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TAKEN BEFORE THE
SCIENCE AND TECHNOLOGY COMMITTEE

FORENSIC SCIENCE

WEDNESDAY 6 MARCH 2013

ANDREW RENNISON and PROFESSOR BERNARD SILVERMAN

Evidence heard in Public

Questions 233 - 298

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Oral Evidence

Taken before the Science and Technology Committee

on Wednesday 6 March 2013

Members present:

Andrew Miller (Chair)
Stephen Metcalfe
Stephen Mosley
Graham Stringer
David Tredinnick
Roger Williams

Examination of Witnesses

Witnesses: **Andrew Rennison**, Forensic Science Regulator, and **Professor Bernard Silverman**, Chief Scientific Adviser, Home Office, gave evidence.

Q233 Chair: We will now move on to our second panel. For the benefit of anyone who is watching, for clarity we are reverting to our inquiry into the Forensic Science Service, which we are running in parallel with the previous one. Can I welcome Mr Rennison and Professor Silverman to the meeting, and for the record invite them to introduce themselves?

Professor Silverman: I am Bernard Silverman, the Home Office chief scientific adviser.

Andrew Rennison: I am Andrew Rennison, the forensic science regulator, and now also the surveillance camera commissioner.

Q234 Chair: Since we met both of you a while back, the process of disposal of the FSS has gone ahead. The market has changed since then in forensics, and we have taken quite a bit of evidence over the last few weeks from people in the private and public sectors and the Met and ACPO. We do have some concerns about the way forward, which we want to explore with you today.

First, can I ask you whether, in your view, the Government have a strategy for forensic science beyond simply encouraging the market?

Andrew Rennison: Thank you very much; I will start with that one. At the moment, I struggle to know what the Government strategy is. I think the Committee was nodding in agreement. There have been Government strategies that took us through privatisation and the DNA expansion project, and it is something about which I have been making noises for a while, but I am pleased to say that the strategy of the Forensic Policy Group now formed to deal with that meets this morning. As soon as I finish here, I am straight back to the Home Office to meet with that group and discuss what I think is a very promising agenda.

Professor Silverman: I would add that Andrew sits on the Forensic Policy Group. I do not sit on it personally, but my deputy and also the head of CAST—the Centre for Applied Science and Technology, which is part of Home Office Science—also sit on that group. My understanding is that that group is the one tasked to take forward the strategy, so we are

placed to make sure that science and technology has its place in formulating the strategy, which I believe to be the remit of that group.

Q235 Chair: The strategy board evolved from the FSS transition.

Professor Silverman: Yes. It is called the Forensic Policy Group.

Q236 Chair: I presume it must have a strategic focus. What is that?

Andrew Rennison: On the agenda this morning they are talking about science, innovation and strategy. We are talking about quality issues.

Q237 Chair: So we might get an answer tomorrow morning.

Andrew Rennison: Yes. It is early days for the group, but it is an encouraging start. I sincerely hope that we do see a strategy emerging out of this sooner rather than later, but they are talking about market quality issues; my role and how we are going to put that on to a statutory footing; and work around the implementation of the Protection of Freedoms Act. They are very topical issues.

Q238 Chair: Professor Silverman, you mentioned some of the stakeholders involved. How are scientific interests specifically represented on that group?

Professor Silverman: The group is not majority science by any means. The group is chaired by Stephen Webb, to whom I understand you will be speaking next week, so he will be able to tell you in detail how the committee works. Alan Pratt, who is the director for science and engineering technology and is my deputy, sits on the group. Rob Colman, who is head of the Centre for Applied Science and Technology, sits on it, and now we also have within Home Office Science the national DNA database delivery unit, the head of which, Kirsty Faulkner, sits on the group. The group has scientific input into its discussions, and I am satisfied that that is at a level where they can make meaningful progress.

For example, this morning—I will be glad to talk about it in more detail—there is a full list of different scientific activities that CAST is doing, which support forensics right across the board. I am happy to discuss those, if you would like more details of them. We are making sure that this board is fully sighted on all the different aspects of work that we can provide to support them in their work.

Q239 Chair: What is the mechanism for it pulling in information from all of the diverse interests?

Professor Silverman: The other stakeholders. Andrew sits on the board.

Andrew Rennison: There is an ongoing debate about whether the commercial providers should sit on that group. They do not at the moment, but plenty of other scientists do.

Q240 Chair: If they are providing scientific innovation, one would have thought their views ought to be taken into account.

Andrew Rennison: Indeed, and I tend to agree with that, so there is an ongoing debate. They are in the process of forming an operations level group that will sit below it and do more of the day-to-day work, and the early agreement I have reached is that there will be considerably more scientists on that group as well. That tends to be where the more detailed discussions are had anyway.

Q241 Graham Stringer: Professor Silverman, how much is spent on basic forensic science research in this country? Do you know how that is funded?

Professor Silverman: There is a range of different things. You used the words “basic research”. Research goes from the very theoretical, fundamental work, or what is called fundamental work, right through to applications in detail, and it is not always possible to separate those things, so I will talk about research more generally.

