

# **Justice 1 Committee**

## **3rd Report, 2007 (Session 2)**

### **Inquiry into the Scottish Criminal Record Office and the Scottish Fingerprint Service**

#### **Volume 1: Report**

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# The Scottish Parliament

## **Justice 1 Committee**

### **3rd Report, 2007 (Session 2)**

## **Inquiry into the Scottish Criminal Record Office and the Scottish Fingerprint Service**

**Published by the Scottish Parliament on 15 February 2007**





# The Scottish Parliament

## Justice 1 Committee

### 3rd Report, 2007 (Session 2)

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Christie Smith, Head of Division, Police Common Services, Information Technology, Crime Prevention, Scottish Executive;  
Richard Henderson, Office of the Solicitor to the Scottish Executive.





# The Scottish Parliament

## Justice 1 Committee

### Remit and membership

#### **Remit:**

To consider and report on matters relating to the administration of civil and criminal justice, the reform of the civil and criminal law and such other matters as fall within the responsibility of the Minister for Justice, and the functions of the Lord Advocate other than as head of the systems of criminal prosecution and investigations of deaths in Scotland.

#### **Membership:**

Pauline McNeill (Convener)  
Marlyn Glen  
Mr Bruce McFee  
Margaret Mitchell  
Mrs Mary Mulligan  
Mike Pringle  
Stewart Stevenson (Deputy Convener)

#### **Committee Clerking Team:**

Callum Thomson  
Douglas Wands  
Euan Donald  
Lewis McNaughton  
Allan Campbell





# The Scottish Parliament

## Justice 1 Committee

### 3rd Report, 2007 (Session 2)

#### **Inquiry into the Scottish Criminal Record Office and the Scottish Fingerprint Service**

The Committee reports to the Parliament as follows—

#### **SECTION 1: BACKGROUND AND INTRODUCTION**

##### **Background to the inquiry**

1. On 8 January 1997, Marion Ross was found murdered in her home in Kilmarnock.
2. Shirley McKie, also known as Shirley Cardwell, a Detective Constable with Strathclyde Police, was part of the murder investigation team. In the course of the murder investigation, Scottish Criminal Record Office fingerprint officers identified a mark (given the reference code Y7) on the bathroom doorframe as matching Ms McKie's left thumbprint.
3. Shirley McKie was informed on 11 February 1997 that her left thumbprint had been identified at the crime scene. On that same day, Ms McKie contested the identification, denying that she had ever entered the house.
4. In May 1997, David Asbury was tried for the murder of Marion Ross. Ms McKie gave evidence as part of Mr Asbury's trial. During her evidence she denied that she had entered the deceased's house and further denied that a fingerprint discovered on the bathroom doorframe was her print. Mr Asbury was convicted of murder and sentenced to life imprisonment.
5. At the conclusion of David Asbury's trial, Crown Counsel considered that there was a prima facie basis for considering that Ms McKie had committed perjury. Accordingly, the Procurator Fiscal at Glasgow was instructed to precognose the case and report to Crown Counsel. The report was submitted in 1998 and the then Solicitor General, Colin Boyd, took the decision to prosecute Ms McKie.<sup>1</sup> The basis of the charge was that Ms McKie had been in Marion Ross's house during the course of the police investigation; mark Y7 had been made by

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<sup>1</sup> Lord Boyd of Duncansby, former Lord Advocate, written submission, available in volume 2 of this report

her, and that, therefore, she had lied under oath at the Asbury trial. Ms McKie continued to deny that she had entered the murder scene and left her print on the doorframe.

6. On 14 May 1999, a jury unanimously found Ms McKie not guilty of perjury.

7. In August 2000, Mr Asbury appealed against his conviction and was granted interim liberation pending a full appeal. His conviction for murder was quashed on 14 August 2002. The Crown had not opposed the appeal in light of new analysis of the fingerprint evidence which contradicted the Scottish Criminal Record Office (SCRO) findings.<sup>2</sup>

8. Ms McKie's acquittal triggered a series of inquiries, investigations, reports, media and political campaigns and legal actions over the following seven years. The common thread was the dispute over the identification of mark Y7 but there have been ramifications that have gone far beyond the individual circumstances of one case.

9. The impetus for this inquiry was the decision by Scottish Ministers to settle an action for damages brought by Ms McKie for malicious prosecution. On 7 February 2006 a settlement was reached and Ms McKie accepted damages of £750,000.

10. Following this out-of-court settlement, on 22 February 2006, the Minister for Justice, Cathy Jamieson MSP, told the Parliament—

“Much has been made of the rights and wrongs in this case. I firmly believe that settling with Ms McKie was the right thing to do. It was right for her as fair recompense for all that she has been through. It was right for our fingerprint service and its staff to allow them to move forward as part of a new national forensic service and central police authority and it was right for the Executive as an appropriate settlement that is a defensible use of the public purse.”<sup>3</sup>

11. There was, however, no admission of liability on the part of the Scottish Ministers. The Minister for Justice explained to the Committee the basis for the settlement—

“We did not accept that there had been malicious intent on the part of the SCRO officers, so we were prepared to arrive at a settlement by mutual agreement that allowed us to maintain our position that there had not been malice while accepting that there had been a misidentification. That is the position that we have held.”<sup>4</sup>

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<sup>2</sup> The Criminal Appeal Court made the following Order: "In the Continued Procedural Hearing in the Appeal against Conviction, having heard senior counsel for the appellant and the Advocate Depute, the Court being advised that the Crown could no longer support the conviction Sustained the Appeal and Quashed the conviction; further the Court was advised by the Advocate Depute that no retrial was sought, and Decerned."

<sup>3</sup> *Official Report*, 22 February 2006, c 23347

<sup>4</sup> *Official Report*, Justice 1 Committee, 12 September 2006, c 3709



12. Previously, on 9 February 2006, the First Minister, Jack McConnell MSP, told the Parliament that the identification of mark Y7 was an honest mistake—

“In this case, it is quite clear—and this was accepted in the settlement that was announced on Tuesday—that an honest mistake was made by individuals. I believe that all concerned have accepted that.”<sup>5</sup>

13. Having settled the case, Ministers were understandably keen to draw a line under the affair. It was apparent, however, that not all those concerned accepted that an honest mistake had been made. Despite agreeing to the settlement, it was apparent that neither Ms McKie, nor her father, was willing to believe that an honest mistake was made.

14. Similarly, the SCRO officers who had originally made the identification continued to maintain that they had not made a mistake. At the same time, various experts and supporters from both sides kept up their arguments in the media. There were growing calls for a public inquiry to be held into the case.

15. In the course of her statement the Minister for Justice outlined her opposition to the establishment of a public inquiry into the case—

“A number of members have expressed support for an independent public inquiry. We need to consider carefully whether anything of value could be achieved by such an inquiry, how long it would take and what impact it would have on the process of reform while we were awaiting its outcome.

A statutory inquiry could not rule on any person's civil or criminal liability and it could not rule on whether Ms McKie's claim against the Scottish Ministers would have been successful had she not agreed to settle out of court without admission of liability.

It could not rule on convictions or acquittals that took place in the past nor could it determine whether particular persons who were under investigation were guilty of criminal conduct.

A public inquiry could not change the outcome of the criminal investigation, it could not reverse the findings of the disciplinary investigation and I very much doubt whether it would be the right way to secure further improvement of our fingerprint service.”<sup>6</sup>

16. As part of her statement, the Minister for Justice announced that she had instructed the then interim Chief Executive of the Scottish Police Services Authority, Deputy Chief Constable David Mulhern, to produce, by the end of March 2006, an action plan to develop the Scottish Fingerprint Service as an integrated part of the new Scottish Forensic Science Service from April 2007.

17. At its meeting on 22 February 2006, the Justice 1 Committee considered the impact of the McKie case on the Scottish Criminal Record Office, Scottish

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<sup>5</sup> *Official Report*, 9 February 2006, c 23255

<sup>6</sup> *Official Report*, 9 February 2006, c 23347

Fingerprint Service and wider Scottish justice system and agreed to write to the Minister for Justice, seeking further information.

18. On 8 March, the Parliament agreed by resolution that action needed to be taken to restore public and professional confidence in the Scottish Fingerprint Service but that a public inquiry was not appropriate.<sup>7</sup>

19. At its meeting on 22 March 2006, and following consideration of correspondence received from the Minister for Justice, the Committee agreed to hold an inquiry, with the following remit—

To consider the efficient running of the Scottish Criminal Record Office and Scottish Fingerprint Service; the implications of the McKie case; the operation of SCRO and within that the fingerprint service and public confidence in the standards of fingerprint evidence in Scotland; to scrutinise the implementation of recommendations of Her Majesty's Inspectorate of Constabulary primary inspection report of 2000 and to ensure that their service is efficient and effective; and to scrutinise the Action Plan announced by the Minister for Justice for improvements in fingerprint and forensic services in Scotland.

#### **Purpose of the inquiry**

**20. The purpose of this inquiry has been to contribute to the process of restoring public confidence in the Scottish Fingerprint Service.**

**21. While the Committee was aware of the work being done by David Mulhern, the Committee could not accept that, in the context of the febrile atmosphere which prevailed in the weeks following the settlement of the civil action, the production of an Action Plan for Excellence (following a series of inquiries, inspections and reports in the preceding seven years) would, on its own, be enough to convince the general public that they could have confidence in fingerprint evidence.**

**22. To this end, the Committee considered that the actual process of holding an inquiry could be useful as part of the process to restore public confidence. The Committee considered that the inquiry would be a forum where, put simply, people could have their say. The Committee considered that there would be merit, of itself, in the process of evidence-taking as a means by which opinions could be aired; questions could be put and positions could be clarified.**

**23. The remit of the inquiry is forward-looking and is focussed on the efficiency and effectiveness of SCRO and the Scottish Fingerprint Service.**

**24. At the same time, however, there is a need to see what lessons can be learned from the key events that surrounded the fingerprint identification process in relation to mark Y7 (the fingerprint which was alleged to have**

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<sup>7</sup> Motion S2M-4039

been made by Ms McKie) and the subsequent inquiries, inspections and reports .

25. It was relevant for the inquiry to examine the procedures which were followed by SCRO fingerprint officers in the initial identification of mark Y7 and, more generally, the procedures which were in place in the SCRO Fingerprint Bureau in 1997 and to track how these procedures have changed over the intervening years.

26. The Committee also considered it extremely important to examine the basis on which the Executive chose to settle out-of-court the civil action raised by Ms McKie. This includes examination of the course of events which led to the settlement of the action and also consideration of the explanation given by the Executive as to why it chose to settle out-of-court.

*Issues outwith the scope of the inquiry*

27. It is important to make clear from the outset that there were a number of issues which were outwith the scope of this inquiry.

28. Firstly, it has never been the purpose of this inquiry to pass judgement or otherwise comment on allegations of criminality by any individual. The Committee accepts entirely that this is a matter for the independent prosecution service and, ultimately, the courts. It is not a matter for the legislature.

29. In evidence to the inquiry, Lord Boyd of Duncansby – the Solicitor General and subsequently Lord Advocate throughout the period in question – told the Committee that he stood by the decision to prosecute Ms McKie on the basis of the information known at the time. He told the Committee that while he accepted that lessons could be learned from the way in which trials like this one were conducted, “the right decisions were taken, given the evidence and information that we had at the time” and that having spoken to the advocate depute (Sean Murphy) about the conduct of the trial, “at the time, I would probably have handled the trial in exactly the same way.”<sup>8</sup>

30. However, he did tell the Committee that if he had known then what he knew now then his decision “might well have been different”.<sup>9</sup>

31. The Committee is aware that the view of the former Lord Advocate is not shared by everyone. People are, of course, entitled to their own view on this subject. However the Committee’s opinion is that it is not the function of the Parliament, or one of its committees, to challenge the judgement of the Lord Advocate as head of the independent system of prosecution in respect of individual decisions in relation to individual cases.

32. This means that it was not part of the remit of the inquiry for the Committee to enquire into the individual decisions taken by the former Lord Advocate; advocates depute or other Crown Office employees in relation to prosecution decisions.

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<sup>8</sup> *Official Report*, Justice 1 Committee, 12 September 2006, c 3688

<sup>9</sup> *Official Report*, Justice 1 Committee, 12 September 2006, c 3700

33. It has, therefore, not been part of this inquiry to examine the way in which the Crown Office handled the prosecution of Ms McKie in the perjury trial. Similarly, the Committee has not sought to open up the decision-making process which culminated in the previous Lord Advocate's decisions:

- not to prosecute the SCRO fingerprint officers involved in identifying the mark from the murder scene as that of Ms McKie; or
- not to defend the appeal by David Asbury against his conviction for the murder of Marion Ross.

34. Secondly, it has not been the intention of this inquiry to re-try Shirley McKie.

35. Thirdly, it has not been the purpose of this inquiry to act as a disciplinary tribunal for SCRO employees or anyone else.

36. Fourthly, the rules of the Parliament in relation to cases that are *sub judice*<sup>10</sup> mean that Members of the Parliament (or committees) may not refer to any matter in relation to which legal proceedings are active except to the extent permitted by the Presiding Officer. In relation to this inquiry, this has meant that the Committee was not able to enquire into the status of another mark from the Marion Ross murder case, known by the reference Q12. Its status is relevant to an ongoing civil action and, as such, remains *sub judice*. Accordingly, the Committee has been unable to comment on this mark as part of the inquiry.

### **Evidence-taking process**

#### *Evidence taking process – the need for transparency*

37. From the outset, the Committee was conscious that the inquiry would cover sensitive and deeply contentious matters. It was also obvious that this type of inquiry would be uncomfortable for a number of the parties most closely involved due to the rawness of the subject matter.

38. The Committee has consciously undertaken its inquiry in as transparent a way as was possible. All relevant and timely written evidence was published in full. All evidence-taking sessions were held in public. The Committee fully recognised that in adopting this approach there was the potential for personal criticisms to be made in public which those being criticised considered to be inaccurate or unfounded. The Committee was also cognisant of the potential for evidence to be submitted which was, at best, tangential and, occasionally, irrelevant to the terms of the remit.

39. The Committee considers that its decision to publish all evidence rather than withholding part of the evidence was necessary and appropriate given the public interest in the outcome of the inquiry.

#### *Procedural and legal complexities – powers under the Scotland Act*

**40. In addition to the highly controversial subject matter, the inquiry also threw up a number of procedural and legal issues which, when taken**

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<sup>10</sup> Standing Orders of the Scottish Parliament, Rule 7.5

**together, made the inquiry the most complex undertaken by any parliamentary committee in the history of the Parliament.**

**41. In particular, the Committee has had to grapple with the extent of the Parliament's (and its committees') power to call for witnesses and documents, as provided for by the Scotland Act 1998. Given the constitutional importance of these matters, it is appropriate to comment in this part of the report on some of the more significant challenges which the Committee faced during the course of the evidence-taking phase of the inquiry.**

42. In undertaking the inquiry the Committee took full account of the powers at its disposal under section 23 of the Scotland Act to compel the attendance of witnesses and to call for the production of documents. The Committee at all times was prepared to exercise these powers if evidence it required could not otherwise be obtained. The Committee was also fully aware of the provisions of section 26 of the Act which allowed the Committee to take evidence under oath if required. Witnesses giving evidence were reminded of that power at each evidence session. In the event, the Committee did not find it necessary to exercise these powers.

43. In any inquiry, difficult and competing issues of public interest arise as to what information should be released and in what context. The Committee was conscious that its powers under the Scotland Act to obtain evidence were not unfettered. There are explicit restrictions to that effect in sections 23(9) and 27(3) of the Act. The Committee could not, for example, compel the production of evidence which would attract privilege in court proceedings. However, the Committee did not feel unduly restricted by the operation of these provisions. Had the inquiry been set up in another way, such as an inquiry under the Inquiries Act 2005, statutory restrictions on the production of certain evidence would also have applied.

44. In conducting the inquiry, the Committee has sought to bring into the public domain as much information as possible in relation to the McKie case and the operation of the SCRO Fingerprint Bureau. To this end, the Committee had to assert its legitimate right to have access to documents which had, until this inquiry, not been publicly disclosed. The Committee was involved in vigorous and detailed negotiations to secure access to documents which the Committee considered to be absolutely essential to being able to fulfil the inquiry remit.

45. By seeking evidence on a voluntary basis and in some cases by negotiation, the Committee has been able to obtain a great deal of information and material that had not previously been made public. The Committee is satisfied that its approach to the inquiry was the correct way to proceed.

*The MacLeod and Pass Reports*

46. The Committee was able to obtain from the Minister for Justice previously confidential reports prepared for the Scottish Executive by independent fingerprint experts John MacLeod and Michael Pass. The two reports prepared by John MacLeod concerning mark Y7 had a direct bearing on the decision by Scottish Ministers to reach a negotiated settlement with Shirley McKie.

47. The Minister initially refused to release the reports as she considered that to do so could potentially undermine Ministers' position in future legal proceedings where they required to commission expert reports on a confidential basis.

**48. However, the Committee was adamant that it was in the public interest that these reports should be disclosed. Indeed, the Committee went as far as to agree a formal motion calling upon the Minister for Justice, Cathy Jamieson MSP, to release the documents.<sup>11</sup> Following further negotiation, the Minister agreed to release the reports to the Committee. In so doing, the Minister acknowledged the exceptional background to the inquiry and its great importance to the criminal justice system, the discipline of fingerprinting and to public perceptions of both.<sup>12</sup> The Committee commends the Executive for its recognition of the Committee's position. The Committee took the decision to publish the reports in full.**

*The Mackay Report*

49. The Committee also sought from the Lord Advocate, a copy of the police report prepared by Deputy Chief Constable James Mackay following his criminal investigation into the actions of SCRO fingerprint officers in the McKie case. The substance of the report was already in the public domain following unauthorised disclosure of the Executive Summary which had appeared on a number of websites. The Committee's stated position was that it wished to receive the full report but that it would not make use of any report which had been disclosed without authority. Once again, the Committee agreed a motion calling upon the Lord Advocate to release the report.<sup>13</sup> This request was refused by the Lord Advocate as he considered that reports of police officers to the Procurator Fiscal are protected by common law duties of confidentiality and that to release the report would lead to a process that focussed on the allegations of criminality and the decision to take no proceedings.

50. As previously stated, it was never the intention of the Committee to challenge or otherwise question the decision taken by the then Lord Advocate not to prosecute any individuals on the basis of Mr Mackay's findings. The Committee considers that the independence of the Lord Advocate as head of the prosecution service in Scotland is an essential part of our system of criminal justice.

51. However, the Committee considered that it was legitimate to look at matters such as organisational culture, processes and standards within the SCRO Fingerprint Bureau. The Committee considered that information on these matters would assist the inquiry by allowing the Committee to compare Mr Mackay's conclusions with those of Her Majesty's Inspectorate of Constabulary's Primary Inspection of the SCRO Fingerprint Bureau of May 2000 and the subsequent ACPOS Change Management Review Team of October 2000.

52. Following further correspondence and a meeting between the then Lord Advocate and the Convener, he agreed to release a synopsis of information from the report which related to these matters.

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<sup>11</sup> Motion S2M-04486

<sup>12</sup> Correspondence from the Minister for Justice, 16 June 2006

<sup>13</sup> Motion S2M-04485

53. While the Committee referred to the synopsis provided by the then Lord Advocate, it has been wary of placing too much emphasis on the information contained within the synopsis as the extracts could not be considered in the context of the full report. Given the scope and nature of the Committee's inquiry, the Committee considers that it would have been in the public interest for this report to have been disclosed in its entirety. In particular, this would have allowed the Committee to scrutinise the report and closely question Mr Mackay on its contents when he appeared before the Committee to give evidence. On this basis, the Committee considers that the then Lord Advocate was wrong to withhold the full Mackay report.

