

DNA ANALYSIS SPECIALIST GROUP

**Notes of the twelfth meeting, held at 12:30pm on 19 July 2012,
at 5 St Philip's Place, Colmore Row, Birmingham**

Present:

Karen Squibb-Williams	CPS (Chair)
Caroline Caird	NPIA
Kathryn Dagnall	Met Police
Matt Greenhalgh	Orchid Cellmark (for Andrew McDonald)
June Guinness	Forensic Science Regulation Unit (Deputy Chair)
Brian Irwin	FSNI
Ben Mallinder	Scottish Police Service Authority
Shirley Marshall	Forensic Science Society
Sue Pope	DNA Principal Forensics
Adam Shariff	NPIA
Andy Rennison	Forensic Science Regulator
Denise Syndercombe-Court	International Society for Forensic Genetics
Des Van Hinsberg	Forensic DNA Services
Kerry Way	LGC Forensics
Kenny Chigbo	(Secretary)

Apologies

David Balding	Royal Statistical Society
Simon Iveson	Forensic Science Regulation Unit
Andrew McDonald	Orchid Cellmark
Tony Nash	Met Police
Dorothy Ramsbottom	Forensic Science Laboratory, Ireland

Item 1: Opening and welcome

1.1 Andy Rennison and Karen Squibb-Williams welcomed those present, including members of the Contamination Specialist Group to the joint meeting with the DNA Analysis Specialist Group. He stressed the importance of each specialist group being aware of what the other group is doing. He informed the DNASG about the earlier Contamination Specialist Group meeting, which focused on guidance and standards for contamination avoidance and creating more robust elimination databases. There was an ad hoc approach to elimination databases previously in place and led by the FSS. The data held by the FSS cannot be retained, due to the closure of the FSS.

1.2 The Regulator has negotiated for Kevin Sullivan from the FSS¹ to work on standards for contamination avoidance and elimination databases. Proposals have been put to the National DNA Database Ethics Group, who were concerned about contaminant profiles remaining on the NDNAD. The

¹ Kevin Sullivan is now a private consultant

proposals were also welcomed by the End User Specialist Group and the Forensic Science Advisory Council. A new mandate for these proposals has been received from the Contamination Specialist Group at the meeting earlier today. The need and urgency for coherent guidance and standards were discussed and agreed. A draft of the guidance and standards is expected by the first quarter of next year. The tight timescale is driven by the implementation of new PCR multiplexes that are more sensitive.

1.3 Andy Rennison circulated a chart showing a proposed model for elimination databases. While compliance with the new PAS377 should over time start reducing contamination through consumables, the proposed model includes a central manufacturers' elimination database that is more robust and transparent. It was suggested that a centralised elimination database was also required for scientists that are not attached to the main forensic services providers. The next steps were for the proposals around the PED to be discussed with the Police Federation. The Contamination Specialist Group has agreed to provide oversight for the work programme. The second phase of the work will also involve looking at the possibility of standards for decontaminants.

1.4 June Guinness asked representatives of forensic services providers for their existing policies and guidance on contamination avoidance.

Action: All

1.5 All present were asked to consider the proposed model and email to June Guinness their thoughts on how the model could operate. They should also consider the functionalities that would be desirable for a user requirement, and any further views on standards for contamination avoidance and the scope of the work.

Action: All

1.6 June Guinness agreed to send an electronic version of the chart with the proposed model.

Action: June Guinness ²

Item 2: Minutes from the last meeting

2.1 The minutes of the meeting on 27 March 2012 were agreed, pending clarification that the Regulator intended to publish his report on LGC contamination in September.

Item 3: Matters arising

3.1 Paragraph 3.1: The intention is to publish the DNA annex for consultation, as the requirements for consultation periods have been updated,

² Electronic version of model circulated

the consultative period would be short, as it had already been through a number of reviews by the DNA SG.

3.2 Paragraph 3.2: The error rate calculation paper has been re-circulated. It was suggested that further work was required on the paper and would be resubmitted as a future agenda item.

Action: Adam Shariff

3.3 Paragraph 4.1: There is a new EU funded project EUROFORGEN-NoE for the creation of a European Virtual Centre of Forensic Genetic Research Denise Syndercombe-Court is the work package leader for the ethical and legal aspects, of which Chris Hughes, the Chair of the NDNAD Ethics Group is also involved. The project is at its early stages and is scheduled to last five years. Discussions by the group for free access to published articles and specialist information on DNA would be communicated by Denise Syndercombe - Court at their next project meeting.

Action: Denise Syndercombe-Court

Karen and June agreed to investigate this future resource further.

Action: Karen Squibb-William/June Guinness

3.4 Paragraph 6.2: Adam Shariff said there was nothing further to report on sample collection. The focus of the multiplex project is concordance. The population categories will follow from this. He agreed to update the next meeting on progress on concordance.

Action: Adam Shariff

Population coverage for concordance and frequency data was discussed, consent obtained by Cellmark for their samples meant they could not share their data. Denise Syndercombe-Court advised she had samples for various populations with consent to use the data, but required resources to process the samples as she couldn't release the samples themselves. The group were of the view that efforts to obtain adequate coverage of population samples relevant to the UK should be attempted.

