropolitan Police. The project aimed to set up a European-wide digital forensics validation database. The 2-year project was funded under the ENSFI 2016 Direct Grant Project theme "Steps Towards a European Forensic Science Area" (STEFA). The project supported the EC objective to increase uptake of lab accreditation and remove barriers to accreditation.

3.2 It was hoped that the project would address uncertainty, contributing to a statistical understanding of uncertainty in digital forensics. Benefits of the database included increased accuracy of data through peer review. Ongoing maintenance of the database would be required at the project end, which may be supported by ENSFI or Europol.

3.3 Members asked about the scope of the database with regards to the types of device from which data was obtained. This would be set to mobile devices initially, but it was hoped to add other data types later on. It was suggested that the project might consider using Git (open source distributive repository used for the Linux kernel) to track updates to the database by users. DFSG members asked whether a guest or observer spot on the project could be held by international laboratories, such as those located in America or Australia. David Johnston agreed to facilitate introductions of the project lead to contacts in the Operational Technology Division of the FBI.

Action 3: David Johnston to make introduction between James Luck and the Operational Technology Division of the FBI.

4. Discovery and disclosure issues

4.1 Disclosure of digital data, particularly in rape cases, had arisen as a serious issue in recent months bringing forward questions on how complex data is reviewed, understood and put into context into a criminal case. Concerns were voiced that this would put further pressure on digital forensics units, which could potentially cause a crisis in the following months if appropriate measures were not taken.

4.2 A recently published report on the case of *R v Allan*[1] was discussed. The report detailed a request for deleted messages to be retrieved from a device, but did not describe what methodology the officer had implemented to search the data. This highlighted general issues around a lack of forensic strategy for officers handling large amounts of data. It was suggested adequate training should be required for police officers in validation of methods to allow them to identify gaps in the data, as well as a clear set of protocols implemented for police officers reviewing the data. Members agreed that independent digital forensic practitioners should be responsible for presenting data at case conferences and to the prosecution and defence, and that this information should not be relayed by investigating officers.

4.3 The CPS report made several recommendations including police digital evidential transfer a single national repository for digital data (including victim's phones). In serious cases this data could stay on the database for 30 years which the group felt was not proportionate.

4.4 The Regulator informed members that data extraction was highlighted at the Forensic Policy Steering Group (FPSG), which leads on the development of the Forensic Science Strategy. The FPSG felt that it would be disproportionate to download all data for every case and that absolute transparency is required to reduce risk. The Regulator informed members that she would be attending a Select Committee on 6th February 2018, where some of these issues would be highlighted.

5. Digital Forensics & Kiosks

[1] The case, which involved allegations that a woman, C, was raped by a man, D, was dropped by the Crown Prosecution Service (CPS) on 14th December 2017 after digital records emerged. Available from: www.cps.gov.uk/publication/joint-review-disclosure-process-case-r-v-allan

5.1 A draft Schedule of Accreditation produced by the United Kingdom Accreditation Service was presented to members, who were asked to provide feedback. The document aimed to address accreditation of tools deployed at multiple sites, such as a fixed site (e.g. kiosks), or known site (e.g. a police station). The terminology used in the document was discussed and members were asked to send suggestions for wording to David Compton. Data extraction from devices was referenced in the document by level of complexity (level 1, 2, 3), the definition of which needed to be clearer.

Action 4: Members to send suggestions on wording used in schedule of accreditation to David Compton

Action 5: John Beckwith draft specific details of 3 levels and articulate what is meant in terms of the 3 levels and circulate to the DFSG members.

6. Statement of Standards and Accreditation

6.1 An update was provided on the statement of standards and accreditation for digital forensics in the Forensic Science Regulator's Code of Practice and Conduct. Comments had been received and incorporated. It was hoped that Version 4 would be ready for publication by mid-year. The codes had been kept quite high-level and were defined by exception rather than inclusion (which can lead to gaps that can be exploited by providers). Members expressed that this could lead to the codes being quite all encompassing. Further discussions around the wording used in the statement took place, especially with regard to definitions of levels and extraction and analysis of the data. The Regulator agreed to take these points away and revise the document accordingly.