*Evidence taken*

54. On 23 March 2006, the Committee issued a call for evidence on the inquiry and received 14 responses. All submissions received were published as a Committee Report on 17 May 2006.<sup>14</sup> A number of supplementary and additional submissions were received after the deadline. Those accepted into evidence by the Committee are published in volume two of the report and are also available on the Scottish Parliament website.<sup>15</sup>

55. The oral evidence sessions were arranged as follows:

Session 1: 12th Meeting, 2006 (Session 2) 26 April

Deputy Chief Constable David Mulhern, then Interim Chief Executive, Scottish Police Services Authority

John McLean, Director, Scottish Criminal Record Office

Ewan Innes, Head of the Scottish Fingerprint Service

Joanne Tierney, Training Manager, Scottish Fingerprint Service

Bruce Grant, Head of Counter Terrorism, Forensic Services, Metropolitan Police

Arie Zeelenberg, Senior Fingerprint Expert, Dutch National Police Force

Danny Greathouse, Department of Homeland Security, USA

Chief Constable Peter Wilson, President, Association of Chief Police Officers in Scotland (ACPOS)

Chief Constable Ian Latimer, Vice President, ACPOS

Session 2: 17th Meeting, 2006 (Session 2) 23 May

Shirley McKie, Iain McKie and Andrew Smith QC

Hugh Ferry, former Head of the Scottish Criminal Record Office

Session 3: 19th Meeting, 2006 (Session 2) 30 May

Hugh Macpherson, Principal Fingerprint Officer, Scottish Fingerprint Service, Glasgow Bureau

Fiona McBride, Fingerprint Officer, Scottish Fingerprint Service, Glasgow Bureau

Anthony McKenna, Fingerprint Officer, Scottish Fingerprint Service, Glasgow Bureau

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<sup>14</sup> Justice 1 Committee, 5th Report, 2006 (Session 2) – Written Evidence received on Scottish Criminal Record Office inquiry (SP Paper 558), available online at:

<http://www.scottish.parliament.uk/business/committees/justice1/reports-06/j1r06-05-00.htm>

<sup>15</sup><http://www.scottish.parliament.uk/business/committees/justice1/ScottishCriminalRecordOfficeInquiryHomepage.htm>

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Charles Stewart, Principal Fingerprint Officer, Scottish Fingerprint Service, Glasgow Bureau

Session 4: 22nd Meeting, 2006 (Session 2) 7 June

Arie Zeelenberg, Senior Fingerprint Expert, Dutch National Police Force and Chairman of the Interpol Fingerprint Expert Monitoring Group

Peter Swann, Independent Fingerprint Expert

Pat Wertheim, Independent Fingerprint Expert

Allan Bayle, Independent Fingerprint Expert

John McGregor, Principal Fingerprint Officer, Scottish Fingerprint Service, Aberdeen Bureau

Jim Aitken, Principal Fingerprint Officer, Scottish Fingerprint Service, Edinburgh Bureau

Ken Clacher, Fingerprint Officer, Scottish Fingerprint Service, Dundee Bureau

Session 5: 24th Meeting, 2006 (Session 2) 20 June

James Mackay, Former Deputy Chief Constable Tayside Police

Natasha Durkin, Solicitor, Shepherd and Wedderburn

Scott Robertson, Former Detective Chief Superintendent, Tayside Police

Sir William Rae, Honorary Secretary, ACPOS

James Black, Human Resources Consultant

Doris Littlejohn, Chair of the Scrutiny Committee

Session 6: 26th Meeting, 2006 (Session 2) 26 June

John MacLeod, Independent Fingerprint Expert

Mike Thompson, Head of National Fingerprint Training, Centrex NTC

Peter Swann, Independent Fingerprint Expert

Malcolm Graham, Independent Fingerprint Expert

John Berry, Independent Fingerprint Expert

Robert Mackenzie, Deputy Head of Bureau, Scottish Fingerprint Service, Glasgow Bureau

Alan Dunbar, Quality Assurance Officer, Scottish Fingerprint Service, Glasgow Bureau

Terry Foley, Senior Fingerprint Officer, Scottish Fingerprint Service, Glasgow Bureau

Alister Geddes, Fingerprint Officer, Scottish Fingerprint Service, Glasgow Bureau

Session 7: 28th Meeting, 2006 (Session 2) 6 September

William Taylor, former HM Chief Inspector of Constabulary in Scotland

Jim Wallace MSP, former Minister for Justice

Deputy Chief Constable David Mulhern, then Interim Chief Executive, Scottish Police Services Authority

Joanne Tierney, Training Manager, Scottish Fingerprint Service

Session 8: 29th Meeting, 2006 (Session 2) 12 September

Lord Boyd of Duncansby, then Lord Advocate

Cathy Jamieson MSP, Minister for Justice.



## **Structure of the report**

56. The remainder of the report is structured as follows—

### **Section Two: Mark Y7**

One of the elements of the remit is to examine the implications of the McKie case. The Committee considers that there is merit in trying to set out in as accessible format as possible a narrative on what happened in relation to mark Y7 and to then set out, in a discursive format, the key issues of dispute between those individuals who consider mark Y7 to have been correctly identified and those who consider that it was misidentified.

Accordingly, in this section, the report sets out the basis for the original identification of mark Y7. The report then discusses the various areas of disagreement that exist over mark Y7. This section of the report also explores what has been said about the professional competence of the SCRO officers in relation to mark Y7.

This section of the report also considers the Scottish Executive's settlement of the civil action for damages brought by Ms McKie. The report sets out a comprehensive account of the legal process that eventually led to the Scottish Executive reaching an out-of-court settlement with Ms McKie.

### **Section 3: Reviews of the SCRO Fingerprint Bureau**

Another element of the remit is to scrutinise the implementation of recommendations made by Her Majesty's Inspectorate of Constabulary in its report following the Primary Inspection of the SCRO Fingerprint Bureau 2000. The inspection was conducted by the then Chief Inspector of Constabulary, William Taylor. He went into great detail about all aspects of how the SCRO Fingerprint Bureau was run and the procedures which were in place at that time. In order to understand how efficient and effective the Scottish Fingerprint Service now is, it is imperative to look back to this 2000 review to see what the key concerns were at that time and how they were subsequently tackled by the SCRO Fingerprint Bureau and Scottish Fingerprint Service in the period up to 2006.

Accordingly, this section of the report is an in-depth analysis of a number of the structural; leadership and management; human resources; procedural and quality assurance issues which the Committee considers to be particularly important.

### **Section 4: The Future of the Scottish Fingerprint Service**

The final element of the remit to give scrutiny to the Action Plan for Excellence for improvements in fingerprint and forensic science services in Scotland. It is a widely shared view that the Scottish Fingerprint Service needs a fresh start and that the implementation of this Action Plan is a crucial part of this process.

This section of the report also considers the baseline review of the Scottish Fingerprint Service conducted by Sir David O'Dowd and the progress made

to date in implementing the various action points contained in the Action Plan.

Finally, this section of the report puts forward the Committee's view on whether the Action Plan for Excellence is fit for purpose and makes recommendations for modifications the Committee considers should be made to strengthen it.

### **Section 5: Key Conclusions and Recommendations**

This section of the report reproduces the Committee's key conclusions and recommendations.

#### *Supporting references*

57. One of the key purposes of the report is to try to set out in a single document what the Committee considers to be the key issues over the 10 year period covered by the report. Given the complexity of the issues at stake, there is a basic but fundamental aim to provide clarity wherever it is possible to do so.

58. As part of this aim, the Committee considered that it would be useful to produce a timeline of the all the key events. This timeline is set out at pages 16-35. Immediately before the timeline is a list of the various people who are referred to during the course of the report. [pages 13-15] By giving the timeline and this list such prominence, it is hoped that this will enable readers to have a more readily digestible picture of events. After the timeline of events is a guide to the fingerprint identification and verification process to assist the reader in understanding the report. Finally, at the end of the report is a glossary of terms [pages 205-208].

#### **Nature of conclusions and recommendations**

59. It is important to note that in the course of charting the key issues, as they appear to the Committee, the Committee has chosen not to draw conclusions on all of the issues which are covered in this report.

60. The Committee considers that some of these matters should properly be left to subject-experts. In these situations, the Committee considers it appropriate simply to draw out, in language that is as accessible as possible, what the issues are and to allow readers to come to their own conclusions.

61. There are, of course, other political and broader policy issues on which it is entirely appropriate for the Committee to draw conclusions and, indeed, make recommendations. It is the aim of the report to do this.

LIST OF PEOPLE REFERENCED IN THE REPORT

<b>Surname</b>	<b>First name</b>	<b>Job title/relation to inquiry</b>
Aitken	Jim	Principal Fingerprint Officer, SFS Edinburgh Bureau
Asbury	David	Prosecuted for murder of Marion Ross; conviction subsequently quashed
Bayle	Allan	Independent Fingerprint expert
Bell	Harry	Director, SCRO - November 1998 to April 2003
Berry	John	Independent Fingerprint expert
Black	James	Human Resources Consultant
Boyd of Duncansby (Lord)	Colin	Lord Advocate - 2000 to 2006
Brown	Andrew	HM Chief Inspector of Constabulary – March 2004 to present
Brown	Lesley Anne	Fingerprint Officer, SCRO/Glasgow Fingerprint Bureau
Bruce	Edward	Fingerprint Officer, SCRO/Glasgow Fingerprint Bureau
Cameron	Roy	HM Chief Inspector of Constabulary - January 2002 to January 2004
Clacher	Ken	Principal Fingerprint Officer, SFS Dundee Bureau
Crowe	Frank	Deputy Crown Agent in HMA v Shirley McKie
Daniels	Peter	Her Majesty's Lay Inspector of Constabulary
Dunbar	Alan	Quality Assurance Officer, SCRO/Glasgow Fingerprint Bureau
Evett	Ian	Forensic Scientist - Co-author of the Evett and Willams report on the 16 point standard
Ferry <sup>16</sup>	Hugh	Head of the SCRO - November 1995 to November 1998
Findlay	Donald	Shirley McKie's QC in HMA v Shirley McKie
Foley	Terry	Senior Fingerprint Officer, SCRO/Glasgow Fingerprint Bureau
Geddes	Alister	Fingerprint Officer, SCRO/Glasgow Fingerprint Bureau
German	Ed	Operator of fingerprint website www.onin.com
Gilchrist	William	Former Regional Procurator Fiscal for North Strathclyde
Graham	Malcolm	Independent Fingerprint expert
Grant	Bruce	Head of Counter-Terrorism Forensic Services, Metropolitan Police
Greathouse	Danny	Department of Homeland Security, USA
Grieve	David	Independent Fingerprint expert
Halliday	David	Fingerprint Officer, SCRO/Glasgow Fingerprint Bureau

<sup>16</sup> Hugh Ferry died on 25 January 2007.

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Hamilton	John	Former Chief Constable, Fife Constabulary and Chair of the Scottish Fingerprint Service Working Group
Hodge (Lord)	Patrick	Presiding Judge in determining award of damages in Shirley McKie against the Scottish Ministers
Innes	Ewan	Head of SFS
Jamieson MSP	Cathy	Minister for Justice - May 2003 to present
Jofre	Shelly	BBC Panorama/Frontline Scotland Reporter
Johnston (Lord)	Allan	Presiding Judge in HMA v Shirley McKie
Latimer	Ian	Chief Constable of Northern Constabulary and Vice President, ACPOS
Leadbetter	Martin	Independent Fingerprint expert
Littlejohn	Doris	Chair of the Scrutiny Committee
Mackay	James	Former Deputy Chief Constable, Tayside Police
Mackenzie	Robert	Deputy Head of SCRO/Glasgow Fingerprint Bureau
MacLeod	John	Independent Fingerprint expert
Macpherson	Hugh	Principal Fingerprint Officer, SCRO/Glasgow Fingerprint Bureau
McBride	Fiona	Fingerprint Officer, SCRO/Glasgow Fingerprint Bureau
McConnell MSP	Jack	First Minister - November 2001 to present
McGregor	John	Principal Fingerprint Officer, SFS Aberdeen Bureau
McInnes	Kenny	Head of the ACPOS Change Management Review Team
McKenna	Anthony	Fingerprint Officer, SCRO/Glasgow Fingerprint Bureau
McKie	Shirley	Prosecuted for perjury - found not guilty by unanimous verdict
McKie	Iain	Father of Shirley McKie
McLean	John	Director, SCRO - April 2005 to May 2006
McClure	Jean	Fingerprint Officer, SCRO/Glasgow Fingerprint Bureau
Mulhern	David	Chief Executive, Scottish Police Services Authority
Murphy	Sean	Prosecuting QC in HMA v Shirley McKie
Nelson	Tom	Director, Scottish Forensic Science Service
O'Dowd	Sir David	HM Chief Inspector of Constabulary for England and Wales – 1996 to 2001
O'Neill	William	Head of SCRO Fingerprint Bureau, November 1995 to October 1997
Padden	Greg	Fingerprint Officer, SCRO/Glasgow Fingerprint Bureau
Pass	Michael	Independent Fingerprint consultant
Rae	Sir William	Chief Constable of Strathclyde Police and Honorary Secretary, ACPOS

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Robertson	Scott	Former Detective Chief Superintendent, Tayside Police
Rolfe	Mervyn	Chairman, Scottish Police Services Authority
Ross	Marion	Murder victim
Rudrud	Torger	Fingerprint Expert, Norwegian National Bureau of Investigation
Russell	David	Peter Swann's solicitor
Smith QC	Andrew	Shirley McKie's QC
Stewart	Charles	Principal Fingerprint Officer, SCRO/Glasgow Fingerprint Bureau
Swann	Peter	Independent Fingerprint expert
Taylor	William	HM Chief Inspector of Constabulary - January 1999 to January 2001
Thompson	Mike	Head of National Fingerprint Training, Centrex NTC
Tierney	Joanne	Training Manager, SFS, 2003 to present
Wallace MSP	Jim	Minister for Justice - 1999 to 2003
Wertheim	Pat	Independent Fingerprint expert
Wheatley (Lord)	John	Presiding Judge in Shirley McKie v. The Strathclyde Joint Police Board and Others
Williams	Ray	Co-author of the Evett and Willams report on the 16 point standard
Wilson	Peter	Chief Constable of Fife Constabulary and President, ACPOS
Zeelenberg	Arie	Senior Fingerprint Expert, Dutch National Police Force

TIMELINE OF EVENTS

1960		
Date	Event/Incident	Source
1960	SCRO was established as a Common Police Service to act as a central repository for criminal records and the national fingerprint collection. The SCRO Controlling Committee was established, chaired by a senior civil servant, with representatives from ACPOS and Her Majesty's Chief Inspector of Constabulary for Scotland (HMCIC).	Written submission to Justice 1 Committee by ACPOS.
1975		
1975	With the amalgamation of forces, SCRO moved to Strathclyde Police Headquarters in Pitt Street, Glasgow. Although little changed in respect of conviction information, the provision of fingerprint services was reshaped. SCRO continued to do all case work for Strathclyde Police and Dumfries and Galloway Constabulary and provided a backup service for Northern Constabulary. The remaining five forces each retained their own fingerprint bureau.	Written submission to Justice 1 Committee by ACPOS.
1991		
1991	Automatic Fingerprint Recognition (AFR) was introduced. It was initially introduced at SCRO in Glasgow and later in Edinburgh, Perth and Aberdeen.	Written submission to Justice 1 Committee by ACPOS.
1995		
1995	Publication of the "Evetts and Williams Report".  In 1988, Ian Evett and Ray Williams, were commissioned by the Home Office to conduct a review of the 16 point standard for fingerprint identification in England and Wales. The report concluded that there was no statistical or logical justification for 16 points.	"A Review of the 16 Point Standard" - Evett and Williams

1996		
Date	Event/Incident	Source
1996	SAGEM Charting PC purchased at a cost of £30,000 to assist the SCRO Fingerprint Bureau in the preparation of visual aids for court presentation purposes.	HMIC Primary Inspection of the SCRO Fingerprint Bureau 2000.
1996	Then Head of the SCRO, Hugh Ferry, raised concerns over impending difficulties within the SCRO Fingerprint Bureau concerning resources, which required urgent resolution to prevent a serious reduction in the quality of service provided by the Bureau.	Written submission to Justice 1 Committee by ACPOS.  ACPOS Presidential Review Group – Change Management Review Team – Scrutiny Report
1997		
8 January 1997	Marion Ross was found murdered in her home at 43 Irvine Road, Kilmarnock. Her body was found beneath a doorframe going into the bathroom from the hall.	Written submission to Justice 1 Committee by ACPOS.  Written submission to the Justice 1 Committee by Hugh Macpherson
January 1997	Mark XF was developed on a Christmas tag from the crime scene. The mark was identified as belonging to David Asbury.	Written submission to the Justice 1 Committee by Hugh Macpherson
16 January 1997	Mark Y7, which was later identified as Shirley McKie's left thumbprint, was sent to the SCRO for elimination purposes.	Shirley McKie v Scottish Ministers – Closed Record
22 January 1997	David Asbury was arrested. A biscuit tin containing money was recovered from his home.	Written submission to the Justice 1 Committee from Digby Brown Solicitors
31 January 1997	SCRO fingerprint officers identified mark QI2 on the biscuit tin having been made by Marion Ross.	Written submission to the Justice 1 Committee from Digby Brown Solicitors

1997 (continued)		
Date	Event/Incident	Source
February 1997	Alistair Geddes and Robert Mackenzie visited Kilmarnock Police Station in order to obtain the list of police officers with legitimate access to the locus of the crime scene. Shirley McKie's name was on that list.	Written submission to the Justice 1 Committee by Hugh Macpherson
6 February 1997	SCRO requested ten prints from Shirley McKie as they were not held in Police records.	Shirley McKie v Scottish Ministers – Closed Record
10 February 1997	Hugh Macpherson was the first SCRO fingerprint expert to identify mark Y7 as belonging to Shirley McKie. He decided to apply the 16 point standard due to the proximity of the mark to the body at the locus.	Written submission to the Justice 1 Committee by Hugh Macpherson  Shirley McKie v Scottish Ministers – Closed Record
11 February 1997	Alistair Geddes was the first expert asked to verify Hugh Macpherson's findings in relation to mark Y7. He eliminated it, however, he was unable to meet the 16 point standard, finding only 10 points of similarity. Hugh Macpherson sought to find other experts who could find 16 points in sequence and agreement.	Written submission to the Justice 1 Committee by Hugh Macpherson  Shirley McKie v Scottish Ministers – Closed Record
11 February 1997	Charles Stewart, Fiona McBride and Anthony McKenna checked mark Y7 and verified Hugh Macpherson's identification, finding 16 points of similarity. The identification was telephoned to the incident room.	Written submission to the Justice 1 Committee by Hugh Macpherson
11 February 1997	The Senior Investigating Officer (SIO) was notified of the elimination of mark Y7 to Shirley McKie.	Shirley McKie v Scottish Ministers – Closed Record
11 February 1997	The SIO requested a statement from Shirley McKie with regard to her presence at the scene of the crime.	Written submission to the Justice 1 Committee by Digby Brown



1997 (continued)		
Date	Event/Incident	Source
11 February 1997	Shirley McKie was told of the identification. She denied having ever been in the murder house.	Written submission to Justice Committee 1 by Iain McKie
17 February 1997	The Deputy Divisional Commander at Kilmarnock contacted William O'Neill, then Head of the SCRO Fingerprint Bureau, to ask him to have mark Y7 re-examined in the presence of Shirley McKie. Mr O'Neill was told that Iain McKie was with the Deputy Divisional Commander at the time of the call. William O'Neill suggested that the Deputy Divisional Commander 'pulled rank' on him and he reluctantly agreed to have the mark re-examined in the presence of Shirley McKie.	Written submission to the Justice 1 Committee by William O'Neill
17 February 1997	Robert Mackenzie examined mark Y7 and confirmed that it was a match for the left thumbprint of Shirley McKie.	Justice 1 submissions - Precognition of Robert Mackenzie
17 February 1997	Alan Dunbar in his capacity as Quality Assurance officer was asked by William O'Neill to re-examine mark Y7 which had already been eliminated. He too eliminated the mark as the left thumbprint of Shirley McKie.	Official Report, Justice 1 Committee, 26 June 2006 Column 3554
17 February 1997	William O'Neill instructed Alan Dunbar to set up what has been termed a 'blind test' or 'blind trial'.	Official Report of the Justice 1 Committee, 26 June 2006 Column 3554

1997 (continued)		
Date	Event/Incident	Source
17 February 1997	Alan Dunbar asked the late shift experts on 17 February to undertake the blind test. Experts Greg Padden, Jean McClure, Terry Foley and Edward Bruce took part in the blind test. Edward Bruce and Terry Foley eliminated mark Y7 as having been made by the left thumb of Shirley McKie. Greg Padden and Jean McClure were unable to eliminate the mark.	Precognition of Robert Mackenzie and Written submission to the Justice 1 Committee by Digby Brown Solicitors  Written evidence from Greg Padden and Jean McLure
18 February 1997	Further to William O'Neill's contact with the Deputy Divisional Commander at Kilmarnock on 17 February, Hugh Ferry intervened, and contacted the Deputy Divisional Commander. Mr Ferry agreed to have the mark reviewed but not in the presence of Shirley McKie.	Written submission to the Justice 1 Committee by William O'Neill
18 February 1997	Robert Mackenzie was summoned to Hugh Ferry's office regarding mark Y7. In his written submission, Robert Mackenzie suggested that Hugh Ferry was agitated and threatening. Hugh Ferry made clear to him that Ms McKie's career was at stake.	Precognition of Robert Mackenzie
18 February 1997	Mark Y7 was re photographed and a new set of elimination prints were taken.	Written submission to the Justice 1 Committee by Digby Brown Solicitors
18 February 1997	Robert Mackenzie and Alan Dunbar were asked to re-examine mark Y7 with the new set of ten prints and the new photograph of mark Y7.	Official Report of the Justice 1 Committee, 26 June 2006 Column 3554
18 February 1997	Robert Mackenzie confirmed to Hugh Ferry by telephone that Y7 matched Shirley McKie's left thumbprint. A comparison was made to eliminate the mark, but not to the 16 point standard.	Precognition of Robert Mackenzie

1997 (continued)		
Date	Event/Incident	Source
April 1997	Electronic capture of fingerprint impressions through Livescan, a national system which allowed an individual's fingerprints to be captured by optical and electronic scanning, was introduced to all forces in Scotland.	Written submission to Justice 1 Committee by ACPOS.
May 1997	SCRO Controlling Committee established the Scottish Fingerprint Service Working Group, led by then Chief Constable of Fife Constabulary, Mr John Hamilton, to examine, among other things, the potential impact of Automatic Fingerprint Recognition (AFR), Livescan and other technical developments on fingerprint services in Scotland, and to make appropriate recommendations for the future.	HMIC Primary Inspection of the SCRO Fingerprint Bureau 2000.
1 May 1997	<p>Malcolm Graham was instructed by Mackintosh and Wylie solicitors to examine fingerprint productions in connection with the case against David Asbury, and provide a report.</p> <p>Malcolm Graham examined books of photographs of fingerprints and joint forensic reports relating to the fingerprint identifications, including mark Y7, at the request of Ms Lesley Dowdalls, Mr Asbury's solicitor.</p> <p>Malcolm Graham concluded that the mark was the fragment of the tip of a left thumb and compared it with the fingerprints of Shirley McKie (Cardwell) and agreed with the identification. He was also asked to determine whether or not it could have been transferred from the biscuit tin found at Mr Asbury's house. He was convinced that it was not transferred from there to the doorframe.</p>	Report on the examination of fingerprints. Malcolm Graham. 17 May 1997 (as submitted by Digby Brown solicitors).