3.5 The other actions from the last meeting were either cleared or are agenda items for this meeting.

Item 4: Work Plan

4.1 It was suggested that emerging technologies like ADAPT should be added to the work plan.

Action: June Guinness

4.2 June reported that there was an ADAPT technology workshop meeting being run by NPIA that Simon Iveson was due to attend. It was agreed that Simon should be asked to provide an update for the next DNASG meeting.

Action: Simon Iveson/June Guinness

4.3 Andy Rennison welcomed the help of the DNASG in assessing the new devices. The Group noted that the NDNAD currently did not accept profiles being loaded from those devices.

4.4 The agreed work plan was as follows:

- DNA appendix
- DNA primer
- Contamination avoidance & prevention guidance
- DNA Elimination databases
- Watching brief on emerging technology, for example, concordance study and frequency database(s) for the new multiplexes, and Rapid DNA Technology
- Policy for Reporting Match probability for new multiplex's – watching brief on Hopwood et al publication
- Standard approach to reporting body fluid and DNA results
- DNA information Resource portal

Item 5: DNA Primer

5.1 The Chair handed out a paper entitled "The Market Place, Forensic Science and the Criminal Justice System in 2012". It is a summary of what the CPS requires of forensic science providers. It deals with core principles that must inform any providers of forensic services and specifies the key requirements of forensic material that is to be used in the criminal justice system. It is supported by the Director of Public Prosecutions, the Attorney-General and the Senior Presiding Judge. Andy Rennison endorsed this saying that he has always seen a gate-keeping role for the CPS in quality standards.

5.2 Andy Rennison reported that Lord Justice Thomas has concerns about the courts' ability for managing forensic science evidence. LJ Thomas has asked the Forensic Science Regulator and the Home Office Chief Scientific Adviser to draft a short guide for judges. It was agreed that this should be in the form of a two-page summary document on DNA that explains what the science is, validation, and how effective it is. A first attempt at a primer has been drafted, but considered too long. He asked the DNASG to help redraft the primer document (circulated) taking an overarching look at DNA. Caroline Caird, Shirley Marshall, Karen Squibb-Williams, Sue Pope and Denise

Syndercombe-Court volunteered to redraft the primer, and agreed to meet in the second week of September.

Action: June Guinness/Caroline Caird/Shirley Marshall/Sue Pope/Karen Squibb-Williams /Denise Syndercombe-Court

Post meeting note: Shirley Marshall should be asked for her views on the summary of the DNA primer.

Action: June Guinness/Shirley Marshall

Item 6: Match probability reporting – new multiplex

6.1 The issue of likelihood ratios was discussed at the last meeting. The Hopwood et al paper proposes a way forward for reporting match probabilities for a 15 STR multiplex based on allele frequencies for UK populations. The paper has been sent to the NPIA and the Forensic Science Regulator. It has also been published in the Science and Justice journal and feedback is expected in the form of comments to the editor. The Group wanted more time to consider the approach and review any feedback on the article before adopting the approach proposed. June agreed to maintain a watching brief for feedback on the paper and revisit subject at a future DNASG meeting.

Action: June Guinness

Item 7: Accreditation of DNA profile interpretation by organisations without DNA processing labs

7.1 This item was for the Group to consider how to take forward the accreditation of organisations that do not carry out DNA profiling and analysis themselves, but need to interpret DNA profiling results for speculative searching and reporting profiles in reports/statements. It was agreed that a subgroup should be convened to discuss and produce a briefing paper in the first instance for the Regulator. The invitees should include the Met, Forensic Access, Cellmark, Key Forensics, the NPIA and UKAS.

Action: June Guinness

Item 8: AOB

8.1 Peter Gill's paper will be circulated to the DNASG for one final look, nil returns would be considered as acceptance of the paper. Comments should be sent to June by 27 July.

Action: All / June Guinness

Item 9: Date of next meeting

9.1 The next meeting will be held on 11 October 2012.

LIST OF ACTIONS

1.4	Representatives of forensic services providers to send their existing policies and guidance on contamination avoidance to June Guinness	All
1.6	June Guinness to circulate an electronic version of the chart with the proposed model. (Done)	June Guinness
3.2	Updated error rate calculation paper be resubmitted as a future agenda item	Adam Shariff
3.3	Access to published articles and specialist information on DNA to be communicated at the next EUROFORGEN project board meeting. Karen and June to investigate the new EU project further	Denise Syndercombe - Court Karen Squibb-Williams/June Guinness
3.4	Adam Shariff to update the next meeting on progress of the multiplex concordance study.	Adam Shariff
4.1	Emerging technologies like ADAPT should be added to the work plan.	June Guinness
4.2	Simon to provide an update on new techniques (ADAPT) for the next DNASG meeting	June Guinness /Simon Iveson
5.2	Caroline Caird, Shirley Marshall, Karen Squibb-Williams, Sue Pope and Denise Syndercombe-Court to redraft the primer, and agreed to meet in the second week of September.	Caroline Caird/Shirley Marshall/Sue Pope/Karen Squibb-Williams/ Denise Syndercombe -Court
6.2	June to maintain watching brief for feedback on the Hopwood paper.	June Guinness
7.1	June to convene a subgroup to produce a briefing paper on accreditation of DNA profile interpretation for organisations without labs.	June Guinness
8.1	June to re-circulate Peter Gill's paper to the DNASG for one final look, nil returns would be considered as acceptance of the paper. Comments should be sent to June by 27 July.	All / June Guinness