First of all, there is work that we do in the Home Office itself. The estimate we have is that CAST spent about £2 million a year. We outsource approximately £1 million to funded projects. In addition, we fund a national DNA database unit for about £1 million, but some of that is offset by income and only some of it is spent on research. We spend about £1 million in support of Andrew Rennison’s work, which he can talk about as well. That is what we spend ourselves.

The Home Office wrote to the forensic service providers to find out how much they were spending on research. Some of them gave us only a percentage of turnover; some said 5% or 9%; one cited 20% to 25%, but, if we add up the actual figures they gave us, we get to about £14 million a year. That is not necessarily all of it; that is not extrapolating to those who did not necessarily reply. Also, in one case they pointed to a product that they said they were working on and that had not been included in the sums they were giving us. So £14 million is a very conservative estimate of the amount spent there.

Q242 Chair: Could I just stop you there and ask whether that is forensic science in its entirety, including, for example, IT forensics, because that is a very small figure if that is the whole thing?

Professor Silverman: I do not think it would include that. As I remember, that is almost entirely on non-IT forensics. This is about work that is provided by people with whom we have service agreements. If I look at who the large players are, they are working mostly on things like DNA and so on; so that is what is there.

The research councils as such—no doubt that is something you would like to discuss—do not earmark money for forensics research because of the Haldane principle. They are quite reluctant to provide earmarked funding. On the other hand, work is done in forensics that will be funded by a whole range of different areas. If we look at my review, which showed all the different pieces of research that had been done across different areas in the research excellence framework, all of those should in principle get some money back from research, from QR, in the research excellence framework. I am sorry about the acronyms, but I imagine that as the Science and Technology Committee you are familiar with them.

In my report, my hope was that, by drawing attention to the way that forensic science is part of so many different areas, it highlights the way in which parts of funding in all those areas will be going to forensic science.

Then the research councils have set in place a special interest group through the Technology Strategy Board. That is not funding as such, and maybe we can talk about that later.

Finally, there is EU funding. We have no specific figures for EU funding, but you will have received submissions. Some of your written submissions point to EU funding. One written submission you have suggests funding for one person of €5 million. One of the forensic science providers is involved in the FP7 programme and is receiving an unspecified amount of funding from that.

I cannot give an overall figure for the amount of money that is going into forensic science research, but I hope that gives an overview of the general picture.

Q243 Graham Stringer: It does. There are a number of follow-up questions. Can you tell us what activities occur in the Centre for Applied Science and Technology and how they differ from work going on in universities, police labs and private sector providers?

Professor Silverman: Let's talk first about fingerprints. We have a unique and long-standing expertise in the recovery and enhancement of fingerprints. That is not about fingerprint comparison or court testimony, but we produce a fingerprint manual, which we have done for many years, that is regarded as an internationally recognised manual of its type. Of the previous version, of which 1,200 were published, three quarters of those went abroad. It has been adopted as standard text by Canada and South Africa, and is widely used within the USA. We have a whole group doing fingerprint development work, and their key customer group is the fingerprint development laboratory within police forces.

People in academia work on the early stage development of fingerprint imaging techniques. We support that, for example, by part-funding PhD students, but our role is to take that knowledge and to test and validate it under operational conditions, and develop best practice procedures that enable these techniques to be developed within the police. This capability has always been within CAST and its predecessor, and it was not something the FSS did. That is an example of something we do. Nobody else does it and has the expertise and experience, and it is a very high priority. That is an example of a piece of work we do, which is not, as it were, the blue-sky stuff done in the academic world, but it is getting that and using it to get it out into practice.

CCTV is another area that is very relevant to Andrew's recent appointment as the surveillance camera commissioner. Again, we have unique and long-standing expertise. We published an operational requirements manual as long ago as 1994. Here, we work in partnership with industry—for example, via the British Security Industry Association. That is not university-type work, but it is working with industry and working directly to support the surveillance camera commissioner.

We do work on the Protection of Freedoms Act and rapid DNA. We are working on determining the most efficient and cost-effective applications for the use of rapid DNA systems. Again, this is not to develop rapid DNA systems, because that is the role of academia and industry, but to work out the best way that those should be used. I am very happy to write in more detail about this.

Q244 Graham Stringer: You have already given us a lot of detail, but that would be very helpful. In your first answer you talked about the research councils. As I understand it, you want forensic science to be a strategic priority within the research councils. Surely, that is in conflict with the Haldane principle. The Government choose areas; they do not choose detailed pieces of work, but they will say they will spend x on astronomy. Surely, the research councils accepting your view that forensic science should be a strategic priority should not be a problem. What was their response?

Professor Silverman: When I suggested in my report that it should be a strategic priority, I meant that some way should be found to make it a priority. The Technology Strategy Board setting up its special interest group is the sort of way that they generally do this. There are lots of good examples in other areas where special interest groups have led on to the formulation and development of research, which then competes for funding, not in the market but in the general situation. I was very pleased that the TSB were prepared to do that, and early indications are that it is going well. It has no money as such associated with it, but it is the way in which our research councils enunciate strategic priorities. Whether it is a Strategic Priority with a capital "S" and a capital "P" I do not know, but it is certainly a strategic priority with lower case "s" and "p", in that the TSB have taken that on board.