1997 (continued)		
Date	Event/Incident	Source
12 May 1997	<p>David Asbury was sentenced to life imprisonment for the murder of Marion Ross. At David Asbury's trial, fingerprint experts from SCRO gave evidence that mark Y7 had been eliminated as that of Shirley McKie. Shirley McKie, in her evidence, stated that she had not been inside the house beyond the front porch and could not therefore have left her fingerprint where it was said to have been found.</p> <p>Following the murder trial there was an investigation on the basis that Shirley McKie may have given perjured evidence. She was later arrested and charged with perjury based on her denial that she was inside the house while the fingerprint evidence gave conclusive probative evidence that she had.</p>	Written submission to Justice 1 Committee by ACPOS.
1998		
March 1998	<p>Scottish Fingerprint Service Working Group reported. It identified that major restructuring of Scottish fingerprint services was required.</p> <p>It recommended an implementation strategy to launch the next stage of the development of fingerprint services in Scotland. Independent consultants, Leishman Management Consulting, were contracted to undertake a two stage process to carry out this work.</p>	Written submission to Justice 1 Committee by ACPOS.
16 March 1998	Home Office Research and Development Branch (Mr Terry Kent) received original door standard from 43 Irvine Road, Kilmarnock, for specialist photography.	Written submission to the Justice 1 Committee by David Russell 26 June 2006.

1998 (continued)		
Date	Event/Incident	Source
May 1998	Peter Swann met Shirley and Ian McKie.	Written submissions to Justice 1 Committee – made by David Russell on behalf of Peter Swann.
13 May 1998	Mark Y7 was examined by Home Office expert Mr Terry Kent. Mr Kent produced a report on his findings and declared that it was not a 'plant' or a 'forgery'.	Written submission to the Justice 1 Committee by David Russell 26 June 2006  Written submission to Justice Committee 1 by Iain McKie
12 May 1998	Peter Swann retained as Ms McKie's defence fingerprint expert	Written submissions to Justice 1 Committee – made by David Russell on behalf of Peter Swann
November 1998	Harry Bell appointed Director of SCRO	Written submission to the Justice 1 Committee by Harry Bell
December 1998	Leishman Management Consulting concluded stage 1 of the process. They found consideration had not been given to the staffing implications of the introduction of new technology and that SCRO Fingerprint Bureau was unable to cope with its workload. It was recommended that methods were developed to enable the Bureau to cope with its workload.	ACPOS Presidential Review Group – CMRT scrutiny report
1999		
2 March 1999	Peter Swann attended offices of Levy and Macrae (solicitors to Shirley McKie) in Glasgow.	Written submissions to Justice 1 Committee by David Russell on behalf of Peter Swann.
2 March 1999	At the High Court of Judiciary in Glasgow, Peter Swann examined the door standard, an actual size photograph of mark Y7, and other exhibits connected with the case.  Mr Swann confirmed to Donald Findlay QC that the mark was genuine and matched Shirley McKie. Donald Findlay terminated the meeting.	Written submissions to Justice 1 Committee – made by David Russell on behalf of Peter Swann.

1999 (continued)		
Date	Event/Incident	Source
3 March 1999	Levy and MacRae provided an original left thumbprint of Shirley McKie to Peter Swann.	Written submissions to Justice 1 Committee –by David Russell on behalf of Peter Swann.
16 March 1999	Peter Swann wrote to Levy and MacRae providing them with two fingerprint reports each dated 16 March 1999.	Written submissions to Justice 1 Committee –by David Russell on behalf of Peter Swann.
March 1999	Mark Y7 was examined by defence fingerprint experts Pat Wertheim and David Grieve.  David Grieve and Pat Wertheim were both of the view that mark Y7 was not made by Shirley McKie.	Written submission to Justice Committee 1 by Iain McKie
21 April 1999	Shirley McKie's trial for perjury commenced at the High Court in Glasgow.	Opinion of Lord Wheatley, Court of Session, 24 December 2003, McKie v The Strathclyde Joint Police Board and Others
11 May 1999	Pat Wertheim and David Grieve gave evidence for the defence at the trial of Shirley McKie.	Written submissions to Justice 1 Committee – by David Russell on behalf of Peter Swann.
14 May 1999	Shirley McKie was found not guilty of perjury by a unanimous verdict.	Written submission to Justice 1 Committee by ACPOS.  Court of Session Opinion, 24 December 2003.
May 1999	Following the not guilty verdict, Harry Bell directed Robert Mackenzie to re-examine mark Y7. Robert Mackenzie re-confirmed his opinion that mark Y7 was a match for the left thumbprint of Shirley McKie.	Written submission to Justice 1 by Harry Bell

1999 (continued)		
Date	Event/Incident	Source
20 May 1999	<p>At the instigation of Mr Bell, a meeting took place at SCRO with the Deputy Crown Agent and prosecuting Advocate in Shirley McKie's perjury trial. The prosecuting Advocate commented that nothing in the McKie case affected the legal framework surrounding fingerprint evidence. The Crown was satisfied with the evidence of the SCRO officers. Concern was, however, raised about the projection facilities used in the court.</p> <p>Following the meeting at SCRO Mr Bell wrote to all Chief Constables in Scotland and HMIC outlining the actions he had taken and the opinion of the Crown.</p>	Written submission to Justice 1 by Harry Bell
June 1999	Leishman Management Consulting completed the second stage of their work. They concluded that there was a need for a more modern structure of accountable management to enable the SCRO Fingerprint Bureau to develop and respond to the needs of those it served.	ACPOS Presidential Review Group – CMRT scrutiny report
November 1999	The first meeting of the 8 Force Standard Working Group (8FSWG) was convened by John Hamilton, Chief Constable, Fife Constabulary	Written submission to Justice 1 Committee by ACPOS.
December 1999	BBC Scotland engaged four English experts (Ron Cook, Frank Reed, Frank Williams and Ray Broadstock) to independently examine the 'Shirley McKie mark'. They unanimously concluded that, 'the mark was not made by Shirley McKie'.	<p>Written submission to Justice Committee 1 by Iain McKie</p> <p>Written submission to Justice 1 Committee by Shelly Jofre</p>

2000		
Date	Event/Incident	Source
January 2000	14 Lothian and Borders Experts wrote to the Justice Minister and Lord Hardie to highlight their concerns about the identification of mark Y7. They stated that: "At best the apparent 'misidentification' is a display of gross incompetence by not one but several experts within the bureau. At worst it bears all the hallmarks of a conspiracy of a nature unparalleled in the history of fingerprints." Their conclusions were based on the material used by Pat Wertheim, which one of the Edinburgh experts sourced from him.	Official Report of the Justice 1 Committee 7 June 2006, c 3397
18 January 2000	BBC Frontline Scotland programme on the misidentification of Shirley McKie's mark was broadcast.	Written submission to Justice 1 Committee by ACPOS.
7 February 2000	ACPOS Council meeting was held at which chief constables discussed the furore surrounding the identification of mark Y7.	Official Report of the Justice 1 Committee, 20 June 2006, c 3434
7 February 2000	SCRO Executive Committee meeting was held. At this meeting it was decided that HMIC should be asked to commission an independent assessment of mark Y7.	Official Report of the Justice 1 Committee, 20 June 2006, c 3434
23 February 2000	William Taylor, HM Chief Inspector of Constabulary, agreed to bring forward the formal inspection of SCRO Fingerprint Bureau.	Written submission to Justice 1 Committee by ACPOS.
24 February 2000	The Minister for Justice, Jim Wallace, stated in response to a written parliamentary question that the terms of reference for a review by HMIC of the standards and quality of work within the Fingerprint Section of the Scottish Criminal Record Office would be announced shortly and that the review would cover the case of Shirley McKie.	Response to question S10-1189 - Allan Wilson (Cunninghame North) (Lab)



2000 (continued)		
Date	Event/Incident	Source
April 2000	Following discussions with the SCRO Executive Committee, the Crown and the Scottish Executive, HMIC agreed that the primary inspection of SCRO planned for December 2000 would be brought forward but only in respect of the Fingerprint Bureau. The McKie case would be examined with a number of others (24 in total) with a view to informing HMIC about the efficacy of the processes involved in making an elimination or identification and the subsequent presentation of evidence in court. In addition HMIC would arrange and oversee a further examination of the disputed identification by experts not previously involved with the case.	HMIC Primary Inspection of the SCRO Fingerprint Bureau 2000
30 May 2000	Use of charting PC suspended in SCRO. The purpose of this PC, which was first introduced in 1996, was to assist in the presentation of fingerprint evidence for court purposes. However, the images it produced were not considered to be sharp enough and it was removed from operation.	HMIC Primary Inspection of the SCRO Fingerprint Bureau 2000
June 2000	Two independent international experts, Arie Zeelenberg and Torger Rudrud, asked by HM Chief Inspector Of Constabulary to examine mark Y7 stated that the mark was not made by Shirley McKie and, <i>'that decision could have been reached at an early point in the comparison processes.'</i>	HMIC Primary Inspection of the SCRO Fingerprint Bureau 2000
21 June 2000	William Taylor, HM Chief Inspector of Constabulary, met with key stakeholders, including ACPOS office bearers, and outlined his emerging findings.	Official Report of the Justice 1 Committee, 6 September 2006, c 3635  Written submission to Justice 1 Committee by ACPOS.
21 June 2000	ACPOS established a Presidential review group (APRG) in response to the HMIC emerging findings.	Scottish Parliament Official Report 22 June 2000

2000 (continued)		
Date	Event/Incident	Source
22 June 2000	Before a public announcement was made on the emerging findings, HM Chief Inspector of Constabulary's lead staff officer made a courtesy call to the McKies to advise them of the findings.	Justice 1 Committee Official Report 6 September 2006 c 3635
22 June 2000	William Taylor, HM Chief Inspector of Constabulary, publicly announced his emerging findings following the inspection of the SCRO Fingerprint Bureau.	Scottish Parliament Official Report, 22 June 2000
22 June 2000	The Minister for Justice, Jim Wallace, and the Lord Advocate responded to HM Chief Inspector of Constabulary's findings in the Scottish Parliament. The Minister also apologised to Shirley McKie for the suffering she had endured. In the course of this response, the Minister for Justice informed the Parliament that the Inspection had concluded that the SCRO Fingerprint Bureau was 'not fully efficient and effective'.	Scottish Parliament Official Report 22 June 2000
22 June 2000	The Lord Advocate directed that all current and future SCRO identifications should be independently checked (this requirement lasted 13 months).  A total of 2,246 cases were examined and the identification of 6,894 marks containing 10,449 impressions were verified. In each case the accuracy of the verification was confirmed.	Written submission from Hugh McPherson to Justice 1 Committee.  Scottish Parliament Official Report 22 June 2000  Written submission to the Justice 1 Committee by ACPOS
3 July 2000	The ACPOS Presidential Review Group subsequently established two teams. Mr Kenny McInnes, then Deputy Chief Constable, Fife Constabulary, was appointed to lead an ACPOS Change Management Review Team in undertaking a 90-day scrutiny of SCRO, while Mr James Mackay, then Deputy Chief Constable of Tayside Police, was appointed to lead the investigation of the circumstances surrounding the fingerprint identification.	Written submission to Justice 1 Committee by ACPOS.

2000 (continued)		
Date	Event/Incident	Source
6 July 2000	<p>The Lord Advocate instructed Mr William Gilchrist, then Regional Procurator Fiscal for North Strathclyde, to inquire into allegations of criminal conduct made by Shirley McKie's father to the Minister for Justice in a letter of 26 June.</p> <p>DCC James Mackay, already undertaking an investigation on behalf of ACPOS in terms of the identification of mark Y7, supported William Gilchrist in his inquiries.</p>	<p>Written submission to Justice 1 Committee by ACPOS.</p> <p>Correspondence from Mr McKie to the Minister for Justice 26 June 2000 c. 3585</p>
13 July 2000	<p>Malcolm Graham wrote to Iain McKie stating he 'had made a terrible mistake' in terms of the identification of mark Y7. He later retracted this apology and re-asserted his initial contention that mark Y7 was a match for Shirley McKie's left thumbprint.</p>	<p>Written submission to the Justice 1 Committee by Digby Brown Official Report Justice 1 Committee 26 June</p>
3 August 2000	<p>SCRO Executive Committee decided to suspend Hugh Macpherson, Charles Stewart, Fiona McBride and Anthony McKenna, on a precautionary basis</p>	<p>Written submission to Justice 1 Committee by ACPOS.</p>
3 August 2000	<p>A retrospective examination of historical cases involving Hugh Macpherson, Charles Stewart, Anthony McKenna and Fiona McBride was commenced. No errors were found.</p>	<p>Written submission to Justice 1 Committee by ACPOS.</p>

2000 (continued)		
Date	Event/Incident	Source
15 August 2000	<p>Presentations were given at the Scottish Police College at Tulliallan by Robert Mackenzie and Alan Dunbar from the SCRO and Arie Zeelenberg and Torger Rudrud who were invited by HM Chief Inspector of Constabulary to consider mark Y7 as part of his inspection.</p> <p>Neither side accepted the other's conclusions.</p> <p>Both James Mackay and William Gilchrist attended the event as observers.</p>	Notes of ACPOS Facilitated meeting at Tulliallan
22 August 2000	David Asbury was granted interim liberation by the Court of Criminal Appeal pending a full appeal in respect of his conviction of the murder of Marion Ross.	Written submission to Justice 1 Committee by ACPOS.
September 2000	Alan Dunbar and Robert Mackenzie were put on non-operational duties.	Strathclyde Police Joint Board Scrutiny Committee Investigation Report – 'The Black Report'
14 September 2000	The HMIC report of the SCRO Fingerprint Bureau Primary Inspection was published.	Written submission to Justice 1 Committee by ACPOS.
14 September 2000	Sir William Rae, then Chief Constable of Dumfries and Galloway and President of ACPOS, met the McKie family and personally apologised for the trauma and distress.	Official Report Justice 1 Committee 20 June 2006 Written submission to Justice 1 Committee by ACPOS.
October 2000	'The Mackay Report' was submitted to William Gilchrist, the Regional Procurator Fiscal for North Strathclyde.	Written submission to Justice 1 Committee by ACPOS.
October 2000	The ACPOS Change Management Review Team published its report building on the conclusions of HMIC.	ACPOS Change Management Review Team report.

2000 (continued)		
Date	Event/Incident	Source
December 2000	HMIC conducted a primary inspection of SCRO as a whole.	HMIC SCRO 2000 Primary Inspection
December 2000	SCRO Fingerprint Bureau achieved ISO 9002 certification.	Written submission to Justice 1 Committee by ACPOS.
2001		
April 2001	Head of the Scottish Fingerprint Service (SFS), Ewan Innes, appointed to lead the work to establish the SFS based on four regional bureaux.	Correspondence from the Scottish Executive, 8 November 2006
24 May 2001	HMIC published report of the Scottish Criminal Record Office 2000 Primary Inspection. HMIC noted, in particular, the action taken in response to the recommendations made following the inspection of the Fingerprint Bureau. Taking into account the performance of SCRO as a whole, HMIC considered SCRO to be efficient and effective.	HMIC SCRO 2000 Primary Inspection
13 June 2001	William Gilchrist, wrote to Peter Swann notifying him of his investigation.	Written submissions to Justice 1 Committee – made by David Russell on behalf of Peter Swann.
16 June 2001	Peter Swann met Mr Gilchrist at the Academy of Experts in London. Mr Gilchrist showed Peter Swann additional material and photographs and copies of reports prepared by fingerprint experts from Holland, Norway and Durham Training School. Peter Swann considered the material produced by Durham and Pat Wertheim as 'totally flawed'.	Written submissions to Justice 1 Committee – made by David Russell on behalf of Peter Swann.
6 July 2001	Lord Advocate withdrew need for independent verification of SCRO fingerprint evidence.	Response to question S1W-16832 Irene Oldfather (Cunninghame South) (Lab).
7 September 2001	The Lord Advocate confirmed that no criminal proceedings were to be taken against the four SCRO fingerprint officers.	Written submission to Justice 1 Committee by ACPOS.

2001 (continued)		
Date	Event/Incident	Source
6 November 2001	Proceedings against Scottish Ministers were served on behalf of Shirley McKie	Correspondence from the Scottish Executive, 8 November 2006
13 December 2001	HMIC published Second Year Review of SCRO Primary Inspection 2000. The review was focussed on the SCRO Primary Inspection, and did not consider the Primary Inspection of the Fingerprint Bureau.	HMIC Second Year Review of SCRO Primary Inspection of 2000
2002		
Early 2002	Work was completed on the establishment of the SFS.	Correspondence from the Scottish Executive, 8 November 2006
14 February 2002	Shirley McKie's action against the Chief Constable of Strathclyde Police on the manner of her arrest was dismissed (appeal was also dismissed on 28 February 2003).	Correspondence from the Scottish Executive, 8 November 2006
19 February 2002	The Lord Advocate, Colin Boyd, in a speech to the Howard League stated, <i>'The BBC Frontline Scotland programme on the case of Shirley McKie ..... helped uncover what were at best serious defects in the analysis of fingerprinting at the Scottish Criminal Record Office and forced the authorities including myself, to act to ensure that such a case would not happen again'</i> .	Official Report, Justice 1 Committee, 12 September 2006
28 February 2002	Strathclyde Joint Police Board (employers of the fingerprint officers) instructed James Black to carry out an independent investigation to consider whether any disciplinary action should be taken against either the four SCRO officers currently suspended or the two officers on non-operational duties. On 28 February 2002 James Black reported that, in his opinion, no disciplinary action should be taken and all six officers should be returned to normal duties.	Strathclyde Police Joint Board Scrutiny Committee Investigation Report – 'The Black Report'

2002 (continued)		
Date	Event/Incident	Source
20 March 2002	On 20 March 2002, Strathclyde Joint Police Board convened a disciplinary committee, to consider the findings of James Black. The Committee, chaired by Doris Littlejohn, concurred with James Black's findings. All six officers were reinstated.	Written submission to Justice 1 Committee by ACPOS.
14 August 2002	David Asbury's conviction was quashed. The Crown did not oppose the appeal.	Written submission to Justice Committee 1 by Iain McKie
18 September 2002	Petition to the Scottish Parliament by four fingerprint experts (Allan Bayle, David Grieve, Arie Zeelenberg and Pat Wertheim) which sought an enquiry of Openness and Accountability within SCRO. No action was taken on the petition.	Written submission to Justice Committee 1 by Iain McKie  Website of the Scottish Parliament's Petitions Committee
2003		
April 2003	Fingerprinting in Scotland was restructured on a four bureaux model under the auspices of the Scottish Fingerprint Service.	Correspondence from the Scottish Executive, 8 November 2006
22 May 2003	HMIC published Third Year Review of the SCRO Primary Inspection 2000. HMIC concluded that it was "satisfied that all the outstanding recommendations are being addressed and that considerable progress has been made. However HMIC would wish to see the impact of ongoing developments before finally discharging."	HMIC Third Year Review of SCRO Primary Inspection of 2000
24 December 2003	Lord Wheatley allowed Shirley McKie's civil action against the SCRO and Scottish Ministers to go to proof.	Written submission to Justice Committee 1 Minister for Justice