7. National Police Chief's Council (NPCC) Landscape update

7.1 An update was provided by John Beckwith on behalf of the NPCC. Members were informed of a landscaping exercise to underpin engagement with digital policing and other key stakeholders, particularly with respect to frontline techniques. The exercise aimed to highlight the benefits of a unified approach to the implementation of standards and consistency. The NPCC recommended that forces establish configuration authorities close to digital policing portfolio governance to enable them to seek accreditation along the lines set out in the codes.

7.2 The NPCC were currently mapping their portfolio and assessing prioritisation for project work. The potential work packages were discussed at the NPCC portfolio board where it was agreed the next set of frontline methods to be prioritised would be computer triage and vehicle telematics.

7.3 An update was provided on the 'kiosk project' which was aiming to develop a national validation package. It was hoped the package would be published in March ready for the next Digital Forensics Portfolio Board. Declarations for frontline troops using kiosks had been developed, the need for which was introduced in Issue 4 of the FSR Codes of Practice & Conduct. A process flow chart was presented to support the use of declarations. David Compton expressed that some of the wording

used in the declarations may be problematic with respect to accreditation and so agreed to provide feedback on this to John Beckwith.

Action 6: David Compton to provide feedback to John on the declarations

7.4 It was reported that the NPCC were in the process of organising a specialist digital forensics and Interpol event that would be held in London 26th-29th June. One of the focuses would be around marketplace engagement. The Forensic Science Regulator was invited to present at the event.

8. Open Source

8.1 An update was provided on the Open Source sub-group. It was agreed in a previous meeting that the group would look at process maps that have been completed by a number of organisations and use these to understand standard workflows. Several of these had been assessed further process maps would be obtained to identify risks and aid the development of standards.

9. Network Forensics

9.1 An update was provided on the network forensics subgroup. The group would normally coordinate their meeting with the DFSG but on this occasion no meeting was being held. A date for the next meeting was required.

9.2 A Network Forensics questionnaire had recently been conducted. The aim of the questionnaire was to determine what stakeholders were classifying as network forensics and to therefore assist defining the scope for the standard. The questionnaire was circulated to around 300 policing practitioners but had a relatively small return. It was necessary to understand how the processes carried out under network forensics map across to other digital forensics standards. Since processes were aligned to device forensics, they should map to the ISO standard.

10. Cell site

10.1 An update was provided on the cell site analysis[2] sub-group. An accreditation pilot being run by UKAS on behalf of the Regulator had stalled, but it was hoped to be revived. There had been a change in management in certain forensic providers and the intention was attempt again to involve them in the pilot and to support standards work. More work was required on how cell site analysis is reported.

11. AOB

11.1 David Johnston informed members that he was going to be involved in assessing how policing uses data for operational decision making. The work was intended to span digital disciplines and so he would report back to the DFSG at the next meeting.

[2] Cell site analysis includes the acquisition of communications data and the processing of those data, often in association with data captured during a radio frequency (RF) propagation survey.

11.2 No date had been set for the next meeting of the DFSG. The secretariat would liase with the chair to find a suitable date, possibly in the week commencing 18th June.

Action 7: Secretariat to arrange next DFSG meeting in June

Annex A

Mark Stokes	Metropolitan Police (Chair)
David Compton	United Kingdom Accreditation Service
David Johnston	Gloucestershire Police
Duncan Thurlwell	NPCC Collision Investigation Nominee
Gill Tully	Forensic Science Regulator
James Luck	Metropolitan Police
Jennifer Housego	NPCC Open Source Nominee
John Beckwith	Staffordshire Police (via teleconference)
Neil Cohen	Centre for Applied Science and Technology, HO
Roy Isbell	Warwick Cyber Security Centre
Tim Watson	Warwick Cyber Security Centre

In attendance

Simon Iveson	Forensic Science Regulation Unit, HO
Penny Carmichael	HO Science Secretariat