Q245 Stephen Mosley: On the special interest group, you seem to be quite positive about it. What expectations do you have long term for what it will actually do?

Professor Silverman: The expectation, or at least the hope, is that it will provide a forum where we can both get better pull and push—better pull in that the actual user communities can become intelligent customers and formulate ideas and questions, which can then be addressed by the academic community. If that works well, my hope is that high-quality scientists will be drawn into this area; that is, people who can decide in which area to work can be drawn into this area. There will be better push because the hope is that the academic work that goes on will become visible to the people who will use it. It is the same principles as in any special interest group, and the whole idea is to draw together these different aspects of the research and development community. All I can say is that in other areas this has worked well, which is why the TSB has devised this as a general approach to different areas of interest.

Q246 Stephen Mosley: I know that when Dr Tully from Principal Forensic Services was in front of us she expressed concern that money was going into research at university level. There was money available for them to investigate cases, but the bit in the middle, turning the research into stuff that is usable by the forensic service providers, is where the weakness is. From what you are saying, I guess that is where the special interest group fits in. Would you agree with Dr Tully?

Professor Silverman: I would agree with her general view that the gap in between—the so-called valley of death—is what is really important. Also, I am sure that in other parts of your work you talk to the research councils and so on, and they will say that is why the Technology Strategy Board is set up the way it is. We know quite well from experience that it is not very easy for the Government to pick winners and fund them, but what they can do is provide a framework within which we can make the valley of death as small as possible, indeed eliminate it if possible, so that you get the join-up and you can transition work smoothly from the original idea to practical application.

Q247 Stephen Mosley: In answer to the previous question, you went over the research market and the amount of money going in. Now we have these smaller private providers, do you see them specifically spending less money in research? Is that the case?

Professor Silverman: No. When we ask the question, they are spending amounts like 5% to 20% of turnover, which seems to me a healthy proportion to be spending on research and development. I am not a commercial expert, but from a naive point of view I would have thought those are quite healthy proportions to be re-investing for the future.

Q248 Chair: We are told by some of the providers that their shareholders will not continue to back that principle unless there is clarity about what the market is.

Professor Silverman: I cannot speculate about the future; I can go only on the evidence.

Q249 Chair: It is a reasonable presumption, isn't it? You would not invest your money in something that you thought had no use, would you?

Professor Silverman: Would I invest my money in something that I thought would have no use? If I were investing my money in a company whose job it was to provide a service and I was told that they were investing a decent percentage in research for the future, I would be quite pleased.

Q250 David Tredinnick: I want to ask you about the relationship with lawyers. Before I do, may I take you back to the first question? I think you said that the Government do not appear to have a strategy at the moment. I was looking through some evidence.

Cellmark Forensics in their evidence said that the Government's strategy was "to allow a private forensic marketplace to develop and to encourage competition between regulated Forensic Service Providers". When we visited one on Monday, it was very obvious that it had been able to expand its business overseas to a large number of countries. I put it to you that there is a Government strategy and that it is working.

Andrew Rennison: I did hint at that in my very first answer. There has been a historical Government strategy, which is about privatisation in the market. That is working, but we have to move beyond that now and look at the viability of the market in the UK and how we manage things here in the future.

Q251 David Tredinnick: Is it difficult for lawyers to evaluate the competence and quality of a forensic scientist or provider?

Andrew Rennison: Yes, it can be. I think it is fascinating how we have gone round in almost a complete circle here. If you read this Committee's report of 2005, where there were some lengthy comments about expert witnesses and evidence and recommendations made, that filtered its way through to the Office for Criminal Justice Reform, which was a joint Home Office/Ministry of Justice team, who did a lot of thinking and consulting on the issue of how we regulate expert witnesses across all prosecution and defence sectors from all regions. They took advice from the Attorney-General and senior judges, and, as a result, made recommendations to Ministers that the solution to this was not a register, but we needed to do further work.

They passed it to the Law Commission, who put it into their programme of work, which I supported over a period of three years. It was a very lengthy, detailed and well-thought-through piece of work. The Law Commission published a consultation paper and a final report in 2011, making what I thought were solid recommendations about how we should manage expert witnesses in the future to give the courts the real powers to manage experts and lawyers the ability to assess them properly. Sadly, that now gathers dust and we are back to the same discussions again as in 2005.

Q252 David Tredinnick: Presumably, you would agree with the Law Commission's 2011 proposals that there should be an admissibility test for expert evidence.

Andrew Rennison: Yes, absolutely.

Q253 David Tredinnick: You stand on that.

Andrew Rennison: Yes; I wholeheartedly agree with that, and the test should be split into two. There are questions around the science being used on that occasion. Is that founded on a proper body of knowledge—the Bonython test in 1984—and is that person also an expert in that field and able to comment on that science?

Q254 David Tredinnick: Is there a lack of scientific literacy among the judiciary that stops scrutiny of forensic evidence? If so, how could the situation be improved?

Andrew Rennison: If I am brutally frank, the answer is that, yes, there is a lack of scientific scrutiny, knowledge and ability. The senior judiciary and lawyers fully accept that. They are not trained scientists. I do have some very good discussions with Lord Justice Thomas and others in the Court of Appeal on exactly these issues. They are looking for all the help they can get. They have given me some pieces of work to do that will help them work their way through this.