2004		
Date	Event/Incident	Source
April 2004	New governance arrangements were put in place for SCRO with the development of a formal national structure for common police services.	Written submission to Justice 1 Committee by ACPOS.
July 2004	The Scottish Executive received a report it had commissioned from John MacLeod on mark Y7. The report had been commissioned to inform its defence in the case brought against it by Shirley McKie.	John MacLeod's first report to the Scottish Executive on mark Y7
2005		
17 March 2005	HMIC published its Primary Inspection report of 2004. The report concluded that the SCRO was efficient and effective, however, recommended further integration within the SFS.	HMIC SCRO 2004 Primary Inspection
1 June 2005	Shirley McKie served formal notice on Scottish Ministers calling on them to admit that Y7 was not her mark.	Correspondence from the Scottish Executive, 8 November 2006
30 June 2005	Scottish Executive wrote to Shirley McKie indicating its willingness to explore settlement of the civil action before proof.	Correspondence from the Scottish Executive, 8 November 2006
13 September 2005	Shirley McKie's solicitors amended her claim to £1.2 million plus interest, with intimation of Minute of Amendment.	Correspondence from the Scottish Executive, 8 November 2006
30 September 2005	Police, Public Order and Criminal Justice (Scotland) Bill was introduced to the Scottish Parliament which proposed new governance arrangements for Scottish Fingerprint Service, namely that it would come under the management of a national forensic science service.	Scottish Parliament Website <a href="http://www.scottish.parliament.uk/business/bills/46-policePublic/index.htm">http://www.scottish.parliament.uk/business/bills/46-policePublic/index.htm</a>



2005 (continued)		
Date	Event/Incident	Source
October 2005	The Scottish Executive received a second report it had commissioned from John MacLeod on mark Y7. Mr MacLeod had been asked to comment further on each of the ridge characteristics on which the SCRO relied to support their identification of mark Y7.	John MacLeod's second report to the Scottish Executive on mark Y7
2006		
30 January 2006	The Scottish Executive received a report it had commissioned from Michael Pass on fingerprint QD2, to inform its defence in the case brought against it by Shirley McKie.	Michael Pass' report to the Scottish Executive on mark QD2
7 February 2006	The Scottish Executive settled the action brought by Shirley McKie for £750,000 on the basis that while there had been a misidentification of mark Y7, there had been no malicious intent on the part of the SCRO officers.	Official Report, Justice 1 Committee, 12 September 2006 c 3710
9 February 2006	First Minister Jack McConnell stated that the identification of the 'McKie print' was an 'honest mistake'.	Official Report, 9 February 2006
2 March 2006	Parliament debated the Shirley McKie case.	Official Report, 2 March 2006
8 March 2006	Scottish Parliament decided against a public inquiry.	Official Report, 8 March 2006
9 March 2006	First Minister answered questions on the settlement in Parliament.	Official Report, 9 March 2006
21 April 2006	Action Plan for Excellence published by David Mulhern, Interim Chief Executive, Scottish Police Services Authority.	Scottish Fingerprint Service website
26 April 2006	Parliamentary Inquiry by Justice 1 Committee commenced.	Official Report, Justice 1 Committee, 26 April 2006
4 September 2006	Non-numeric standard for fingerprint examinations was introduced	Letter from David Mulhern, Interim Chief Executive, SPSA
15 December 2006	HMIC published the report of the Eighteen Month Review Inspection of SCRO.	HMIC SCRO 18 Month Review Inspection 2006

## GUIDE TO THE FINGERPRINT IDENTIFICATION AND VERIFICATION PROCESS



Fig. Fingerprint characteristics

Fingerprint characteristics are features on the friction ridges of the skin. These ridges are formed during development in the womb and remain the same throughout a person's life and for a time after death. Only damage to the skin which penetrates through the outer skin layer, the epidermis, to the inner layer, the dermis, will cause scarring which will permanently alter the ridge alignment.

Friction ridges form patterns in distinct main types, e.g. whorl, loop or arch, which allows for classification under these types. The ridges are not continuous lines but may, for example:

- end (ridge ending);
- split into two ridges or two ridges combine to form one (bifurcations);
- be a very short ridge (island); or
- split into two and a short distance thereafter re-form into one ridge (lake).

In addition the ridges themselves may be a particular shape, thickness or hold distinctive pores.

Every fingerprint will contain some of these ridge characteristics. However, it is the sequence in which these characteristics appear which makes each fingerprint unique.

### **Identification process**

When a fingerprint is found at a scene of crime, the impression left by the owner is referred to as a 'mark'. A 'print' is taken by the police from a person they suspect of committing a crime. Such prints are normally referred to as 'tenprints'.

A fingerprint examiner will compare and evaluate the crime scene 'mark' against the 'print' to determine if they come from the same person.

The identification of a fingerprint is based upon the unique agreement of details between the unknown crime scene mark and the known print on a fingerprint form. The information held within both the unknown mark and the known print is subjected to a process known as Analysis, Comparison, Evaluation and Verification (ACE-V).

#### *Analysis*

The process of comparing fingerprints begins with the expert assessing the mark in question to determine whether it contains sufficient detail to make identification possible. This includes an assessment of factors such as: the surface on which the mark was discovered; the substance it was made by (e.g. sweat from the person who left the mark, blood or oil); the method by which the scene of crime officer or laboratory technician recovered the mark to make it visible for identification; and any areas of distortion or movement caused by the way the mark was deposited as this can affect the appearance of the ridges.

The fingerprint expert will then analyse the mark in more detail looking at the actual flow of the ridges to determine if there is any discernable pattern type. The expert then considers any clues in the mark that may indicate which finger, thumb or area of palm could have left the impression. Pattern and digit determination allow the expert to prioritise those fingerprints to be compared with the mark. The expert will also look at the quality and clarity of the unique features and characteristics that are revealed in the print. At the conclusion of the analysis stage the expert will have made a decision as to the suitability of the print for further examination.

#### *Comparison*

The second stage of the process is comparison. Once the fingerprint expert has analysed the unknown mark and accumulated all the information possible it is then compared to a print on a fingerprint form.

Firstly the patterns are compared. The overall fingerprint pattern does not have sufficient uniqueness to determine an identification. The pattern only functions to narrow the number of possible donors.

If the patterns are found to be in agreement the comparison moves to the next level - the comparison of ridge characteristics. The ridge features are examined to ascertain whether they are in the same position, in the same order and have the same relationship to each other (with none in disagreement) in both the mark and the print. This is known as the coincident sequence.

If any unaccountable disagreement is found the identity cannot be established and the known print will be discounted from the comparison process.

However, if the initial sequences agree in both the mark and the print, the expert will proceed to compare the relative position and location of further characteristics in both, all the time looking for any disagreement in the sequence of characteristics.

The fingerprint expert will also be taking into account the unique features of the ridges themselves looking for agreement between any visible distinctive ridge edge shapes and minute detail.

This process will continue until the expert is satisfied that the comparison process is complete.

#### *Evaluation*

After comparing the unknown mark and the known print, the fingerprint expert will make his or her evaluation. The expert will weigh up all of the information available as a result of the comparison process and determine whether there is unique agreement between the two to confirm identity beyond all reasonable doubt.

There are three possible conclusions of the identification process, namely—

- Identity is established – the mark could only have been made by the person whose tenprint has been matched with it.
- Not identified - the mark could not have been made by that person.
- Unsuitable quality – the clarity of information visible in either the mark or tenprint is of too poor a quality to allow a conclusion to be made.

Prior to introduction of the non-numeric standard, one other conclusion could also be reached—

- Partial or Insufficient Identification - the identification did not meet the sixteen point standard.

#### *Verification*

The next aspect of the identification process is the verification element. This is an independent and complete analysis, comparison and evaluation of both mark and the print which is carried out by a minimum of a further two fingerprint experts.<sup>17</sup>

The verification process is considered by fingerprint experts to be the key to the reliability of fingerprint evidence. It demonstrates that the original conclusions are valid through consistent results from the different experts who have independently analysed, compared and evaluated the information available in both mark and print.

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<sup>17</sup> Until 1999, Scottish fingerprint bureaux procedures required a minimum of three experts to verify the identification of a mark.

### **16 point standard**

In 1953 the Home Office issued guidance on the standard for presentation of fingerprint evidence in court. This guidance was commonly referred to as the '16 point standard' as it required that in any fingerprint identification of a single mark there should exist 16 characteristics in sequence and agreement between the mark and the fingerprint impression against which it is matched.

This 'numeric' standard applied to the presentation of evidence in courts across the United Kingdom until June 2001 when England & Wales adopted a 'non-numeric' standard.

### **Non-numeric standard**

A non-numeric standard for fingerprint identification does not require a specific number of characteristics to be found before an identification can be presented as evidence in court. Fingerprint experts continue to come to their conclusions of identity through a process of analysis, comparison, evaluation and verification of unique features visible in an unknown mark and a known print. The key difference between a numeric and a non-numeric standard, in terms of court presentation of fingerprint evidence, is that an expert will be required to provide more detailed explanation of his or her conclusion on identity and the basis on which this conclusion has been made.

The non-numeric standard has been operated in several jurisdictions worldwide for a number of years. In addition to England & Wales, these include: Canada; USA; parts of Australia; Norway; Latvia; Luxembourg; Switzerland; and Slovakia.

The Scottish Fingerprint Service introduced the non-numeric standard for fingerprint identifications on 4 September 2006.

At the time of its launch in Scotland, the Scottish Fingerprint Service set out what it considered to be the key benefits of the non numeric standard:

- Fingerprint evidence will now be presented in court on every occasion where identity is established
- The fingerprint expert will be able to offer a fuller explanation of how they arrived at their conclusion by discussing all the features revealed rather than simply focusing only on the number of points. This will be more easily understood by the court and, where appropriate, the jury
- The court will be able to consider all the information presented to it and make an informed decision on the identification
- All fingerprint evidence will be presented across Scotland in a clear and consistent style of reporting agreed with the Crown Office and Procurator Fiscal Service.

**Elimination**

As part of the process of seeking to identify marks found during a criminal investigation, fingerprints are taken from people who have had legitimate access to the scene, or who may have legitimately handled evidence. These are commonly referred to as elimination prints.

The purpose of obtaining such prints is to eliminate as many crime scene marks as possible in order that the marks that are not eliminated assume a greater significance due to an increased likelihood that they might have been made by the perpetrator of the crime.

## **SECTION 2: MARK Y7**

### **Introduction**

62. This section of the report deals with the issues that have arisen around mark Y7 (the mark which was alleged to have been made by Shirley McKie).

63. The first element of this section of the report provides an account of how mark Y7 was identified as belonging to Ms McKie by the SCRO Fingerprint Bureau.

64. The second element of this section of the report discusses a number of the areas of dispute which exist between those individuals who contend that mark Y7 was correctly identified and those individuals who contend that it was misidentified.

65. The third element of this section of the report provides an account of the civil action raised by Ms McKie and the out-of-court settlement which was reached with the Scottish Ministers.

66. In the final element of this section of the report, the Committee gives its views on what conclusions can be drawn from the controversy that has surrounded the status of mark Y7.

### **SCRO CONSIDERATION OF MARK Y7**

67. Discussed below is the process by which mark Y7 was identified and then verified by fingerprint experts at the SCRO Fingerprint Bureau.

### **Identification and verification as part of the Marion Ross case**

68. The SCRO Fingerprint Bureau received 428 lifted and photographed marks in relation to the Marion Ross case. Two of the Bureau's fingerprint officers, Hugh Macpherson and Alister Geddes, visited the crime scene to view the marks in their original location. They also visited Kilmarnock Police Station in order to obtain the list of police officers with legitimate access to the locus of the crime scene. Shirley McKie's name was on that list.<sup>18</sup> The Committee understands that the SCRO fingerprint officers had to request a further set of elimination prints for Shirley McKie as they did not have her prints filed in the database of police officers' prints held at SCRO.

69. Hugh Macpherson eliminated mark Y7 when he identified it as the left thumbprint of Shirley McKie. In so doing, he took the decision to apply the 16 point standard to the identification. Alister Geddes was next to consider the mark. In the course of his written submission, Alister Geddes explained to the Committee the process by which he eliminated mark Y7 to the left thumbprint of Shirley McKie—

“At some point Hugh Macpherson requested that I carry out a verification of a scene of crime mark that he had eliminated. The eliminated mark was Y7

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<sup>18</sup> Hugh Macpherson, written evidence, available in *Justice 1 Committee, 5th Report, 2006 (Session 2) - Written evidence received on Scottish Criminal Record Office inquiry* (SP Paper 558)

and the suspected donor was a police officer. I received a photograph of the mark Y7 actual size and the elimination form of Detective Constable Shirley Cardwell or McKie. I carried out my comparison and I was happy to eliminate Y7 as that of the left thumb of Miss McKie. I returned the articles to Mr Macpherson and informed him of my verification.”<sup>19</sup>

70. In the course of Arie Zeelenberg’s report of January 2006, he suggested that Alister Geddes had doubts about the identification of mark Y7.<sup>20</sup> In his written submission Alister Geddes confirmed that he eliminated mark Y7 to Shirley McKie, finding 10 points in sequence and agreement. He refuted Arie Zeelenberg’s allegation that he was unconvinced—

“I was categorically stating that Y7 was identical to the left thumb of Shirley McKie. I was eliminating Y7 from the enquiry as I had confirmed ownership of said mark. At no point in the procedure was any doubt ever expressed by myself on the identification of Y7 as the left thumb of Miss McKie.”<sup>21</sup>

71. While Alister Geddes concurred with Hugh Macpherson that mark Y7 matched the left thumbprint of Shirley McKie and was able to ‘eliminate it’, he could not find 16 points in sequence and agreement.

72. Alister Geddes explained that he focussed his consideration of mark Y7 on the bottom part of the mark. He informed the Committee that he was of the view that there was “severe movement” in the mark, and that, as a consequence, he was unable to work from the bottom to the top of the mark.<sup>22</sup> He explained to the Committee that although there was detail in the top part of the mark it was out of sequence with what he had achieved in the bottom part of the mark.<sup>23</sup>

73. Alister Geddes also explained that the tenprint of Shirley McKie’s left thumb from which he was working did not have sufficient detail at the top to allow him to carry out a full comparison with the top part of mark Y7.<sup>24</sup>

74. Alister Geddes explained to the Committee that Hugh Macpherson had sought to demonstrate to him where he could find the additional characteristics, but that he could not see them.<sup>25</sup>

75. However, Alister Geddes indicated that no pressure was placed on him to find 16 points and that as he was unable to find 16 points Hugh Macpherson sought to find others who could meet the 16 point standard.<sup>26</sup>

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<sup>19</sup> Alister Geddes, written evidence, available in *Justice 1 Committee, 5th Report, 2006 (Session 2) - Written evidence received on Scottish Criminal Record Office inquiry* (SP Paper 558)

<sup>20</sup> Arie Zeelenberg, report on mark Y7, January 2006, as submitted by Digby Brown, available in *Justice 1 Committee, 5th Report, 2006 (Session 2) - Written evidence received on Scottish Criminal Record Office inquiry* (SP Paper 558)

<sup>21</sup> Alister Geddes, written evidence

<sup>22</sup> *Official Report*, Justice 1 Committee, 26 June 2006, c 3574

<sup>23</sup> *Ibid*

<sup>24</sup> *Official Report*, Justice 1 Committee, 26 June 2006, c 3574-3575

<sup>25</sup> *Official Report*, Justice 1 Committee, 26 June 2006, c 3562

<sup>26</sup> *Ibid*



76. Charles Stewart, Fiona McBride and Anthony McKenna were then, in turn, invited by Hugh Macpherson to consider the mark.<sup>27</sup>

77. According to Hugh Macpherson's written submission, all three found 16 points of similarity between the mark and the left thumbprint of Shirley McKie.<sup>28</sup>

78. It would appear that, like Alister Geddes, the focus of these three experts' consideration was also on the lower part of the mark. Charles Stewart suggested to the Committee that it was not uncommon to have insufficient detail to enable consideration of the top part of a mark—

“...I have never had a fingerprint form that has been taken high enough to the top of thumb to allow me to fully compare the top of the thumb to see whether it is continuous with the lower part. It could be continuous; it could be that there is slight pressure distortion because the thumb has been put down twice.”<sup>29</sup>

79. On 11 February 1997, after Charles Stewart, Fiona McBride and Anthony McKenna verified his identification of the mark, Hugh Macpherson contacted the Senior Investigating Officer and informed him that mark Y7 had been identified as matching the left thumbprint of Shirley McKie.<sup>30</sup>

80. According to Chief Inspector William O'Neill, Head of the Fingerprint Bureau in 1997, on 17 February 1997 he was called by the Deputy Divisional Commander at Kilmarnock. In his written submission William O'Neill stated that the Deputy Divisional Commander called to request that the mark be re-checked and that this should be done in the presence of Shirley McKie. William O'Neill intimated that Iain McKie (father of Shirley McKie) was with the Deputy Divisional Commander at the time of the call. He stated that he was pressured by the Deputy Divisional Commander into accepting the request to re-examine the mark in the presence of Shirley McKie—

“I was told by him that the request had come from the highest authority. As the Deputy Divisional Commander in Kilmarnock was of a higher rank than me, and insisted, I reluctantly agreed.”<sup>31</sup>

81. On 17 February 1997, Robert Mackenzie, the Deputy Head of the Bureau, and Alan Dunbar, the Quality Assurance and Training Manager, re-examined mark Y7 at the request of William O'Neill. They eliminated mark Y7 as the left thumbprint of Shirley McKie.<sup>32</sup>

82. Again on 17 February 1997, as a further check, William O'Neill instructed Alan Dunbar to facilitate what has become known as the 'blind test'. Some of the

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<sup>27</sup> *Official Report*, Justice 1 Committee, 30 May 2006, c 3210

<sup>28</sup> Hugh Macpherson, written evidence

<sup>29</sup> *Official Report*, Justice 1 Committee, 30 May 2006, c 3239

<sup>30</sup> Hugh Macpherson, written evidence

<sup>31</sup> William O'Neill, supplementary written evidence, available online, at: <http://www.scottish.parliament.uk/business/committees/justice1/ScottishCriminalRecordOfficeInquiryHomepage.htm>

<sup>32</sup> Robert Mackenzie, supplementary written evidence, precognition statement to Tayside Police, available in volume 2 of this report

officers working the late shift that day were enlisted by Alan Dunbar to undertake a 'blind test'. In the averments provided by Shirley McKie's solicitors informing her action against Scottish Ministers, it was suggested that Greg Padden, Jean McClure, Terry Foley and Edward Bruce took part in the blind test.<sup>33</sup> Other evidence presented to the Committee made reference only to Terry Foley and Edward Bruce. However, it should be noted that when, years later, John MacLeod examined this matter, the Scottish Executive provided him with precognition statements from Jean McClure and Greg Padden to inform his consideration of the mark.<sup>34</sup> The Committee obtained written responses from Greg Padden and Jean McClure confirming their involvement in the blind test (see paragraphs 251 – 254).

83. In his written submission to the Committee Terry Foley stated that he was asked by Alan Dunbar to eliminate the print as having been made by the left thumbprint.<sup>35</sup>

84. Terry Foley stated that he eliminated the mark finding 10 points in agreement between mark Y7 and the left thumbprint. Edward Bruce also eliminated the mark. It should be noted that Terry Foley does not suggest at this juncture, that he or his colleagues were aware that the left thumbprint belonged to Shirley McKie.<sup>36</sup>

85. However, according to the averments provided by Shirley McKie's solicitors, neither Jean McClure nor Greg Padden were able to reach a conclusion and could not confirm whether or not the mark was a match for the left thumbprint. This was confirmed by both Jean McClure and Greg Padden in correspondence to the Committee.<sup>37</sup>

86. On 18 February 1997 Hugh Ferry, the Head of the SCRO, contacted the Deputy Divisional Commander at Kilmarnock and advised him that, further to his conversation with William O'Neill, the mark would be re-examined, but that Shirley McKie was not to be in attendance during this process.<sup>38</sup>

87. According to Robert Mackenzie he was called into Hugh Ferry's office and advised that an officer's 'career was at stake' and that he had 'better be correct' in his identification.<sup>39</sup>

88. Following the decision to re-examine the mark, a new set of tenprints were taken from Shirley McKie and the mark was re-photographed. Again according to Robert Mackenzie's precognition, on the morning of 18 February 1997 a further six fingerprint officers, including Robert Mackenzie, Alan Dunbar and David Halliday,

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<sup>33</sup> Digby Brown Solicitors, written evidence, available in *Justice 1 Committee, 5th Report, 2006 (Session 2) - Written evidence received on Scottish Criminal Record Office inquiry* (SP Paper 558)

<sup>34</sup> John MacLeod, report to the Scottish Executive on mark Y7, July 2004, available online, at <http://www.scottish.parliament.uk/business/committees/justice1/ScottishCriminalRecordOfficeInquiryHomepage.htm>

<sup>35</sup> Terry Foley, written evidence, available online, at: <http://www.scottish.parliament.uk/business/committees/justice1/ScottishCriminalRecordOfficeInquiryHomepage.htm>

<sup>36</sup> Ibid

<sup>37</sup> Digby Brown Solicitors, written evidence

<sup>38</sup> William O'Neill, supplementary written evidence

<sup>39</sup> Robert Mackenzie, supplementary written evidence, precognition statement to Tayside Police

re-examined mark Y7. They all eliminated the mark, but not to the 16 point standard. Robert Mackenzie informed Hugh Ferry of these findings.<sup>40</sup>

89. The next SCRO involvement with mark Y7 was in the preparation of the material for David Asbury's trial for the murder of Marion Ross. Charles Stewart and Hugh Macpherson gave evidence at David Asbury's trial. In his written submission, Charles Stewart informed the Committee of what he had been asked to prepare—

“The evidence preparation was unusual in that we had to produce reports and evidence books for everything in the case. This included producing all the insufficient, unidentified and identified marks, which was not something the Procurator Fiscal normally requested. Again, unusually, we also had to produce illustrations for all those persons we had identified marks for against their elimination fingerprint forms.”<sup>41</sup>

### **Identification and verification following the David Asbury trial**

90. Following the conclusion of David Asbury's trial and the subsequent decision to charge Shirley McKie with perjury, SCRO fingerprint officers were invited by the Procurator Fiscal to prepare material for the trial.<sup>42</sup> Hugh Macpherson, Charles Stewart and Fiona McBride subsequently gave evidence at the perjury trial.

91. In his precognition to the Mackay inquiry (given to Tayside police officers on 13 July 2000), Robert Mackenzie noted that his next involvement and the next involvement of any of the SCRO officers was in August 1999 when he examined the enlargements which had been used by the SCRO officers at the perjury trial after they had been returned to the Bureau by the Procurator Fiscal. He suggested that the enlargements produced were of a poor quality due to the limitations of the SAGEM Charting Personal Computer. He suggested that the poor quality of the enlargements undermined the evidence given by the SCRO fingerprint officers in their court presentation at Shirley McKie's perjury trial.<sup>43</sup>

92. Robert Mackenzie also indicated that at this juncture he undertook a further comparison of the mark. Re-examining the mark, he now found 21 characteristics in sequence and agreement. On 7 February 2000, he presented this information to the SCRO Executive Committee.<sup>44</sup>

93. In his precognition statement, Robert Mackenzie stated that, in his opinion, the upper part of the mark was made up of several touches of the left thumb of Shirley Cardwell (McKie).<sup>45</sup>

94. On 15 August 2000, Robert Mackenzie and Alan Dunbar, made a presentation at the Scottish Police College, Tulliallan, on mark Y7 at a meeting facilitated by

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<sup>40</sup> Robert Mackenzie, supplementary written evidence, precognition statement to Tayside Police

<sup>41</sup> Charles Stewart, written evidence, available in volume 2 of this report

<sup>42</sup> Ibid

<sup>43</sup> Robert Mackenzie, supplementary written evidence, precognition statement to Tayside Police

<sup>44</sup> Ibid

<sup>45</sup> Ibid

ACPOS.<sup>46</sup> To undertake these presentations, Robert Mackenzie and Alan Dunbar gave further consideration to the mark. In his oral evidence to the Committee, Robert Mackenzie indicated that in the course of his presentation he focussed on the lower part of the mark and demonstrated to those in attendance that he could find 21 characteristics in sequence and agreement.<sup>47</sup>

95. The next and most recent consideration of the mark undertaken by the SCRO fingerprint officers was as part of the Executive's defence in the civil case brought against it by Shirley McKie. Terry Foley was among those fingerprint officers invited to re-consider the mark. Terry Foley notes that he had never had any doubts about the elimination of mark Y7. He previously found 10 points in sequence and agreement but was now able to find 16 points—

“After examining the enlargements, the only change to my original conclusion, with a further 9 years experience to my credit, is that I now found 16 points characteristics in sequence and agreement.”<sup>48</sup>

### **What others have said about mark Y7**

96. In an effort to understand the dispute which has arisen over the identification of mark Y7 the Committee sought evidence from fingerprint experts who supported the identification made by the SCRO officers and others who considered it to be a misidentification.

97. Like the SCRO fingerprint officers, Peter Swann, John Berry and Malcolm Graham contended that mark Y7 was a match for the left thumbprint of Shirley McKie.

98. In contrast, Pat Wertheim, Arie Zeelenberg, John MacLeod, Allan Bayle, Jim Aitken, Mike Thompson and John McGregor all contended that it was a misidentification. The Committee was told by Arie Zeelenberg that this position is one that is held by a significant number of other fingerprint experts worldwide.<sup>49</sup> However, these were the experts who presented evidence to the Committee and as such it is their opinions that have informed the Committee's consideration of this matter.

99. The Committee also notes that a number of senior figures within the Scottish Criminal Justice system and Scottish Ministers are of the view that it was a misidentification.

100. On 21 June 2000, William Taylor, HM Chief Inspector of Constabulary, held a meeting with Office Bearers from ACPOS and outlined the preliminary findings of his Inspection of the SCRO Fingerprint Bureau. In particular, he advised that the disputed fingerprint in the Shirley McKie case had been examined, at his request, by Arie Zeelenberg and Torger Rudrud, two senior police fingerprint experts from

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<sup>46</sup> Robert Mackenzie, supplementary written evidence, precognition statement to Tayside Police

<sup>47</sup> *Official Report*, Justice 1 Committee, 26 June 2006, c 3589

<sup>48</sup> Terry Foley, written evidence

<sup>49</sup> *Official Report*, Justice 1 Committee, 7 June 2006, c 3357

the Netherlands and Norway respectively. These experts had independently concluded that mark Y7 had definitely not been made by Shirley McKie.<sup>50</sup>

101. In advance of the publication in September 2000 of the formal report by HMIC, Sir William Rae, then incoming President of ACPOS, met with the McKie family and personally apologised for the trauma and distress suffered as a consequence of the misidentification of the fingerprint mark.<sup>51</sup>

102. The Minister for Justice, Cathy Jamieson MSP, advised the Committee that the Scottish Executive's position is that it was a misidentification. She confirmed to the Committee that it was on this basis that the Scottish Executive moved to settle with Shirley McKie.<sup>52</sup> Scottish Ministers did not, however, make a public statement about the misidentification until after the settlement of the civil case in February 2006.

103. After the settlement had been reached with Shirley McKie, the First Minister Jack McConnell MSP made a statement to the Parliament about the misidentification—

“In this case, it is quite clear—and this was accepted in the settlement that was announced on Tuesday—that an honest mistake was made by individuals.”<sup>53</sup>

104. Lastly, David Mulhern, Chief Executive of the Scottish Police Services Authority, in the introduction to his Action Plan for the Scottish Fingerprint Service refers to mark Y7 as a misidentification.

#### MARK Y7: AREAS OF DISPUTE

105. The second element of this section of the report discusses a number of the areas of dispute which exist between those individuals who contend that mark Y7 was correctly identified and those individuals who contend that it was misidentified. The Committee gives consideration to the following areas of dispute—

- the debate about the characteristics of mark Y7;
- the analysis of mark Y7;
- procedures used by SCRO fingerprint officers in the identification and verification of mark Y7; and
- the professional competence of the SCRO fingerprint officers in relation to mark Y7.

106. The Committee was aware that there was a great deal of disagreement on these issues between the SCRO fingerprint officers and other fingerprint experts

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<sup>50</sup> ACPOS, written evidence, available in *Justice 1 Committee, 5th Report, 2006 (Session 2) - Written evidence received on Scottish Criminal Record Office inquiry* (SP Paper 558)

<sup>51</sup> *Ibid*

<sup>52</sup> *Official Report*, Justice 1 Committee, 12 September 2006, c 3710

<sup>53</sup> *Official Report*, 9 February 2006, c 23255

from whom the Committee has taken evidence. Set out below are the various arguments put to the Committee on these issues and the conclusions the Committee has been able to draw.

### **The debate about the characteristics of mark Y7**

107. In the course of the inquiry, the Committee quickly became aware that there was a considerable degree of dispute amongst fingerprint experts around the characteristics of mark Y7. This included issues such as whether it was a complex mark, how it was made and whether it was a right or left thumb that made mark Y7.

#### *Is it a complex mark?*

108. In the course of evidence taking the Committee heard contrasting views as to whether or not mark Y7 is complex.

109. In stating that a mark is complex, as opposed to simple, fingerprint experts are establishing that the mark in question is difficult to consider and to draw conclusions upon.

110. Alister Geddes stated in evidence to the Committee that it is a complex mark.<sup>54</sup> Other SCRO fingerprint officers shared this view.<sup>55</sup>

111. Peter Swann and John Berry were also of the view that it is a complex mark. John Berry told the Committee that he had had to devote considerable time to the mark due to its complexity.<sup>56</sup>

112. John MacLeod also told the Committee that it was ‘very complex’.<sup>57</sup>

113. However, this opinion was not shared by all of the fingerprint experts who have considered the mark. In response to Members questioning, Pat Wertheim confirmed that he had been able to establish within 60 to 90 seconds that there were dissimilarities between mark Y7 and the left thumbprint of Shirley McKie. As such he did not consider it a complex mark—

“It is one touch, down and off. It does not involve the slipping, twisting, smearing and multiple touches that have been represented by some. There are obvious, glaring dissimilarities.”<sup>58</sup>

#### *Committee’s comments on the complexity of the mark*

**114. The Committee notes the level of disagreement between the various fingerprint experts on this matter. It is particularly noteworthy that the dividing lines are not drawn neatly between those individuals who consider that a correct identification was made and those who do not. The Committee considers it worrying that such variation in interpretation should exist.**

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<sup>54</sup> *Official Report*, Justice 1 Committee, 26 June 2006; c 3564

<sup>55</sup> *Official Report*, Justice 1 Committee, 30 May 2006; c 3248

<sup>56</sup> *Official Report*, Justice 1 Committee, 26 June 2006; c 3551

<sup>57</sup> *Official Report*, Justice 1 Committee, 26 June 2006; c 3495

<sup>58</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3406

115. The Committee considers that opinions on the relative complexity of the mark to a large extent turn on the experts' view of how the mark was made. The Committee next explores how the mark was made.

*How was the mark made*

116. A variety of different theories have been proposed to the Committee to explain how the mark was made.

117. Arie Zeelenberg suggested that the mark was made by one finger with the top placed first with high pressure and the rest of the finger placed next with less pressure. He explained this theory to the Committee—

“We must keep in mind that the fingerprint was found in isolation, in an uncommon location—not in a shop or on a door handle. There are a limited number of users or donors, and the chance of an indiscernible double placing is remote. The properties do not indicate that there is a double setting, because the lines never cross. If we look at the properties and phenomena, we see that there is a high tip, with pressure—the broader lines tell you that—and the collar is darker. Everything indicates that there is pressure. The downward bend of the ridges also shows that there is pressure from the tip downwards.”<sup>59</sup>

118. Pat Wertheim was similarly minded. However, he discerned a degree of twisting—

“I determined that it was made by the area of the finger above the core or centre of the pattern—in other words, the top part of the finger tip—and that it was twisted slightly to the right.”<sup>60</sup>

119. John MacLeod also discerned a degree of twisting in the mark—

‘Almost certainly the same thumb made a mark in two parts, by twisting. The tip of the thumb might have touched the wooden frame first and then slid round this way, or it might have happened the other way round—the thumb might have touched the wood and slid that way.’<sup>61</sup>

120. Hugh Macpherson noted there was twisting in the top part of the mark—

“As I think I have explained, in my view there is a definite twisting of the print. For me, above the area of subtle movement there are characteristics that I believe validate the impression. It looks as though the finger was put down and twisted and turned.”<sup>62</sup>

121. Alister Geddes also discerned twisting in the mark—

“The assessment that I made at the time was that the mark had been placed on the doorframe tip first, that it had been twisted and that the bottom part of

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<sup>59</sup> *Official Report*, Justice 1 Committee, 7 June 2006, c 3348

<sup>60</sup> *Official Report*, Justice 1 Committee, 7 June 2006, c 3399

<sup>61</sup> *Official Report*, Justice 1 Committee, 26 June 2006, c 3496

<sup>62</sup> *Official Report*, Justice 1 Committee, 30 May 2006, c 3239

the finger had then been placed on the doorframe. Both parts of the mark were made by a single touch, albeit that they were made at different times.”<sup>63</sup>

122. According to Robert Mackenzie’s precognition statement the top part of the mark represented several touches.<sup>64</sup> Robert Mackenzie along with Alan Dunbar presented his views on the mark at Tulliallan.

123. Arie Zeelenberg questioned the credibility of the theory proposed by Robert Mackenzie. He suggested in his report of January 2006 that if the theory proposed by the SCRO fingerprint officers at Tulliallan was correct, then Shirley McKie would have had to place her fingerprint five times in exactly the same place.<sup>65</sup>

124. In terms of evidence from other SCRO fingerprint officers, Charles Stewart gave his view on how the mark was made—

“During the comparison process I was very wary because I could see a lot of pressure where the bone is at the top of the finger. That amount of pressure usually means that there is a possibility that the finger came off the surface and was put down again at some point. I cannot say definitely whether that happened, because I was unable to compare the top of the impression against the fingerprint form, which is the only way of saying whether the fingerprint was continuous.”<sup>66</sup>

125. Fiona McBride was unable to provide an explanation of how the mark was made—

‘Without being present when the mark was laid down, I cannot say whether the thumb was put down and moved one way, put down and moved another way or put down twice. I just know that it is Shirley McKie’s print.’<sup>67</sup>

126. In the course of John Berry’s consideration of mark Y7, he developed a particular theory on how the mark had been made. He explained to the Committee how, in comparing the mark with a rolled impression of Shirley McKie’s left thumbprint reproduced in the *Daily Mail* on 24 October 2004, he had discerned a 66 degree anticlockwise movement in the mark—

“The impression was magnificent, crisp and clean. On the right-hand side, in all its glory, was my Rosetta characteristic. I drew a line from the Rosetta characteristic on the scene mark to the top of the core and found that there was a 66° distortion, which I have rarely come across. At that point, I had to transfer through 66° the *Daily Mail* image of Shirley McKie’s thumb print until the Rosetta characteristic was vertically and horizontally in the same place. It was difficult to do that but, once I had done it, I was able to state unequivocally that it was made by Shirley McKie.’<sup>68</sup>

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<sup>63</sup> *Official Report*, Justice 1 Committee, 26 June 2006, c 3565

<sup>64</sup> Robert Mackenzie, supplementary written evidence, precognition statement to Tayside Police

<sup>65</sup> Arie Zeelenberg, report on mark Y7, 12 January 2006, submitted by Digby Brown

<sup>66</sup> *Official Report*, Justice 1 Committee, 30 May 2006, c 3239

<sup>67</sup> *Ibid*

<sup>68</sup> *Official Report*, Justice 1 Committee, 26 June 2006, c 3552



127. John Berry explained to the Committee what he meant by the ‘Rosetta characteristic’—

“I discovered a characteristic that I thought was very important. It was a bifurcation, which is rather like a set of points on a railway line. Normally, the bifurcation is about 170°—in other words, it is a little less than horizontal. The characteristic that I discovered—which I termed the Rosetta characteristic—was 130°, with a dot next to it.”<sup>69</sup>

128. Peter Swann concurred with this theory. He explained to the Committee that by rotating the impression of Shirley McKie’s left thumbprint taken from the Daily Mail by approximately 66 degrees anticlockwise he was able to discern characteristics in sequence and agreement with mark Y7.<sup>70</sup>

129. Arie Zeelenberg was not convinced by John Berry’s theory—

“What happens if we rotate a print by 66°? We might find some similarities—I do not know either way—but other similarities will be off, as in the slides. Mr Kasey Wertheim, a forensic scientist, carried out a study in 2004. He made a map of the whole thumb of Shirley McKie. He drew all the points, and tried to rotate the map as much as he could. However, the cluster of minutiae in the latent, as shown in the map on the slide before you, are not there—not at 66° and not at 90°.”<sup>71</sup>

130. Pat Wertheim was similarly unconvinced by this theory. He suggested to the Committee that if there had been this degree of movement then there would have to be some degree of smudging. He could not find any such smudging in the mark and as such could not believe that such movement had occurred.<sup>72</sup>

131. Both Arie Zeelenberg and Mike Thompson also highlighted the lack of smudging or distortion as reason to doubt the probability of John Berry and Peter Swann’s theory. Mike Thompson told the Committee—

“If your finger is in contact with a surface and you rotate it by 66°, it would not take too much understanding to appreciate that the print would be smudged.”<sup>73</sup>

*Committee’s comments on how the mark was made*

132. The Committee heard a number of theories as to how mark Y7 was made. The Committee notes the extent of disagreement between the various fingerprint experts on this matter.

133. The Committee also notes the widely differing styles adopted in the various explanations and presentations given as to how the mark was made.

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<sup>69</sup> *Official Report*, Justice 1 Committee, 26 June 2006, c 3552

<sup>70</sup> *Official Report*, Justice 1 Committee, 7 June 2006, c 3369

<sup>71</sup> *Official Report*, Justice 1 Committee, 26 June 2006, c 3354

<sup>72</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3405

<sup>73</sup> *Official Report*, Justice 1 Committee, 26 June 2006; c 3532

134. The Committee's view is that Arie Zeelenberg's explanation (that the mark was a single touch, placed tip first with pressure downwards) was comprehensive and detailed. The Committee notes that Alister Geddes and Hugh Macpherson also indicated that it was a single touch. However, the Committee notes that both Mr Geddes and Mr Macpherson reached a different conclusion to Mr Zeelenberg on mark Y7.

135. The Committee's view is that Robert Mackenzie's theory, (that the mark represented several touches) as expressed in his precognition to James Mackay, lacks detail. However, the Committee recognises that it did not press him further on this theory when he appeared before the Committee.

**136. Most of the experts discerned an element of twisting in the mark. John Berry and Peter Swann, however, put forward a distinct theory about the level of twisting, suggesting that the mark had undergone a 66 degree anticlockwise movement. The Committee notes that Pat Wertheim was sceptical about this theory, particularly in relation to the lack of smudging of the mark which he said he would have expected to find in a mark with this degree of movement. The Committee also noted that both Arie Zeelenberg and Mike Thompson did not accept the theory in light of the lack of smudging in the mark.**

**137. While the Committee recognises the clarity of the evidence given by Mr Berry and Mr Swann, the Committee considers that they did not fully substantiate their theory. In particular, they did not offer an explanation as to how this degree of movement could occur without any evidence of smudging or discontinuity. It would have assisted the Committee's understanding of their theory if they had offered further explanation.**

*Left or right thumbprint*

138. The Committee has been presented with differing views on whether mark Y7 was made by a left or right thumb.

139. By matching mark Y7 to Shirley McKie's left thumbprint, the SCRO fingerprint officers, Peter Swann and John Berry clearly consider it can only have been made by Ms McKie's left thumb.

140. However, in the course of the minute of the Tulliallan meeting it was noted that Robert Mackenzie and Alan Dunbar, who were of the view that mark Y7 was made by a left thumb, accepted that if the mark was made by a single finger impression then it was "more likely to be that of a right thumb and not that of Shirley McKie."<sup>74</sup>

141. Malcolm Graham, in his first report to Mackintosh & Wylie, David Asbury's solicitors, for whom he was acting, stated that it was a right thumbprint. However, it should be noted that Malcolm Graham wrote to the Committee in order to advise them that this was merely a clerical error and that he provided an additional report

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<sup>74</sup> Note of ACPOS facilitated meeting, Scottish Police College, Tulliallan, 15 August 2000 as submitted by Alan Dunbar, available in volume 2 of this report

to Mackintosh & Wylie in which he made it clear it was, in his opinion, a left thumbprint.<sup>75</sup>

142. Looking at the top part of mark Y7, Arie Zeelenberg discerned qualities, which suggested to him, that it was made by a right thumbprint—

“Although the top is of bad quality it is noticeable that some lines coming from the left side stop (D2/3, E3. F5ab). This is an indication that the lines ‘fan out’ on the tip at the left side. The dominant direction of the lines in the tip (CDE2) is slanted to the right. Those are properties that very strongly indicate a mark coming from a right thumb.”<sup>76</sup>

143. In Pat Wertheim’s report on the mark, dated 26 May 2000, he too suggested that it was a mark made by a right thumb—

“In considering pattern variances between the right and left hands, and variances between thumbs and other fingers, an analysis of UC01050197 Y7 leads to the conclusion that the mark was most likely made by a right thumb.”<sup>77</sup>

144. In John MacLeod’s opinion, mark Y7 was made by a right thumb, however, he did not discount that it could possibly have been made by a left thumb. If it had been made by Shirley McKie, John MacLeod was clear that it could only have been made by her left thumb.<sup>78</sup>

*Committee’s comments on whether it was a left or right thumbprint*

**145. On the basis of the evidence given to the Committee, it is clear that there is a split among the experts about whether mark Y7 was made by a left thumb or a right thumb. Those experts who believe the mark was made by Ms McKie clearly consider it to be a left thumbprint. Some experts who consider that mark Y7 was made by multiple touches of Ms McKie’s left thumb have recognised that if the mark was made by a single touch then it was more likely to have been made by a right thumb. However, those experts who do not believe mark Y7 was made by Shirley McKie consider that it is more likely that the mark was made by a right thumb.**

**146. The Committee considers that the issue as to whether the impression was made by a left or right thumb is fundamental to the analysis of mark Y7.**

**147. The Committee finds it disturbing that a considerable dispute should exist between fingerprint experts on an issue that might, to outsiders, appear to be relatively straightforward.**

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<sup>75</sup> Malcolm Graham, written evidence, available in volume 2 of this report

<sup>76</sup> Arie Zeelenberg, report on mark Y7, 26 May 2000, submitted by Digby Brown

<sup>77</sup> Ibid

<sup>78</sup> John MacLeod, report to the Scottish Executive on mark Y7, July 2004

### The analysis of mark Y7

148. The Committee considers below the basis on which both the SCRO fingerprint officers and the other fingerprint experts drew their conclusions on mark Y7

#### *The analysis of the lower part of mark Y7*

149. From the evidence received, the focus of all of the SCRO fingerprint officers' consideration of mark Y7 was the lower part of the mark. On the basis of the information contained within this part of the mark, all of the SCRO fingerprint officers involved in the original identification were able to find sufficient characteristics in sequence and agreement to eliminate the mark to Shirley McKie.