Q255 David Tredinnick: Is part of the problem that it is not part of lawyers' training?

Andrew Rennison: And the legal and science cultures can be very different; they look at things very differently. The trick now is to try to find bridges across that. I am in some very early negotiations with a judge who sits on my advisory council and there are conversations I have to take up with the Judicial College, who train the judiciary around what training they can put out.

Q256 David Tredinnick: Do you think there should be some kind of formal assessment arrangement? Do you think we need something like the CRFP again?

Andrew Rennison: No, I do not. CRFP was a register. It was the Government response in the late '90s—1998—toward issues around quality failings in forensic science, but in early 2008, with the benefit of advice from the Attorney-General, the Office for Criminal Justice Reform and others, Ministers took the view that a register was not the solution to managing this.

Q257 David Tredinnick: But would you favour a stamp in the passport—some badge of rank—that goes to a lawyer that says this lawyer is basically accredited and is able to understand evidence, rather than just winging it, as you were saying?

Andrew Rennison: There are two issues. One is whether the lawyer can manage the evidence and it is also whether the expert they are using is competent. You have had quite a bit of evidence about the competence of defence and other experts. Whether you could badge lawyers I don't know; I really don't know whether we could achieve that. But I would like to see some badging of the training for lawyers and information to which they have access to allow them to make some rational decisions.

Q258 Roger Williams: Mr Rennison, you have been the pioneer as far as forensic statutory regulation is concerned. How would you like to see it evolve in the next five years?

Andrew Rennison: I have another year in post, and that will be the end of my six-year tenure. I do not expect to be applying for a further term, but I will wait and see. I have not made a final decision. I would like to see some very clear plans in place for the four to five years after I leave, principally some very clear decisions made and consultation in flow around statutory underpinning for the post. I would like to see very serious thought given to the level and scope of regulation required. Should the role include the regulation of defence expertise? It does not at the moment. I would like to see that absolutely thought through, with very clear plans, and it happening as I leave so that my successor can take it to the next stage.

I think we have reached the stage where I can do all I can reasonably achieve on a voluntary consensus basis. We have achieved a lot; there is a lot of support out there, but we get to the stage where we need some statutory underpinning, particularly in these times of real austerity, to protect the integrity of science when there are other real pressures bearing on us.

Over the next five years, I would like to see the codes of practice I have developed expanded considerably further. There are whole new areas of forensic science that we have not explored. One huge area I am just stepping into, which I think could take another three to five years to resolve, is medical forensics—the examination of victims and suspects, particularly in serious sexual offences. We had a long and very healthy discussion about exactly that at my last advisory council meeting, and we are now pulling together a group to research that. The regulation of standards is very fragmented. There are a lot of very well-intentioned people in very different fields of work doing lots of work, but none of it is co-ordinated and joined together. Therefore, I want a clear plan of action to carry on developing codes of practice, hopefully with some statutory underpinning over the next five years.

Q259 Roger Williams: You have perhaps covered the point I was going to make. Do you think that there should be some regulatory underpinning of the interpretation of results and how they are presented in court, for instance?

Andrew Rennison: Yes, there should, and I have a small group looking at exactly that at the moment. It is possible to go for accreditation around interpretation but it is not used. There is a growing demand for that to be used, but I need to publish some guidance, and we are working on that.

Q260 Roger Williams: You have achieved a great deal through the way in which you have carried out the work, but the Home Office, as I understand it, is committed to consulting on giving you statutory powers. Is there a timetable in the Home Office for that? In Home Office-speak, how much time will that take?

Andrew Rennison: That is a really good question. I will be a bit wiser after this morning's policy group meeting where a paper has been tabled on exactly this issue to explore the scope and extent of regulation. I think we are on a 12-month timetable here, and during those 12 months I would like to see a consultation paper published, with some very clear Government thinking set out, so that when I leave and my successor comes into post they can carry that forward with a very clear course of action set out.

Q261 Chair: You said earlier that accreditation did not cover defence. Can you expand on that?

Andrew Rennison: The focus of my work has been police and the commercial laboratories that feed into the prosecution side of the fence, but, in fairness to many science companies that specialise in working for defence teams, a number have come forward. I do work with them; I do liaise with them. I am in Durham next week meeting with one of them, and I meet with them quite regularly. They have also moved their analytical processes through accreditation, so they have adopted the standards where they can and where they see fit, but that is achieved through discussion, consensus and negotiation with me.

I have tried on a number of occasions to work with the Legal Services Commission to underpin that, because they pay for the majority of this work through the legal aid budgets. There was early interest about three or four years ago. They published a consultation paper in 2004 to try to pin some regulation, through CRFP, to the funds they were handing out, but that all turned into nothing. They waited to see what my codes of practice said.

Having published the codes of practice, I wrote to them again and said, "Would you like to adopt these now as a means of regulating defence expertise?" I had a very polite letter back saying, "No, thank you." They have been through a whole review of their work. They are now pulled much closer back to the Ministry of Justice, and I have been referred to the Ministry of Justice to take up the discussion. That is part of today's discussions around the scope of regulation, which we will have to address with the Ministry of Justice.