150. Like the SCRO fingerprint officers, Peter Swann based his identification of mark Y7 on the lower part of the mark. In his written submission to the Committee he explained that his first consideration was undertaken at the request of Shirley McKie's solicitors. A further description of this process is incorporated in the timeline. In his report on the mark to Shirley McKie's solicitors, dated 16 March 1999, Peter Swann identified 16 points in sequence and agreement in the lower part of the mark.<sup>79</sup>

151. Following Shirley's McKie's acquittal Peter Swann re-examined mark Y7—

"I was able to obtain a photograph of Exhibit Y7 and to check it again. However, my view remained unchanged: Exhibit Y7 was the left thumbprint of Shirley McKie. I obtained some excellent copies of the Fingerprint Evidence and spent some very considerable time undertaking re-examination and preparing a Comparison Chart. At that stage, I prepared a Comparison Chart on Exhibit Y7 evidencing 21 ridge characteristics in sequence and agreement with the left thumbprint of Shirley McKie."<sup>80</sup>

He continued—

"there were in excess of 20 ridge characteristics in sequence and agreement in the area below, so as to fully satisfy me as to the identification."<sup>81</sup>

152. Pat Wertheim told the Committee that at Shirley McKie's perjury trial he conceded that 5 points in the lower part of the mark could be similar. However, he explained to the Committee that, on further inspection, it was apparent that these points were not in agreement—

"At Shirley McKie's trial, I conceded for point of argument to five points in the middle that could conceivably be considered to match. I do not remember the numbers that they were given on production 189. However, under close inspection, even those five do not match. It does not take an expert long to see that the ridge counts are off. There are two ridges between the points, but on the other prints there are three ridges between them. There is a ridge

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<sup>79</sup> Peter Swann, written evidence, available in *Justice 1 Committee, 5th Report, 2006 (Session 2) - Written evidence received on Scottish Criminal Record Office inquiry* (SP Paper 558)

<sup>80</sup> Ibid

<sup>81</sup> Ibid

ending on the left-hand side of a ridge in the latent print and it falls on the right-hand side of the ridge in the ink print. Those are glaring dissimilarities.”<sup>82</sup>

153. Arie Zeelenberg also discerned differences in the lower part of the mark. In his and Torger Rudrud’s report to HMIC William Taylor in 2000, they assessed the lower part of the mark. They suggested that in the lower part of the mark there was a significant difference between mark Y7 and Shirley McKie’s left thumbprint—

“The opposing directions of the lines next to the core and the diversion of them are strong indications of a high delta and also that this could very well be a (supposedly small) whorl pattern.

The comparison print from McKie is a high left loop.

If our assumptions and conclusions are right then this would disqualify the left thumb print from McKie as a comparison print for the lower part of the latent too.”<sup>83</sup>

154. In the report Zeelenberg and Rudrud went on to find at least 9 points in the lower part of the mark that were present in one print and absent in the other. They stressed any one of these differences would be enough to rule out the possibility of the latent matching the comparison print.<sup>84</sup>

*Committee’s comments on the analysis of the lower part of mark Y7*

**155. It is worth noting the polarized nature of the views held on the lower part of the mark. It appears extraordinary to the Committee that one expert could find 21 characteristics in agreement and none in disagreement in the lower part of the mark while another expert could find not one in agreement and nine in disagreement in the same part of the mark.**

*The analysis of the top part of mark Y7*

156. The SCRO fingerprint officers’ elimination of the mark was based entirely on the lower part of the mark. Both Alister Geddes and Charles Stewart explained to the Committee that the print of Shirley McKie’s left thumb had not been taken sufficiently high enough to enable them to compare it against the top part of mark Y7. Charles Stewart explained to the Committee it was not an uncommon phenomenon to have an incomplete fingerprint form—

“Again, I have never had a fingerprint form that has been taken high enough to the top of thumb to allow me to fully compare the top of the thumb to see whether it is continuous with the lower part. It could be continuous; it could be that there is slight pressure distortion because the thumb has been put down twice.”<sup>85</sup>

157. Charles Stewart provided further explanation to the Committee on this issue—

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<sup>82</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3406

<sup>83</sup> Report on mark Y7 by Arie Zeelenberg dated 26 May 2000, as submitted by Digby Brown

<sup>84</sup> *Ibid*

<sup>85</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3239

“It depends on the quality of the fingerprint form that we are comparing the mark against. If the fingerprint form is not well taken, there may be certain areas on the scene-of-crime impression that we cannot compare against the fingerprint form because that area does not physically appear on the fingerprint form. We can compare only what we have against the form that we have. Quite often, we say, “Well, that appears to be him, but we would need another form to allow us to make a fuller decision,” or “We cannot give you an answer just now because of the quality of that form—we need a good quality form to allow us to offer any opinion to you.” We can compare only what we have against the forms that we have, and I seem to remember that I could not compare the top of fingerprint Y7 against the fingerprint form that we had because the form was not taken well enough in that area. I do not know whether that helps the committee, but it could explain why other people think that there is dissimilarity. To my mind, I could not fully compare that fingerprint against the form because all the areas that I required were not showing on the fingerprint form.”<sup>86</sup>

158. Charles Stewart suggested that when there are a certain number of characteristics in sequence, as he considered there to be in his comparison of mark Y7 and Shirley McKie’s left thumbprint, it is likely the rest will be in sequence.<sup>87</sup>

159. Peter Swann was similarly minded. In his written submission to the Committee he noted that before John Berry informed him of the 66 degree anticlockwise movement in the mark he found differences in the top of the mark that he was unable to explain. Regardless of this he was sure that it was Shirley McKie’s left thumbprint—

“I had 21 in agreement on the chart that I prepared. I accept that five or six at the top were in disagreement. I knew that it was an identification irrespective of what I saw at the top because of what I saw lower down. I knew that there would be a reason for what I saw at the top, but I did not know what it was at the time.”<sup>88</sup>

160. Peter Swann told the Committee that finding a characteristic in disagreement did not necessarily preclude an identification—

“I know what the guideline says: 16 characteristics in agreement with none in disagreement. That has been in place since 1953. In practice, however, experts find characteristics that appear to be in disagreement for which there is some explanation. That often happens. The first chart that I prepared for mark Y7 contained 21 characteristics in agreement. There were some at the top that, at that time, I could not explain, although I explained them later when I got a proper rolled impression of Shirley McKie’s print. At that time, I knew that, because there were so many characteristics in agreement—21—it

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<sup>86</sup> *Official Report*, Justice 1 Committee, 30 May 2006; c 3235

<sup>87</sup> Charles Stewart, written evidence

<sup>88</sup> *Official Report*, Justice 1 Committee 7 June 2006; c 3382

was an identification, irrespective of what we saw at the top, which was difficult to assess until we got the right rolled impression.”<sup>89</sup>

161. In evidence to the Committee on 26 April Arie Zeelenberg explained his approach to the process of identification and how discrepancies should be treated—

“Identification is the establishment by an expert of sufficient coinciding coherent characteristics in sequence—the sequence is what is important—in combination with the detail of the ridges and the absence of even one single discrepancy. One single discrepancy stops the identification process.”<sup>90</sup>

162. In written evidence, Arie Zeelenberg provided further detail on his approach—

“Any difference in location and in presence or absence of points means a red flag. A difference in location may be explainable but an expert will now be alerted and start looking for more differences and check the supposed similarities even more vigorously.”<sup>91</sup>

*Committee’s comments on the analysis of the top part of mark Y7*

163. **The Committee notes that it was common for SCRO to receive tenprints with limited detail in the tip of fingerprints and appreciates the difficulty in attaining this detail. In the case of mark Y7, the Committee acknowledges that the SCRO fingerprint officers felt able to undertake consideration of the mark without having an impression which showed the full detail of the top part of the left thumbprint of Shirley McKie.**

164. **The Committee notes that both Peter Swann and Charles Stewart stated that although there were ‘unexplained’ differences in the top part of the mark, these differences could be disregarded due to the fact that there were sufficient characteristics in sequence and agreement in the lower part of the mark.**

165. **The Committee contrasts this approach with that taken by Arie Zeelenberg who was of the clear view that one single unexplained discrepancy would stop the identification process.**

*Committee’s assessment of the experts’ analysis*

166. On 7 June 2006 both Arie Zeelenberg and Peter Swann were invited to give presentations to the Committee setting out their respective assessments of mark Y7 and the comparison of the mark with Shirley McKie’s left thumbprint.

167. In the course of this presentation Arie Zeelenberg identified to the Committee at least 20 discrepancies between mark Y7 and Shirley McKie’s print. He told the

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<sup>89</sup> *Official Report*, Justice 1 Committee 26 June 2006; c 3547

<sup>90</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3346

<sup>91</sup> Arie Zeelenberg, report on mark Y7, January 2005, submitted by Digby Brown

Committee that there were numerous differences in ridge detail and that in his opinion there were invented points marked up by the SCRO.<sup>92</sup>

168. At the same meeting, Peter Swann presented a diametrically opposing assessment of mark Y7. He suggested that having taken account of the 66 degree anticlockwise movement, between himself and John Berry they were able to identify 32 ridge characteristics in agreement.<sup>93</sup>

169. John MacLeod was commissioned to provide two reports to the Scottish Executive on his findings on mark Y7. These were intended to inform the Executive's defence of Ms McKie's damages action. In the first report he noted four differences between mark Y7 and Shirley McKie's left thumbprint. Having been asked to consider the findings of the SCRO in more detail in order to give his opinion on the degree of error made in identification, in the second report he discerned 15 differences and he concluded that they did not match.

**170. Assessing the overall positions taken by the fingerprint experts on mark Y7, the Committee is incredulous that Arie Zeelenberg could find no ridge characteristics in agreement and 20 in disagreement and John MacLeod could find one in agreement and 15 in disagreement and yet John Berry and Peter Swann could find between them 32 in agreement and disagreement.**

#### **Factors cited to explain disagreement between experts**

171. During the course of the inquiry, three factors were regularly cited as being a cause of the divergence in findings. These factors all relate to the material used by different fingerprint experts to make a comparison.

172. The factors cited as being a possible cause of the divergence in conclusions are—

- use of a plain impression versus a rolled impression;
- use of images obtained from the internet; and
- use of a print published in the Daily Mail.

173. Peter Swann indicated that, in his opinion, the material used in the consideration of mark Y7 was critical—

“I know that the other people have got it wrong. That might sound like rather a bold statement, but my reason for making it is simply that, in my opinion, people have not been using the correct material.”<sup>94</sup>

174. Set out below are the arguments presented by the fingerprint experts as to the importance of these factors, and why the Committee does not deem them to be of critical importance.

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<sup>92</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3351

<sup>93</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3370

<sup>94</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3366



*Use of a plain impression versus a rolled impression*

175. Peter Swann explained to the Committee the importance, in his opinion, of using a rolled impression in order to capture the full area of ridge detail from a finger.<sup>95</sup> He indicated that the best comparison for mark Y7 was with a rolled impression and that looking at the rolled impression he was able to see characteristics which were not present on plain impressions of Ms McKie's left thumbprint.<sup>96</sup>

176. Charles Stewart supported the views of Peter Swann. He explained to the Committee what he considered to be the benefits of rolled impressions—

“A rolled impression shows perhaps 80 to 90 per cent of the surface area of the finger whereas a plain impression might show only 45 to 50 per cent. In some cases, a plain impression will give sufficient information to allow one to carry out a comparison and reach a conclusion, but on the whole one really requires the rolled impression because that shows much more of the finger. It shows the full picture.”<sup>97</sup>

177. John Berry also advocated the use of rolled impressions but described to the Committee the process by which he had been able to make an identification using a plain impression of Shirley McKie's thumbprint obtained from the internet<sup>98</sup>—

“I attempted to find the characteristic on the plain impression of Shirley McKie's thumbprint. I spent a considerable amount of time working through the minefield of ridge detail. After a long period, I found the Rosetta characteristic. Unfortunately, instead of being like the side view of a 125 train, it was a sort of blob with a dot in it. I knew that it was the Rosetta characteristic and that, without any doubt, the mark had been made by Shirley McKie.”<sup>99</sup>

178. Pat Wertheim explained that for comparison with mark Y7 there was no need to take rolled impressions. He explained to the Committee why he thought this was the case—

“Much has been made of the fact that I used plain impressions, not rolled impressions. The shape of a thumb tip is a complex surface. It is a curved surface, and a rolled impression reduces that complex curved surface to a square or rectangular flat image, which includes gross areas of distortion. Normally, rolled impressions are used for comparing with latent prints because the inked prints are taken before seeing the latent print. In this case, however, I had the advantage of having first seen the crime scene mark—the latent print—on the door frame. I could see that, if the print was of a left thumb, it must have been placed not flat against the door frame but slanted at a slight angle upward and canted just slightly to the right or clockwise, so

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<sup>95</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3374

<sup>96</sup> *Ibid*

<sup>97</sup> *Official Report*, Justice 1 Committee, 30 May 2006; c 3269

<sup>98</sup> *Official Report*, Justice 1 Committee, 26 June 2006, c 3555

<sup>99</sup> *Official Report*, Justice 1 Committee, 26 June 2006, c 3556

the best inked impression to compare to that latent print was one that was taken in the same manner.”<sup>100</sup>

179. Pat Wertheim took between 80 and 100 plain impressions of the left thumbprint of Shirley McKie. He explained to the Committee the rationale for taking so many impressions—

“I took from Shirley McKie between 80 and 100 inked impressions of her left thumb to try to duplicate as closely as possible the direction and angle of touch in order to minimise the difference in distortion.”<sup>101</sup>

*Committee’s comments on use of a plain versus a rolled impression*

180. The Committee recognises that a rolled impression in most instances is preferable as it provides the expert with more ridge detail on which to make his or her comparison.

181. The Committee notes the points raised about the additional information captured from a print in a rolled impression. However, this has to be balanced against the fact that SCRO fingerprint officers were apparently able to identify the mark without having an impression of the left thumbprint of Shirley McKie which showed the tip of the thumb.

182. The Committee notes that John Berry reached his initial identification of mark Y7 on the basis of comparison with a plain impression. Pat Wertheim also relied upon plain impressions in reaching his conclusion that mark Y7 had not been made by Shirley McKie.

**183. The Committee is of the opinion that the use of a rolled impression versus a plain impression cannot account for the divergence of expert findings on mark Y7.**

*Use of images obtained from the internet*

184. Concerns were also raised about the use by some fingerprint experts of internet images of mark Y7 to reach a conclusion on whether or not it matched the left thumbprint of Shirley McKie.

185. Amongst others, Arie Zeelenberg made use of images of the mark and comparison prints taken from the website of Ed German.<sup>102</sup> Arie Zeelenberg and Torger Rudrud had also examined two original one-to-one size photographs of mark Y7 and original inked fingerprint sheets from Shirley McKie at Fife Constabulary Headquarters in Glenrothes on Wednesday 14 June 2000.<sup>103</sup> In the report prepared by Torger Rudrud and Arie Zeelenberg for HMIC they stated that there were “no principal differences between the photographic exposures from SCRO and the latent from Pat Wertheim as presented at the SCAFO site.” Rudrud and Zeelenberg concluded that there was “virtually no difference in the quality of the latent prints”. However, they noted that in the images on the internet there

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<sup>100</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3394

<sup>101</sup> *Ibid*

<sup>102</sup> <http://onin.com/fp/afis/afis.html>

<sup>103</sup> Report of fingerprint analysis and comparison, prepared for HMIC by Torger Rudrud and Arie Zeelenberg, 28 June 2000 - as annexed to Digby Brown’s submission to the Justice 1 Committee

were white lines running diagonally from the bottom right to the left middle of the mark which appeared to have been made after the original photographs had been taken but concluded that there was “no sign of substantial change of ridge information.”<sup>104</sup>

186. SCRO fingerprint officers did, however, raise concerns about the use of images of mark Y7 from the internet. Robert Mackenzie suggested that when looking at the original photograph of the mark on 17 and 18 February 1997 he saw a fault line running through it, which was caused by pressure as the print was laid on the surface. He suggested that there was a ‘brush mark’ through the image available on Ed German’s website, which obscured this fault line. He considered that examining this image without the benefit of seeing the original material<sup>105</sup> could lead to confusion.<sup>106</sup>

187. Peter Swann was similarly critical of the use of the image of mark Y7 from the internet. He also drew attention to what he perceived to be damage to the mark—

“The internet photograph has striations on it that run diagonally from the bottom left to halfway up the right-hand side.”<sup>107</sup>

188. All four of the SCRO fingerprint officers who gave evidence to the Committee on 30 May 2006 were critical of the use of internet images. Anthony McKenna indicated that the SCRO Fingerprint Bureau always advocated looking at the original material. Charles Stewart explained to the Committee his concerns about the use of internet images in this instance—

“I have seen images on the internet that are purportedly mark Y7 but they do not bear much relation to what I looked at because there is a brush mark that damages the lower half of the mark. I was always taught to base my comparison and identification on original material.”<sup>108</sup>

189. Arie Zeelenberg highlighted, however, that in spite of their criticism, Robert Mackenzie and Alan Dunbar had used the images of mark Y7 and Shirley McKie’s left thumbprint taken from the internet. He referred to the minute of the Tulliallan meeting—

“I will not read it all out, but the internet image is discussed and there is mention all over that the SCRO used the internet images of the comparison prints. My conclusion is that the SCRO used the internet image of the comparison prints and so was able to mark up points in the brush mark.”<sup>109</sup>

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<sup>104</sup> Report of fingerprint analysis and comparison, prepared for HMIC by Torger Rudrud and Arie Zeelenberg, 28 June 2000 - as annexed to Digby Brown’s submission to the Justice 1 Committee

<sup>105</sup> The term “original material” was applied by witnesses to the inquiry in various ways. The Committee uses it to mean material which is a true representation from an authenticated source.

<sup>106</sup> Robert Mackenzie, supplementary written evidence, precognition statement to Tayside Police

<sup>107</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3387

<sup>108</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3250

<sup>109</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3355

190. Pat Wertheim argued that the images on the internet were not of poor quality and that the 'brush mark' would not alter an experts conclusions about the mark.

"References have been made to the scuff or brush marks through the image. They are neither added nor subtracted detail. I return to the analogy of the rubber stamp. You can use a rubber stamp to stamp your name and address on to a piece of paper. If you then take your finger and smear it through the rubber stamp, you might smudge or lighten the ink, but you will not change the name Marlyn Glen to the name Mary Mulligan. The smearing will not change the detail in the fingerprint. It might smudge it slightly or even completely remove it, although in this case it did not."<sup>110</sup>

*Committee's comments on the use of images obtained from the internet*

191. The Committee notes the preference of the SCRO fingerprint officers for the use of original material. However, the Committee also notes that Robert Mackenzie and Alan Dunbar made use of material from the internet for the purposes of their presentation at Tulliallan.

192. The Committee also notes the concerns about the so-called brush mark on the internet image of mark Y7. On the basis of the evidence given to the Committee, the Committee is not, however, convinced that this brush mark altered the image in such a way that it would necessarily change an expert's conclusion on the identification of the mark.

*Storage of Crown evidence*

193. While the Committee is not concerned that the brush mark would change an expert's view, the Committee is concerned that an important piece of evidence held by the Crown Office and Procurator Fiscal Service should have become damaged.