Q262 Chair: Is your concern that the lack of take-up would have a negative impact on the criminal justice system?

Andrew Rennison: The lack of take-up of accreditation?

Chair: Yes.

Andrew Rennison: Potentially, yes, but accreditation does not provide all the answers.

Chair: No, absolutely.

Andrew Rennison: I am doing a lot of work with experts in specific areas, who would never go for accreditation. Forensic pathology is an example. We have published standards with the Royal College of Pathologists. We have done some very good work with the Institute for Archaeologists. They have published standards of guidance, which I wholeheartedly

endorse. They have an expert panel who are meeting at the end of this week, where they set qualification standards for their members. We have done exactly the same with the forensic anthropologists. I have a meeting on Friday with the Society of Chiropodists and Podiatrists to do the same for forensic podiatry. Where I can get the professional bodies involved I am absolutely delighted to do so, because they bring to this a whole new level and angle of regulation, which everyone can use. For example, the forensic anthropologists I work very closely with work for the defence as much as they work for the prosecution, but they now have standards they can work to, and they are published.

Q263 Stephen Metcalfe: I want to talk specifically about police forensic labs. When we looked at this before there was concern that police labs were not accredited, whereas commercial providers were. Are all police labs now heading towards accreditation? I know they have set priorities of 2013 and 2015 for DNA and fingerprints. They are all going for that and are going to reach it, are they?

Andrew Rennison: There is a huge programme of work, which I have pushed as hard as I can, which has absolute support from the chief officers leading on this: Chris Sims, Chris Eyre, and John Fletcher, deputy chief constable of Bedfordshire, who leads on the work. There is huge support and commitment to achieve accreditation for these labs. There are now 14 police forces working through accredited labs. About seven labs are accredited, but we are seeing huge numbers of collaboration agreements being signed. Fourteen forces now work through accredited labs, and there are 31 other applications in with UKAS working their way through the system. All of that is absolutely mapped out; it is all on a very complex spreadsheet.

Formerly, the National Policing Improvement Agency—now a team of CAST—lead on that. Bernard has the paper here. There is an absolute commitment from CAST to carry on that work and support police forces through this, because it is a hugely important project. The chief officer leading on it, John Fletcher, has publicly stated that there is an absolute commitment. Their vision is that by 2020 all police forensics will be working to the quality standards that I have set. There are early deadlines, the first of which is November of this year for DNA activities. It is quite clear to me that there is now a risk that some forces will miss that, so we are doing work on what happens then. The answer is very simple: they have to stop doing the work. I believe the only person who can give them permission to carry on is the Secretary of State, because the UK would be in breach of a European instrument. The penalties would be quite significant and the risks huge, but they have had plenty of time to prepare for that and put other strategies into place.

Q264 Stephen Metcalfe: Do we know why they are going to miss that deadline?

Andrew Rennison: It is time and effort.

Q265 Stephen Metcalfe: On their part.

Andrew Rennison: On their part. Two years ago we were keen to have a very clear programme of work here, because I feared that there would be a bunching of effort as we got closer to the deadline, which would make it very difficult, almost impossible, for the United Kingdom Accreditation Service to meet their expectations. That is exactly what they are finding. Despite their best efforts, this bunching is happening and they cannot, quite understandably, commit additional resources at the last minute to achieve that. That is all very clearly mapped out and understood, and the rest could be managed.

Q266 Stephen Metcalfe: I am right in saying that UKAS have put in additional resources to help.

Andrew Rennison: They have. I worked very hard to get UKAS and the police planning together on this. I have had a contract with UKAS to help oil the wheels, quite frankly. I have seen it as being to my benefit to fund some of this work, and we have seen some rewards from that. As a result of the earlier police planning, UKAS recruited three additional dedicated assessors, which has had a very helpful impact.

Q267 Stephen Metcalfe: I had heard it was five.

Andrew Rennison: They might have recruited two more since they last spoke to me.

Q268 Stephen Metcalfe: You talked about some labs missing the deadline of November 2013 for DNA, and then they will not be able to continue. Are any police labs at the moment doing forensic work that are not accredited?

Andrew Rennison: Yes; there are some labs doing it.

Q269 Stephen Metcalfe: Who are they?

Andrew Rennison: I have a long list that we can work through at some stage. I do not think it is right to go through it here in detail, but I can write to you with that further information. In fact I will get the CAST team who lead on the project to liaise with you on that.

I have agreed in the past to some limited screening work, particularly visual examination of items for blood, going ahead in the absence of accreditation. Come November of this year, that will have to be accredited, but it is low-risk work and is subject to very clear guidance that I agreed to. It was published by the MKA 18 months to two years ago. For example, if a police force takes a quite legitimate decision to take items of clothing out of a bag and examine them for blood, they close the door on any other forensic activity. So it has to be a very clear part of their early strategy and thinking to justify their reasons for doing this, but it does save them quite large amounts of money. There is still some swabbing and recovery of evidence going on. The more progressive police forces have that accredited already. I am limited in what I can demand on that until the 2013 deadline, but most forces are on the right track to achieving accreditation.

Q270 Stephen Metcalfe: Changing track slightly, there have been suggestions that it is becoming easier to challenge forensic evidence that has been gathered by police labs because of this accreditation issue. Have you seen any of that?

Andrew Rennison: I have not personally seen that, but it does seem entirely logical. I was fascinated to hear the evidence of—my memory of names is not good, so please bear with me—Michael Turner QC and Richard Atkinson from the Law Society and what they did not know about standards and quality standards. I suspect that they will go away much wiser and might be challenging more in the future. Some lawyers have cottoned on to this. Certainly, when you look at cases in the Court of Appeal, you see more evidence that these issues are being questioned.

Can I share a real issue of disappointment here? Michael Turner QC represents the Criminal Bar Association; Richard Atkinson represents the Criminal Law Committee of the Law Society. Both those organisations have had seats at my advisory council for over four and a half years, and I have done presentations to the Law Society. The gentleman behind Mr Atkinson briefing him invited me in when I did a presentation about two and a half years ago. They listened very intently and promised to get more involved. They have never attended. Sorry, the Criminal Bar Association attended one meeting of my advisory council four and a half to five years ago; they do not attend now. They get reminders of every meeting, so they have every opportunity to be far more involved in this and have more say in what is

happening. I shall be writing to them again to say, “You remain invited to the central table where quality standards are discussed.”

Q271 Stephen Metcalfe: Could I encourage you to speculate why they are not engaged in this process?

Andrew Rennison: I don’t know the answer. Well, I do know the answer from the Criminal Bar Association. I have met with the gentleman nominated to attend from the Criminal Bar Association. He cites that professionally he is far too busy, and he is; he is a very committed QC and has a huge workload. I have said that I am prepared to amend our meeting times and so on to early evenings to try to accommodate some of that, but we will keep trying.

Q272 Chair: Going back to the deadline, it seems to me that the risks go beyond simply the financial penalty. If you were a QC involved in a case post-2015, surely you would be inclined to bring to the judge’s attention the failure of this wretched police force over all these years, despite the pressures from the regulator, to get up to the standards that the regulator has set. Surely, it is bound to become a tool to discredit police forensic evidence, unless they meet those standards.

Andrew Rennison: If the Law Commission work had come to fruition, the courts and others working for them—lawyers and so on—would have far greater ability to question the standards that apply to the evidence that is coming through the system. Of course we will see more questions along those lines, but there are broader risks than that, Chair. There are remaining risks to the quality of the science that is delivered, let alone the question whether or not you are accredited. That is a fairly basic question. The more detailed question would be, “What have you done to manage or avoid contamination in handling these DNA exhibits?” As we move, and we are moving, to the new chemistries in DNA, contamination will become an ever-increasing issue that has to be very carefully managed. Police forces have to be very guarded and careful that they are presenting legitimate evidence that has not been reduced in value because of poor quality work.

Q273 Chair: Where you have a police force, for example, that under the new regime is relying on its third-party provider or itself to archive material—because there is no central system—that will present another chink in the armour, or an advantage to the defence barrister, to challenge the integrity of material that is re-presented in subsequent hearings, won’t it?

Andrew Rennison: That has been a long-standing issue. The record of cold case reviews speaks for itself. There has been a very successful reopening of old cases. In particular, the FSS archive was delved into, samples were found, cases solved and innocent people acquitted. The case of Sean Hodgson a few years ago is an absolutely classic example. There was an archive in existence then. Ten years before he was acquitted the FSS could not find the material. They tried again 10 years later and did find it, which led to him being acquitted. Questions were rightly asked at the time. If there is to be an archive, it has to be a very well-managed one.

Q274 Chair: It has to be well managed.

Andrew Rennison: Well indexed.

Q275 Chair: If it is dispersed and a number of different players take responsibility for their samples, there needs to be a consistent methodology in storing and indexing materials—

Andrew Rennison: Yes, indeed.

Q276 Chair: —so that there cannot be challenges to the integrity of the data, but also so that it can be found. Isn't that fairly obvious?

Andrew Rennison: So it can be found. You have been to the archives on a visit.

Q277 Chair: Yes, but that is dealing only with past cases, isn't it?

Andrew Rennison: And future cases. I am undecided as to whether we need an all-singing-and-all-dancing central archive or whether police forces do this on their own, as long as it is done properly. I have agreed to write the guidance on how samples should be stored and the standards that apply to that.

Q278 Chair: But there needs to be a single indexing system so that police forces across the country can search other people's archives.

Andrew Rennison: Some of that indexing exists already because it is the crimes you are looking for and not necessarily the forensic exhibits. The police work very hard on linking crimes, and I can give you some good examples where there has been successes in that. As Gary Pugh mentioned, you have the DNA database, which links across different samples and cases. The fingerprint database does the same, and now the National Ballistics information system does the same. Very careful thought needs to be given—I am happy to support this—to the benefits of what you want against the costs and effort of achieving that.

Q279 Chair: If you decided that it is okay for the current arrangements to continue, and future cases will be the responsibility of a particular police force to determine, would you include in that the option of the police force entering into a contract with the central archive?

Andrew Rennison: That is one option. I think you heard evidence from others that this is all open for review and is being discussed—and it should be.