**194. The Committee recommends that COPFS review its procedures for storage of trial evidence, including, but not limited to, fingerprint evidence.**

*Use of a print published in the Daily Mail*

195. John Berry drew his final conclusions on mark Y7 on the basis of comparison with an impression of Shirley McKie's thumbprint published in the Daily Mail of 24 October 2004. John Berry told the Committee that the rolled impression was "magnificent, crisp and clean."<sup>111</sup>

196. Malcolm Graham was similarly impressed with the Daily Mail impression suggesting it was better than any of the impressions taken by Pat Wertheim.<sup>112</sup>

197. Peter Swann, who had made his initial identification of mark Y7 in 1997 using a rolled impression of Shirley McKie's left thumbprint provided to him by Ms McKie's solicitors, was also impressed with the quality of the rolled impression published by the Daily Mail—

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<sup>110</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3399

<sup>111</sup> *Official Report*, Justice 1 Committee, 26 June 2006; c 3552

<sup>112</sup> *Official Report*, Justice 1 Committee, 26 June 2006; c 3582

“There are various places where one could get the left thumb impression of Shirley McKie. This one is from the *Daily Mail*. It is a beautiful reproduction. I do not know how the *Daily Mail* got it—it did not get it from me. It was published by the *Daily Mail* in 2000 and reproduced in 2002 and 2004, I believe. It is extremely clear and shows good marks.”<sup>113</sup>

198. Arie Zeelenberg highlighted serious concerns about the use of an impression taken from a newspaper—

“There are two issues. One is authentication, which relates to who is providing the print and whether we are confident that it is from the stated source. The other is the point that, if we put a glass on a newspaper, we will see all the small dots with which it is printed; there is no way that it can reflect the detail that is in a latent.”<sup>114</sup>

199. The Committee notes the opposing arguments presented by fingerprint experts about whether the impression from the Daily Mail was of sufficient quality for comparison purposes. It would appear to Members that the printing process could impair the detail of the print.

*Committee’s comments on factors cited to explain disagreement*

200. **The Committee considers that the debate among experts about the effect of these factors in the comparison of mark Y7 and Shirley McKie’s thumbprint has created additional confusion in an already complex case. However, the Committee is not persuaded, in this case, that these factors were of critical importance to the conclusions drawn by the various fingerprint experts.**

201. **The Committee believes that the interests of justice would be better served if in all cases fingerprint experts adopted a standard approach for their comparison of crime scene marks and fingerprints from a known donor.**

202. **While recognising that it will not be possible in all cases to achieve an absolute consistency in the methodology used by all fingerprint experts, the Committee nonetheless, considers the following factors are important to achieving a consistency of methodology:**

- **examination of images which are as close to the original material as possible;**
- **examination of the mark and print in controlled conditions; and**
- **transparency in the audit trail for images of both the mark and fingerprint being compared to ensure authenticity.**

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<sup>113</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3368

<sup>114</sup> *Official Report* Justice 1 Committee, 7 June 2006; c 3403

**Procedures used by SCRO fingerprint officers in the identification and verification of mark Y7**

203. The consideration of mark Y7 highlighted a number of concerns about the consistency of procedures within the SCRO Fingerprint Bureau.

204. Discussed below are the inconsistencies highlighted to the Committee in the consideration of elimination prints, the initialling of the back of mark Y7 and the implementation of the 'blind test'.

*The procedure used to eliminate mark Y7*

205. The Committee's understanding is that Hugh Macpherson – the first SCRO fingerprint officer to examine mark Y7 – made the decision to establish the identification of mark Y7 to a 16 point standard. At that time, the 16 point standard meant that in any fingerprint identification there needed to exist 16 characteristics in sequence and agreement between the mark and the fingerprint impression against which it was compared. It is important to note that mark Y7 was subject to the elimination procedure – not the full identification procedure. As such, the elimination of mark Y7 did not need to have been made to this standard. For an elimination, the Committee understands that there was no standard in place for the number of points that had to be found in sequence and agreement.

206. Hugh Macpherson explained to the Committee why he chose to apply the 16 point standard to the identification of mark Y7—

“Firstly, because that is what I personally attained in the comparison of mark Y7 against Ms. McKie’s left thumbprint. Secondly because of where the mark was developed with its close proximity to the victim’s body position, I felt that there may be repercussions, needless to say there was no way that I could second guess that I would still be discussing the identification of mark Y7 some nine years later. Thirdly, the volume of elimination fingerprints received for comparison was far greater (162), as against the number of persons quoted for suspect comparison (12), so as a result there was no demarcation between elimination and suspect comparison/identification, in this case. This point is highlighted and evidenced previously re the identifications of marks XF, Q12 and Y7, all emanating from elimination fingerprint form comparison. I have always been of the view that any identification, no matter what its source, should be given due consideration whether that be from a suspect quote, an elimination form or from a manual or computerised search. All persons identified in the Ms Marion Ross case emanated from crime scene marks being compared against elimination fingerprint forms received, there were no suspect identifications and no AFR identifications. An elimination fingerprint form identification being fully signed off by four experts (nowadays three) to the 16 point standard, particularly in a ‘special case’ such as the Ms. Marion Ross murder enquiry is not uncommon either re this case nor in other cases I have worked on.”<sup>115</sup>

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<sup>115</sup> Hugh Macpherson, written evidence

207. Hugh Macpherson provided further explanation as to why he decided to apply the 16 point standard. He appeared to suggest that doing so was not normal practice and that elimination prints do not normally receive this level of scrutiny—

“There is nothing to stop me doing that. Normally in a case, only the marks of the deceased and the accused go to court and those are marked up to the 16-point standard. All I did was to apply to the mark the same criteria that I applied to the marks that were identified previously in the case. I could find 16 points—that was my main reason.”<sup>116</sup>

208. However, Hugh Macpherson, later in the same evidence session, appeared to contradict this position. He recounted to the Committee HMIC’s statement on elimination prints—

“The aim of fingerprint comparison in Scotland, at present, is to find 16 points or characteristics of friction ridge skin detail on a crime scene mark that are identical in sequence and agreement with a fingerprint given by a donor. This applies to donors who are suspects and those who have given their fingerprints for elimination purposes.”<sup>117</sup>

He continued—

“They are one and the same thing. We have always maintained that, no matter what the comparison, it could end up in court, even if it is a negative comparison. Where two persons are accused in a case, a fingerprint expert might find that one of the comparisons is negative. I have had to go to the High Court in Ayr to testify that I had compared someone negatively. Any comparison has to be given due diligence, whether it is an elimination print, a suspect print, an automatic fingerprint recognition ident or a manual ident.”<sup>118</sup>

209. Other SCRO fingerprint officers were asked to eliminate the mark to the 16 point standard. Although Alister Geddes eliminated the mark, he was not able to find 16 points. Charles Stewart, Fiona McBride and Anthony McKenna were able to find 16 points.

210. In subsequent examinations of the mark – namely by Robert Mackenzie and Alan Dunbar; by the four fingerprint officers who participated in the ‘blind test’ and also the consideration undertaken by six fingerprint officers after the mark had been re-photographed and new tenprints taken – the SCRO fingerprint officers were asked to eliminate the mark, but not to the 16 point standard.<sup>119</sup>

211. Mike Thompson, Durham NTC, indicated that the fact that it was an elimination print should not have made a difference to the examination process undertaken by the SCRO fingerprint officers.<sup>120</sup>

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<sup>116</sup> *Official Report*, Justice 1 Committee, 30 May 2006; c 3210

<sup>117</sup> *Official Report*, Justice 1 Committee, 30 May 2006; c 3217

<sup>118</sup> *Ibid*

<sup>119</sup> See paragraphs 218 – 225

<sup>120</sup> *Official Report*, Justice 1 Committee, 26 June 2006; c 3528

212. In contrast, John MacLeod suggested that elimination marks tended to be treated differently—

“Well, with elimination prints there is always a tendency to be not as thorough as you might be. However, I am perhaps speaking out of turn here.”<sup>121</sup>

213. The synopsis of the Mackay report would seem to support Mr MacLeod’s position that elimination prints were not normally given such thorough scrutiny. The synopsis of the report includes a conclusion that there was a need for higher standards for elimination prints.<sup>122</sup>

214. It should be noted that the procedure for identification of elimination prints was considered by HMIC as part of its 2000 inspection of the SCRO Fingerprint Bureau. HMIC’s consideration of this issue is explored in greater length in the next section of the report.

215. The Committee notes the reasons given by Hugh Macpherson as to why he chose to adopt a 16 point standard to the identification of mark Y7. The Committee also notes that some experts from outside the Bureau have suggested that to apply this standard to a mark being compared for elimination purposes would be uncommon.

**216. The Committee finds it disturbing that in 1997 there would appear to have been no agreed procedure or standard for the comparison of a mark with an elimination print in the SCRO Fingerprint Bureau. In the apparent absence of such documentation, it is not possible for the Committee to give a definitive view on whether Mr Macpherson’s approach was appropriate or not.**

**217. However once the decision was taken to adopt a 16 point standard for identification of mark Y7, the Committee considers that it is reasonable and logical to expect that this standard would have then been used by every SCRO fingerprint officer who subsequently examined mark Y7. The Committee considers that the fact that this did not happen highlights a serious flaw in SCRO’s identification and verification procedures at that time.**

*16 point standard*

218. In written evidence, Charles Stewart informed the Committee of the process by which he makes an identification. He suggested that when there are a certain number of characteristics in sequence and agreement, as he considered there to be in his comparison of mark Y7 and Shirley McKie’s left thumbprint, it is likely the rest will be in sequence.<sup>123</sup>

219. Peter Swann explained to the Committee how he reaches an identification—

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<sup>121</sup> *Official Report*, Justice 1 Committee, 26 June 2006; c 3502

<sup>122</sup> Synopsis of the Mackay Report; paragraph 14.7, available online at: <http://www.scottish.parliament.uk/business/committees/justice1/ScottishCriminalRecordOfficeInquiryHomepage.htm>

<sup>123</sup> Charles Stewart, written evidence



“...when you get X number of characteristics in agreement, you know that the mark is identical”<sup>124</sup>

220. He expanded on this in the course of his second appearance before the Committee—

“Generally speaking, if I find five or six points of agreement, I know from experience that I will find more and more points of agreement.”<sup>125</sup>

221. Some witnesses suggested that when applying the 16 point standard there may be a tendency that once an expert believes a mark matches a donor print he or she then strives to find the 16 points to prove it. Pat Wertheim raised concerns about this approach in relation to the evidence he heard from Peter Swann—

“From listening to Mr Swann's presentation, it seemed that he was saying that when he could not find the point in Shirley McKie's thumbprint where it existed in the mark, he went looking in other places until he happened to find a point that looked the same. The only way that he could do that was if he moved 66° around the fingerprint. I reject that approach, which is not valid. One starts with the analysis of the crime scene mark. One does not go looking willy-nilly in the ink print to try to find points that look like it somewhere else in the print.”<sup>126</sup>

222. At the meeting on 7 June Arie Zeelenberg drew the Committee's attention to a quotation from the Evett and Williams report. The Evett and Williams report was carried out into fingerprint identification under the auspices of the Home Office and was published in 1996.<sup>127</sup> The report notes particular traits in working to the 16 point standard which might affect an expert's approach to identification—

“Probably because of the sixteen points standard, a practice has grown in the U.K. service which the team did not find in the other countries visited. A fingerprint expert will generally reach an inner conviction about the correctness of an identification long before he has found 16 points. His or her subsequent activity will centre on establishing that features which are clearly visible in the print can also be seen in the poorer quality mark. The print is used as a guide for scrutinizing the mark. This is called, in some quarters, 'teasing the points out'.”<sup>128</sup>

223. The Committee notes the evidence from Charles Stewart and Peter Swann that when they find a certain number of characteristics in sequence and

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<sup>124</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3382

<sup>125</sup> *Official Report*, Justice 1 Committee, 26 June 2006; c 3544

<sup>126</sup> *Official Report*, Justice 1 Committee, 26 June 2006; c 3405

<sup>127</sup> In 1988-89 the authors carried out a review of the requirement in England and Wales that a fingerprint identification should be based on at least 16 points of comparison before evidence may be given in court. The review included: visits to bureaux in the UK and in various other countries; a study of the statistical aspects of fingerprint identification; a historical review; and a collaborative study in which fingerprint experts from many different bureaux at home and abroad examined ten sets of comparisons. A paper describing the conduct of the review and its conclusions can be found at <http://www.scafo.org/library/120101.html>.

<sup>128</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3353

agreement their experience leads them to believe the rest will be in sequence and agreement.

224. The Committee also notes the findings of Evett and Williams that ‘A fingerprint expert will generally reach an inner conviction about the correctness of an identification long before he has found 16 points.’<sup>129</sup>

225. On 4 September 2006, use of the 16 point standard was ended in Scotland and the non-numeric standard was adopted. Section 4 of this report explores the change to the non-numeric standard.

*Hierarchical nature of the identification process*

226. The synopsis of the Mackay report highlighted James Mackay’s concerns about the hierarchical nature of the identification process within the SCRO Fingerprint Bureau.

227. James Mackay suggested in the SCRO fingerprint Bureau there was pressure on junior fingerprint officers to agree with senior fingerprint officers and there was also deference toward senior officers by more junior officers. In support of this theory he drew on evidence from Alister Geddes as regards his professional relationship with Hugh Macpherson.

228. In the synopsis of the Mackay report, it is noted that Alister Geddes suggested that while there was a checking process in place within the Bureau he would normally accept the findings of Hugh Macpherson—

“I did not have near the level of expertise as Hugh at this time and would normally accept his findings had been correct, all work was at all times double checked.”<sup>130</sup>

229. The synopsis also noted that Alister Geddes was sometimes unable to see characteristics that Hugh Macpherson could and that in these instances Hugh Macpherson would demonstrate to him where he had gone wrong and where the points could be found.<sup>131</sup>

230. Alister Geddes explained to the Committee that in the case of mark Y7, Hugh Macpherson had sought to demonstrate to him where he could find the characteristics, but in this instance Alister Geddes could not see them.<sup>132</sup>

*Initialling of photographs of marks*

231. Fiona McBride informed the Committee that as a means of listing the sequence in which mark Y7 had been checked and its identification verified, she initialled the back of the photograph of mark Y7 and also placed the initials of Hugh Macpherson and Charles Stewart who had already checked and verified the

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<sup>129</sup> A review of the 16 point standard in England and Wales, I Evett and R Williams, October 1995

<sup>130</sup> Synopsis of the Mackay Report

<sup>131</sup> Ibid

<sup>132</sup> *Official Report*, Justice 1 Committee, 26 June 2006; c 3562

mark on the back.<sup>133</sup> It should be noted that this was not agreed procedure within the Bureau.

232. Fiona McBride explained to the Committee why she instigated this practice—

“To put it in context, back in 1997 the processes were still evolving, and I was aware of a practice that Kenneth Graham, a fingerprint expert, had started. What used to happen is that someone would check a case, come to their decision and pass it on to the next person. At the end, when they had checked all the marks, they would sign to say that they had done so. I wanted to keep track of what I had looked at. I noticed that Kenneth Graham had started to put his initials on cases along with the date. It was not the main signature; it was just so that he could keep track of what he had seen, what he had not seen and what he had yet to check. I thought that that was a pretty good idea, and I put my initials on the back of the photograph for that reason. I asked Hugh Macpherson whether he minded my putting his initials on it, too, as I thought that it was a good idea. He said, "Well, okay then."<sup>134</sup>

233. In response to questioning from the Committee on this procedure, Hugh Macpherson stated—

“There is nothing sinister about it. The initials were already on the screen, as it was. You talked about putting initials on a piece of evidence. We have many photographs of Y7 and we use a clean copy for our production book.”<sup>135</sup>

234. Furthermore, Hugh Macpherson sought to stress that the purpose of this exercise was merely to ensure that there was a record of who had considered and verified the identification.<sup>136</sup>

235. Initialling the mark on behalf of other experts was questioned by a number of witnesses including John McGregor of the Aberdeen Fingerprint Bureau—

“First, we would never initial a photograph or a document for anybody else. However, so that a document can be tracked, you have to initial and date it, so a person looking at it would know when you made your comparison. That is what happens in Aberdeen, but we would certainly never, on behalf of someone else, sign anything that we had not checked ourselves.”<sup>137</sup>

236. This view was echoed by Jim Aitken of the Edinburgh Bureau and Ken Clacher of the Dundee Bureau.

237. It should also be noted that in evidence to the Committee Alan Dunbar stressed this practice no longer existed.<sup>138</sup>

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<sup>133</sup> *Official Report*, Justice 1 Committee, 30 May 2006; c 3213

<sup>134</sup> *Official Report*, Justice 1 Committee, 30 May 2006; c 3214

<sup>135</sup> *Official Report*, Justice 1 Committee, 30 May 2006; c 3215

<sup>136</sup> *Ibid*

<sup>137</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3401

<sup>138</sup> *Official Report*, Justice 1 Committee, 26 June 2006; c 3560

238. **The Committee notes that in initialling the back of the photograph of mark Y7 with her own initials and those of Hugh Macpherson and Charles Stewart, Fiona McBride was using a method for tracking which was not an agreed and documented procedure.**

239. **However, having done so, the Committee questions why Alister Geddes’s initials were not also added to the back of the mark given the fact he too had verified the identification although not to the 16 point standard.**

240. **The Committee is concerned that senior fingerprint officers were content to allow such an ad hoc procedure to be implemented without further consideration or comment.**

*Blind test of mark Y7*

241. Further concern was raised about the procedures in place within the SCRO Fingerprint Bureau in relation to the implementation of what has been termed a ‘blind test’.

242. According to Chief Inspector William O’Neill, Head of the Fingerprint Bureau in 1997, on 17 February 1997 he was called by the Deputy Divisional Commander at Kilmarnock. In his written submission William O’Neill stated that the Deputy Divisional Commander called to request that the identification of mark Y7 be re-checked and that this should be done in the presence of Shirley McKie. William O’Neill intimated that Iain McKie was with the Deputy Divisional Commander at the time of the call. He stated that he was pressured by the Deputy Divisional Commander into accepting the request to re-examine the mark in the presence of Shirley McKie—

“I was told by him that the request had come from the highest authority. As the Deputy Divisional Commander in Kilmarnock was of a higher rank than me, and insisted, I reluctantly agreed.”<sup>139</sup>

243. William O’Neill subsequently instructed Alan Dunbar to facilitate a ‘blind test.’

244. It should be highlighted that the Committee understands this was not a blind test in a scientific sense and was not seen as one by those who initiated it. The term was first used retrospectively by people outwith the Bureau.<sup>140</sup>

245. For ease of reference, however, it will be referred to as the blind test in the course of this section of the report.

246. When asked about his interpretation of blind testing, Hugh Ferry, suggested that this constituted something different—

“A blind test is where a mark has been identified by an expert or a number of experts and is then fed into the workload of another expert to test whether he or she can identify it as being from the same individual.”<sup>141</sup>

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<sup>139</sup> William O’Neill, supplementary written evidence

<sup>140</sup> *Official Report*, Justice 1 Committee, 26 June 2006; c 3559

<sup>141</sup> *Official Report*, Justice 1 Committee, 23 May 2006; c 3148

247. The Committee questioned Alan Dunbar on the nature of blind testing and he agreed that what took place in relation to mark Y7 was not a true blind test.<sup>142</sup>

248. Arie Zeelenberg explained his understanding of blind testing and associated difficulties with the process—

“There are several notions of what constitutes a blind test. If you present a print to an expert, it is hard to avoid a situation in which the expert does not instantly know, from looking at it, that it is either a possible identification or an exclusion. Exclusions come before identifications. When the expert looks at a print for one minute, they might say, “Well, somebody might have identified it already, so I am being asked to verify it.” It is hard to avoid that sort of situation.

Another way to do a blind test is to give the expert an actual case that nobody knows about; the expert does not know whether it is to be an identification or not. Then, at the end, you can look at how the expert went about analysing the print. That is really blind testing. There are several other ways of doing it, but it is always difficult. And it is always difficult to avoid the mindset.”<sup>143</sup>

249. From the evidence presented to the Committee, there appeared to be some doubt as to who conducted the blind test. Most of the evidence makes reference only to Terry Foley and Edward Bruce. However, the averments produced by Shirley McKie’s solicitors as part of her civil action also referred to Jean McClure and Greg Padden. The averments also suggested that neither Jean McClure nor Greg Padden were able to come to a conclusion on mark Y7.

250. It should be noted, however, that in evidence to the Committee Alan Dunbar did not indicate that any of the fingerprint officers participating in the blind test failed to reach a conclusion on the mark. Alan Dunbar told the Committee that—

“No officer came back with a different finding.”<sup>144</sup>

251. The Committee was concerned about the uncertainty as to who conducted the test and what their conclusions had been. As such, the Committee wrote to David Mulhern, asking him to arrange responses from Greg Padden and Jean McClure to confirm whether or not they were involved.