Q280 Chair: Certainly the views of the private sector are that that would be just another burden on them and an unreasonable one.

Andrew Rennison: But it is not necessarily just the case files. All of these providers have good electronic information systems of their own, which people can access, but none of that is linked together; so that is worth exploring for the future.

Q281 David Tredinnick: On that point, I am slightly surprised to hear you say you are not too concerned about in which direction this goes. I would have thought that having a central store is much easier. If you are going down the route of having devolved storage of data, there absolutely have to be very clear interfaces, very clear rules and a common information technology system, otherwise we will get back into a situation, which is a notorious problem among police forces, of having incompatible computer systems. Will you comment on that?

Andrew Rennison: It is a good vision to aim for. The police have struggled for years to achieve integration of these computer systems, and it is hugely costly. Perhaps if they are starting afresh it might be a solution. I just think that is part of the ongoing project that has to be thought through very carefully and all the benefits weighed up. I am struggling to see huge benefits achieved from that on what I think the costs would be. Wider issues need to be considered as well; it goes beyond just the commercial providers and the police. What about forensic pathologists and some of the other niche experts? Perhaps that argues in favour of a central archive. I am happy to support the ongoing consideration of that, but I haven't got the answer.

Q282 Chair: Where is the capital going to come from to set up local archives? Isn't that really a waste of money when there is a central resource?

Andrew Rennison: Where would the capital come from for a central resource? It will almost certainly come out of police budgets.

Q283 David Tredinnick: With police and crime commissioners now, I am not sure I see the setting up of an archive as a priority for them. If I go and say there is antisocial behaviour in Barwell and we are fed up with it, that is the kind of issue I hope they would make a priority. I think this is going to go right down the list. I really fear for fragmentation. I do not see how you can have all these little tiny pots of information and have proper co-ordination that is not likely to break down and be very expensive to manage. I just can't see it; it defies logic. Keep it all together and it is easy to access.

Andrew Rennison: That is part of the ongoing debate that has to be had and very carefully thought through against all the costs, because it is the police and crime commissioners whom you have to draw into that debate now, because they will incur that cost, however it is worked out. I do not see the Government paying for it.

Q284 David Tredinnick: I suggest it will not be a very high priority. Moving on to forensic science skills, what impact has the loss of forensic scientists from the profession had on R and D and the criminal justice system?

Andrew Rennison: Without doubt, huge numbers of people have left the profession, and that is bound to have a negative impact. I am seeing a very small positive impact. There are some very resourceful people who have remained in the industry.

Q285 David Tredinnick: But the market was contracting anyway, was it not?

Andrew Rennison: Yes.

Q286 David Tredinnick: Isn't that a natural thing to happen?

Andrew Rennison: Not in those large numbers. We have seen a large number leave the industry in a very short space of time, and it carries on. Some reshaping carries on even now. About 150 staff at LGC Forensics are being consulted on it at the moment. If you put that in the wider context of policing numbers reducing—10,000 police officers have gone in the same period of time; the CPS has lost almost 11% of its resources—all of that is having a huge impact on the investigation of crime and the criminal justice system.

Q287 David Tredinnick: Is that loss of staff attributable solely to the FSS closure, or is there something else there that we are missing?

Andrew Rennison: The single biggest cause of all of this is just reductions in spending; it is budgetary.

Q288 David Tredinnick: It is demand-driven—lack of demand. Demand has collapsed; so people lose their jobs.

Andrew Rennison: Yes, across the board. The Comprehensive Spending Review resulted in police forces being told to reduce by 20% over four years. The vast majority of police forces decreased their spending on forensic science by 20% overnight, and some reduced by a further 15% the following year because the discretionary budget for forensic science was a cash pot that was instantly identified.

Q289 David Tredinnick: Aren't we going to get better value for money here if police give up the turf of some of their localised forensic services and take it to these much bigger

and better-resourced companies? We used to amalgamate small councils to make more efficient councils. What is the point of having small constabularies struggling to maintain not particularly well-resourced facilities? Is not economy of scale very important when you have all these reductions?

Andrew Rennison: Isn't that what they are doing?

Q290 David Tredinnick: I am not sure it is the case. Some police forces are defending their turf and want to maintain the forensics on the grounds that it is local and important for them to have it.

Andrew Rennison: You do see varying patterns of behaviour. I witness some good examples of collaboration among forces to achieve exactly that—economies of scale. The East Midlands is a good example where three forces have done exactly that; Surrey and Sussex and many others are doing the same. I think the route through this is more regional collaborations. Fingerprints is a classic example where huge economies of scale could be achieved.

Q291 Chair: We were told that the north-east is a good example. Would you agree with that?

Andrew Rennison: Yes. Six or more forces have got together and they are collaborating as a single unit. There are huge economies of scale to be made. They are beginning to collaborate on fingerprints; others could do the same. Do we necessarily need 43 fingerprint bureaux around the country, or could we operate with 10 or 12? It is far more efficient in my view, and I know serious thought is being given to that.

Q292 Chair: In the case of fingerprinting, there was an attempt in the north-west to merge several forces, but the prevailing view among fingerprint officers themselves was that they were not worried about the single managerial structure but saw massive disadvantages in focusing on a single location. Fingerprint specialists do not themselves have to be centralised, do they?

Andrew Rennison: I don't see why not. There is resistance to that change, and that is what you have witnessed there. The north-west is taking a different approach to this.

Q293 Chair: I am thinking of it geographically. The travel time to get to a scene of crime does factor into costs.

Andrew Rennison: Yes, but that is managed through another part of the process. I am thinking more in terms of the bureaux. They stay in the office and do the comparison work. It is a very deskbound-type work that could be centralised. I am launching a whole new raft of standards for fingerprints on the 21st of this month. That will cause some of the smaller forces to think how they operate, because there has to be a minimum size in terms of numbers you have to have in place to achieve the standards that I want.

In answer to Mr Tredinnick's comment, yes, of course you can have economies of scale. I think in the future that some of this work will be outsourced as well. Why not? Why would you not want to regionalise and consider outsourcing things like fingerprint work? Historically, it has always been done by the police. Some chief constables have said to me, "Why don't we outsource that in the future?"

Q294 David Tredinnick: How many FSS staff transferred into the Centre for Applied Science and Technology? Could more have been transferred?

Andrew Rennison: I don't know the answer to that.

Professor Silverman: Directly, I think the answer is one, and it was for a project based on type approval of drug-driving devices, which I am very happy to discuss because I think it is a very interesting project. CAST has, on time, put in place what needs to be done so that the Government can introduce a new offence of driving under the influence of drugs, or driving with a certain amount of drugs in the bloodstream. That is ongoing work. I am really delighted with the work that has been done. There is some very good science, which required a lot of investment and very hard work, and I am very pleased with it. I do not think there was any other work within CAST's remit that would have involved taking on staff from the Forensic Science Service, so the short answer is that that was the member of staff taken on.

Q295 Chair: The final question, Mr Rennison, is about the procurement framework. We have heard concerns being expressed about the commoditisation of the process and the argument that we are not going to have a holistic approach to a crime scene as a result of that. We had one very good description from a private provider with some illustrations where, for example, sending a trainer that had a blood mark on it did not give a holistic picture, and all it proved was that there was blood on the trainer, whereas splatter analysis up the inside of the trouser leg should have been associated with it. Isn't commoditisation a problem, and does it not put some of the valuable work of forensics at risk?

Andrew Rennison: It has shifted some of the decision making that historically was done in a forensic science laboratory, where the whole case or exhibits were reviewed. It has shifted that decision making back into the hands of the police force, which makes those decisions on which exhibit to sample from, which to send and the instructions they give to the laboratory. The police are very aware of those risks.

The risk is managed if there are proper bridges of communication—you have heard other witnesses talk about bridges of communication—and if they are working effectively. I have run workshops on this. It is absolutely vital. If that risk is shifted to the police, the laboratories have got to have very good and open lines of communication to discuss the case with the police and advise if they feel it is necessary to do so, and for the police to ask questions. There are varying patterns of behaviour across the country. I see examples of very good communication; in some areas more could be done. What I want to see in the future is that, as accreditation rolls out to police laboratories and the police units handling this, the United Kingdom Accreditation Service—they can and will do this—are assessing the bigger picture, not each organisation in isolation, looking at these bridges of communication and checking whether the whole flow of the case is seeing best value and best practice.

Q296 Chair: But there is a snag, though, isn't there? Let's take that same example. I am the contractor who has been asked to look at the blood on the shoe. As the forensic scientist, I say to you as the purchaser, "Look, Mr Rennison, I think that if you gave me the trousers as well I'd be able to produce much more information." Your procurement manager, who I suspect would not be a scientist and probably not even a serving police officer, would say, "Ah, the private sector would say that, wouldn't they?" We are going to get negative pressures that will potentially damage the process.

Andrew Rennison: And that is a very sad consequence and outcome of the severe budget pressures that these police forces are under. There is a negative consequence to this.

Q297 Chair: So you would be urging chief constables to be very careful of that and make sure there is, using your bridge example, which I accept, a bridge that ensures that the best quality information is obtained.

Andrew Rennison: Yes. There is further work to be done on this. We discussed exactly this at my advisory council in February. The result of that is that we have agreed that I

would run some thread-to-needle audits of cases through the system just to test exactly that. I have had one early discussion. I think there are more discussions to be had with the likes of the National Audit Office. How do you view value for money here? If at the police end upstream you see value for money being achieved, is there any real assessment of impact further downstream, because you have made your savings there? Who has seen the whole picture? I am not sure the whole picture is being seen and properly evaluated at the moment. Further work should be done on that, and I am going to do it.

Q298 Chair: Are you looking at Scotland and Northern Ireland, who are approaching things slightly differently, to determine what works best?

Andrew Rennison: Yes, I am. My role, as you know, is England and Wales, but we reached very early agreements with the authorities in Scotland and Northern Ireland to collaborate. I am regularly in Belfast, and I am regularly in Glasgow talking to Tom Nelson. In fact I am there next week at a conference. Yes, we explore that, and we also look internationally at what works and does not work.

Chair: Thank you very much indeed for your contributions this morning. It has been very interesting.