252. Responses were received from Greg Padden and Jean McClure. Jean McClure confirmed that she had participated in the blind test but that she had not reached a conclusion on the mark. She explained that when she was asked to consider the mark, it was late and she was tired. She indicated that she had requested a further opportunity to consider the mark in the morning, but that she had not been afforded this opportunity.<sup>145</sup>

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<sup>142</sup> *Official Report*, Justice 1 Committee, 26 June 2006; c 3554

<sup>143</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3360

<sup>144</sup> *Official Report*, Justice 1 Committee, 26 June 2006; c 3554

<sup>145</sup> Jean McClure, supplementary written evidence, available in volume 2 of this report

253. Greg Padden also confirmed his involvement and that he too had not reached a conclusion on the mark. In his response, Greg Padden indicated that he had not been afforded an opportunity for a ‘proper examination’ of the mark. However, his impression was that there was insufficient detail in the mark for comparison. Like Jean McClure, he asked for further time the following day to consider the mark. He made this request to Alan Dunbar who informed him that he could not have any more time and that a conclusion was required there and then. As such, he informed Alan Dunbar that he could not reach a conclusion on the mark.<sup>146</sup>

254. Greg Padden also indicated that he was not aware of the blind test being used before or after its application in the case of mark Y7.<sup>147</sup>

255. Alan Dunbar informed the Committee that he was instructed to facilitate the blind test by William O’Neill, but that he felt the procedure was driven by Hugh Ferry. He suggested that he did not see the need for the process—

“Senior management instructed me what to do, and I tried to work in the best possible fashion, so that what I did could be looked back on. I did not necessarily agree with what I had to do, but I did it to the best of my ability.”<sup>148</sup>

256. The Committee asked Hugh Ferry what his involvement was in the blind test. Hugh Ferry initially confirmed that he had given authority for a blind test. However, later in the same session, he stated that he did not know whether he had authorised the blind test.<sup>149</sup>

257. In the course of the same session, Hugh Ferry indicated that he did not receive the results of the blind test.<sup>150</sup> However, both Robert Mackenzie<sup>151</sup> and William O’Neill<sup>152</sup> suggested that Hugh Ferry was made aware of the results.

258. The Lord Advocate told the Committee that the Crown Office had never been made aware of the conclusions of the blind test.<sup>153</sup> Sir William Rae also told the Committee that he was not aware of the blind test.<sup>154</sup>

**259. The Committee is concerned about the implementation of what has been termed a blind test. The Committee is clear that it was an ad hoc procedure instigated by senior management in the SCRO Bureau in response to pressure from senior Strathclyde Police officers to have mark Y7 re-examined. The Committee considers the blind test to have been an ill-considered and inappropriate reaction to this pressure by SCRO management.**

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<sup>146</sup> Greg Padden, supplementary written evidence, available in volume 2 of this report

<sup>147</sup> Ibid

<sup>148</sup> *Official Report*, Justice 1 Committee, 26 June 2006; c 3561

<sup>149</sup> *Official Report*, Justice 1 Committee, 23 May 2005; c 3148

<sup>150</sup> Ibid

<sup>151</sup> Robert Mackenzie, supplementary written evidence, precognition statement to Tayside Police

<sup>152</sup> William O’Neill, supplementary written evidence

<sup>153</sup> *Official Report*, Justice 1 Committee, 12 September 2006; c 3691

<sup>154</sup> *Official Report*, Justice 1 Committee, 20 June 2006; c 3456

260. **The Committee found the evidence presented to the Committee by Hugh Ferry to be unclear and confusing. He was unable to confirm whether or not he had authorised the blind test and, in spite of evidence to the contrary, he indicated that he had not been informed of the findings of the test.**

261. **The Committee considers that the instigation of the blind test was without precedent and without any reference to agreed procedures or standards. Furthermore, it does not appear to the Committee to have been carried out under appropriate conditions. However, once it had been undertaken, the Committee considers that the full process and conclusions of all the SCRO fingerprint officers should have been disclosed to Strathclyde Police and to the Crown Office and Procurator Fiscal Service.**

#### **The professional competence of SCRO fingerprint officers in relation to mark Y7**

262. In the course of the inquiry a number of questions have been raised about the professional competence of the SCRO fingerprint officers in relation to mark Y7.

263. The Committee has considered the conduct and capability of the fingerprint officers including their court presentation skills, an issue which was specifically highlighted in the course of the inquiry.

264. As previously set out, it is not the Committee's intention for this inquiry to be a disciplinary tribunal for the SCRO fingerprint officers. Questions have, however, been raised in evidence about their conduct and capability. The Committee considers it is legitimate for it to explore such matters.

265. On 6 July 2000 Colin Boyd, the Lord Advocate, instructed Mr William Gilchrist, then Regional Procurator Fiscal for North Strathclyde, to inquire into allegations of criminal conduct against the SCRO fingerprint officers made by Shirley McKie's father to the Minister for Justice.<sup>155</sup>

266. In order to support William Gilchrist's inquiries, Deputy Chief Constable James Mackay of Tayside Police (who had been asked initially by ACPOS to investigate the identification of mark Y7) was directed by the Crown Office to make his report to William Gilchrist. As such, his work now became a criminal investigation and came under the auspices of the Crown Office as opposed to ACPOS.<sup>156</sup>

267. On 3 August 2000 the SCRO Executive Committee suspended Fiona McBride, Charles Stewart, Hugh Macpherson and Anthony McKenna on a precautionary basis and in September 2000 Robert Mackenzie and Alan Dunbar were placed on non-operational duties.<sup>157</sup>

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<sup>155</sup> ACPOS, written evidence

<sup>156</sup> Ibid

<sup>157</sup> Strathclyde Police Joint Board Scrutiny Committee Investigation Report – 'The Black Report'

268. On 7 September 2001, following the conclusion of the investigation, the Lord Advocate announced that no criminal proceedings would be brought against the SCRO fingerprint officers.<sup>158</sup>

*Disciplinary inquiry: 'The Black Report'*

269. In May 2001, Harry Bell, the Director of SCRO advised the six fingerprint officers concerned that, at the conclusion of the Crown assessment of the criminal case, an evaluation of any discipline issues would be required.<sup>159</sup> Strathclyde Joint Police Board (employers of the fingerprint officers) set up a Scrutiny Committee, with an independent chairperson to conduct an internal disciplinary inquiry. James Black, an independent management consultant, was engaged to conduct an investigation. Mr Black was not a fingerprint expert. He conducted interviews with the six fingerprint officers in December 2001 and again in February 2002. Mr Black's findings were reported to the Scrutiny Committee in February 2002. In turn, the Scrutiny Committee reported its conclusions to Strathclyde Joint Police Board.<sup>160</sup>

*The objective of the investigation*

270. The investigation sought to establish whether, on the balance of probabilities, there were grounds on the basis of conduct or capability for disciplinary action against any of the officers within the ad hoc investigation and disciplinary procedure that had been agreed by all parties.<sup>161</sup>

*Terms of reference*

271. The terms of reference for the investigation set out definitions of conduct and capability—

“Conduct - an employee is generally required to conduct him or herself in a manner which is not likely to destroy the duty of trust and confidence that an employee owes to an employer. Certain areas of conduct which result in the breakdown of this relationship of trust and confidence may properly be termed gross misconduct. However there are also other types of conduct of an employee that, while not amounting to gross misconduct, may constitute conduct in respect of which an employer believes that disciplinary action may be appropriate. Examples of gross misconduct may be lying or falsifying records, deliberately covering up errors or acting recklessly in the manner in which work was carried out, while a general example of minor misconduct may be bad timekeeping.

Capability - an employee should be qualified and capable of carrying out the duties associated with the post in which they are employed. If it appears that an employee is no longer qualified to carry out their duties, for instance as a result of advances in technology with which the employee has failed to keep apace, or an employee does not appear to be capable of carrying out their duties as their level of competence is no longer that which is expected

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<sup>158</sup> ACPOS, written evidence

<sup>159</sup> Strathclyde Police Joint Board Scrutiny Committee Investigation Report – ‘The Black Report’, page 18

<sup>160</sup> Strathclyde Police Joint Board Scrutiny Committee Investigation Report – ‘The Black Report’

<sup>161</sup> Strathclyde Police Joint Board Scrutiny Committee Investigation Report – ‘The Black Report’, page 3



of them, or where the work completed can be shown to have fallen below the standard expected and procedures laid down, then an employer may also consider taking disciplinary action.”<sup>162</sup>

272. The inquiry focussed on the actions of the officers in relation to the identification of marks in the Asbury case, including mark Y7. James Black sought to make his judgement on the basis of their capability to do their job and their conduct in doing so in order to determine whether or not there should be any disciplinary action against the six officers.<sup>163</sup>

273. James Black told the Committee he based his conclusions on whether or not the fingerprint officers operated to the procedures in place in 1997.<sup>164</sup>

274. In order to inform his consideration, James Black interviewed the six officers in question. Furthermore, in addition to visiting the SCRO to obtain an impression of their working practices, he also visited the fingerprint units of both New Scotland Yard and Greater Manchester Police in order to compare the manner in which they operated.<sup>165</sup>

275. In terms of conduct, Mr Black found no evidence of misconduct by the four suspended fingerprint officers or by the two senior managers. The report stated—

“In the case of the four suspended experts the procedures followed and the relationships maintained throughout the initial work, the preparation for the court cases and in the years following remained professional and correct. In the case of the two managers placed on non operational duties these two people carried out tasks as instructed by senior managers in a professional manner.”<sup>166</sup>

276. As regards issues of capability, the report concluded that no evidence had been found of “low standards of performance or disregard for the procedures of the organisation.”<sup>167</sup> In relation to the four fingerprint officers who had originally identified mark Y7, the report went on to conclude that “all four people who worked on Y7 did so with all appropriate diligence and professionalism.”<sup>168</sup> In relation to the two managers, Robert Mackenzie and Alan Dunbar, the report concluded that their work on Y7 “was again in line with the procedures and standards at that time.”<sup>169</sup>

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<sup>162</sup> Strathclyde Police Joint Board Scrutiny Committee Investigation Report – ‘The Black Report’, page 4

<sup>163</sup> Ibid

<sup>164</sup> *Official Report*, Justice 1 Committee, 20 June 2006, c 3475

<sup>165</sup> Strathclyde Police Joint Board Scrutiny Committee Investigation Report – ‘The Black Report’, page 3

<sup>166</sup> Strathclyde Police Joint Board Scrutiny Committee Investigation Report – ‘The Black Report’, pages 3 and 4

<sup>167</sup> Strathclyde Police Joint Board Scrutiny Committee Investigation Report – ‘The Black Report’, page 9

<sup>168</sup> Ibid

<sup>169</sup> Strathclyde Police Joint Board Scrutiny Committee Investigation Report – ‘The Black Report’, page 3

277. In light of these findings, Mr Black recommended that the four officers be returned to their normal duties with no disciplinary measures taken against them and the two senior fingerprint officers returned to operational duty.<sup>170</sup>

278. The scrutiny committee, set up by Strathclyde Joint Police Board, considered the report. The chair of the Scrutiny Committee, Doris Littlejohn, informed the Justice 1 Committee of the Scrutiny Committee's response to the report—

“We concluded unanimously that a thorough investigation had been carried out and that, based on the facts stated as having been found in the report, the recommendation that no disciplinary proceedings should follow was justified.”<sup>171</sup>

279. The Committee notes that the Black investigation, based upon an assessment of whether the fingerprint officers had followed the procedures in place in 1997, concluded that no matters of misconduct or lack of capability had taken place in the work surrounding mark Y7.

*Evidence from other witnesses*

280. The Committee received evidence from a number of other witnesses who raised questions about the capability and conduct of the SCRO fingerprint officers in relation to mark Y7. Arie Zeelenberg, in his report on the mark of January 2006, cast doubt on the professionalism of the fingerprint officers—

“No indication is given about the differences in the top part, differences in the bottom part are not mentioned, neither are explanations given for possible differences. In the charting, ridge characteristics that are present in the comparison print but absent in the latent (and vice versa) are marked up as points of similarity.

There is no way for an expert to look at this print with an open mind and a critical professional attitude to make an identification with the comparison print of McKie.”<sup>172</sup>

281. Separately, Pat Wertheim questioned the conduct and competence of the SCRO fingerprint officers—

“Any competent person trained in fingerprint comparison, even at the most elementary level of training and experience, conducting an analysis of scene of crime mark UC01050197Y7 and comparing that mark to the inked left thumbprint of Shirley Jane McKie, should have no trouble reaching the conclusion that the mark was not made by Shirley Jane McKie, but had to have been left by some other person.”<sup>173</sup>

282. John MacLeod, in his report to the Scottish Executive, was asked to determine whether reasonable care had been taken in the identification mark Y7

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<sup>170</sup> Strathclyde Police Joint Board Scrutiny Committee Investigation Report – ‘The Black Report’, page 11

<sup>171</sup> Official Report, Justice 1 Committee, 20 June 2006; c 3474

<sup>172</sup> Arie Zeelenberg, report on mark Y7, January 2006, as submitted by Digby Brown

<sup>173</sup> Precognition statement of Pat Wertheim, 26 May 2000, as submitted by Digby Brown

by the SCRO fingerprint officers. It was his opinion that reasonable care could not have been taken by the officers—

“It is my opinion that the differences between the characteristics in the mark Y7 and those in Shirley McKie’s left thumb can be clearly seen and that reasonable care could not have been taken during the comparisons that wrongly made this identification.”<sup>174</sup>

283. The Committee notes the very serious nature of the conclusions reached by John MacLeod, Arie Zeelenberg and Pat Wertheim about the conduct of the SCRO fingerprint officers. However, the Committee considers it important to set these comments about the capability of the SCRO fingerprint officers in context.

284. SCRO management instigated a retrospective verification of all serious cases involving any or all of the four fingerprint officers for the period of one year before the McKie case and one year after. This verification found all work by the four fingerprint officers to be 100 per cent accurate.<sup>175</sup>

285. More generally, on 22 June 2000, following the announcement of the emerging findings of HMIC (considered in detail in the next section of this report), the Lord Advocate instructed that for all current and future cases where fingerprint evidence provided by SCRO was submitted to Procurators Fiscal, an independent and external check of this evidence should be carried out either by another police fingerprint bureau or independent expert, prior to the commencement of proceedings. These additional checks were initially carried out by experts from Central Scotland Police and Fife Constabulary. From July 2000, the independent verification role was carried out by two fingerprint experts from the Royal Ulster Constabulary.<sup>176</sup>

286. On 6 July 2001, in response to a Parliamentary question the Lord Advocate announced that independent verification of SCRO fingerprint identifications was no longer required in light of changes and improvements made to SCRO procedures. In his answer the Lord Advocate noted—

“Since independent verification was introduced last year, over 1,700 cases have been examined and in each instance, the quality and accuracy of the work of SCRO officers has been confirmed.”<sup>177</sup>

#### *Court presentation by SCRO fingerprint officers*

287. General concerns about court presentation skills of SCRO fingerprint officers are explored at greater length in the next section of the report, but the Committee considers it is important to explore at this point the evidence it has received regarding the court presentation made at the perjury trial of Shirley McKie.

288. In a letter of 2 June 1999, Harry Bell, then Director of the SCRO, advised Chief Constables in Scotland of the outcome of a meeting he had held with the

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<sup>174</sup> John MacLeod’s Report to the Scottish Executive July 2004

<sup>175</sup> Strathclyde Police Joint Board Scrutiny Committee Investigation Report – ‘The Black Report’, page 17

<sup>176</sup> ACPOS Presidential Review of SCRO, Interim Report, 14 September 2000, page 9

<sup>177</sup> S1W-16832

prosecuting advocate, Sean Murphy QC, who had represented the Crown in Shirley McKie's perjury trial, and the Deputy Crown Agent, Frank Crowe, on the fingerprint evidence given at the perjury trial. Harry Bell advised the Chief Constables that both had made it clear they were satisfied with the presentation of the SCRO fingerprint officers. He expressed the view that this case was unique and was unlikely to affect future consideration of fingerprint evidence. However, Harry Bell did accept the need for some re-evaluation of court presentation and suggested that consideration should be given to the methods of presentation and equipment used.<sup>178</sup>

289. James Mackay also met with advocates who had appeared in Shirley McKie's perjury trial. One of the advocates attributed blame to the equipment used by the SCRO fingerprint officers. However, Mr Mackay also noted that one advocate considered that the SCRO fingerprint officers had difficulty in explaining their conclusions and another considered that the SCRO fingerprint officers were arrogant in the way they gave their evidence.<sup>179</sup>

290. The Committee also thinks it is informative to note the comments made by Lord Johnston when he made his charge to the jury at the perjury trial—

“You are bound I suggest, though it's entirely a matter for you, to recollect and take into account the Crown witnesses, particularly Mr Stewart and Ms McBride, pressed by Mr Findlay in cross-examination offered no reasons for why they were dismissing the top part of the print other than it's my opinion, it's my judgment. On the other hand, what do the Americans do or particularly Mr Wertheim? He says you look at the print,.....and you find immediately without more than a casual....glance that there are mismatches between the top half of both prints.....He says well, that places me immediately in a doubt and what should I do next he says? He says well, distortion or slippage..... is something that can happen for a variety of reasons, pressure, application, movement and so on and so forth, but he doesn't say it is my judgment. He goes on to say I look for.....warning signs, signs of blurring, signs of movement.....he would expect to find if he was looking for distortion. He finds none. So what does he do? He goes back to his first base and says therefore this is a mismatch and he bases that on reasons, not just judgement.”<sup>180</sup>

291. This issue of court presentation is explored in greater detail in section three of the report.

#### *Cropping of images of mark Y7*

292. Cropping concerns the presentation of photographic enlargements of fingerprint evidence for court productions. In some bureaux, including the SCRO, in order to highlight a specific part of a mark or print, the photograph was cut or cropped to focus on that section.

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<sup>178</sup> Submission from Scottish Criminal Record Office – copy of letter from Harry Bell to all Scottish Chief Constables 2 June 1999, available in volume 2 of this report

<sup>179</sup> Synopsis of the Mackay Report

<sup>180</sup> Lord Johnston's charge to the jury HMA v Shirley McKie

293. In the course of his presentation to the Committee, Arie Zeelenberg expounded on the issue of cropping—

“Let us turn to cropping. There are no written rules for cropping. If I have a big palm print, I might be forced to take out a piece for demonstration purposes, but I would say that I had done that. If there are no written rules, you have to go by general rules of transparency, fairness and logic. Of course, you have to bear in mind that you must be able to demonstrate what you say you see and to tell people if there is something wrong. You have to explain that.”<sup>181</sup>

294. Arie Zeelenberg then pointed out that about half of the tip of mark Y7 had been cut off in the court productions produced by the SCRO. In particular, he noted that points 19 and 20, which he had identified as being discrepancies, had been cut off and asked why no explanation was given for doing this.<sup>182</sup>

295. He went on to severely criticise the way in which images had been prepared—

“I conclude that the presentation of the productions was not professional, transparent or honest. It was misleading and wrong. There are a large number of discrepancies.”<sup>183</sup>

296. Charles Stewart stated that as a consequence of the charting pc they used to produce court enlargements they were only able to focus on a small area of the mark—

“The machine was bought for us and we were told that we could use it—that was it. We did not like the machine: it was of very poor quality and had many operational problems. To produce a reasonably sized illustration, it was necessary for us to focus on a very small area of the mark. If I had picked a big area of the mark, my enlargement would not be any bigger than the actual size. I had to narrow in on the area of the mark on which I was working, so that the illustration showed as much as possible of that area.”<sup>184</sup>

297. It was recognised by James Mackay in his report that the cropping of marks was not unique to mark Y7. In his report he indicated that it was also not unique to the SCRO Fingerprint Bureau and that cropping was evident in the work of other bureaux. He did, however, conclude that a professional review should be undertaken of procedures as they related to cropping.<sup>185</sup>

298. In a subsequent review of SCRO practices the ACPOS Change Management Review Team (CMRT) was also made aware of the practice of cropping court enlargements. While it acknowledged that this might reveal the necessary level of detail, the CMRT considered that to do so without showing the whole image “was contrary to principles of disclosure and transparency and may lead to criticism.”

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<sup>181</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3352

<sup>182</sup> *Ibid*

<sup>183</sup> *Official Report*, Justice 1 Committee, 7 June 2006; c 3353

<sup>184</sup> *Official Report*, Justice 1 Committee, 30 May 2006; c 3229

<sup>185</sup> Synopsis of the Mackay Report

By the time of the CMRT review in autumn 2000, the practice had been discontinued by SCRO, a move which the CMRT supported.<sup>186</sup>

**299. The Committee recognises the concerns expressed by several experts about the cropping of images of mark Y7 for court presentation. However, in this context, the Committee also notes that the practice of cropping was common place.**

**300. However, the Committee considers that the practice of cropping images for court presentation purposes was contrary to principles of disclosure and transparency. The Committee welcomes the action taken by SCRO to discontinue the practice.**

*Committee's comments on the professional competence of the SCRO fingerprint officers in relation to mark Y7*

301. While it has been useful and legitimate to explore issues pertaining to the professional competence of the SCRO fingerprint officers in relation to mark Y7 it has not been the Committee's intention to undertake a disciplinary inquiry and accordingly the Committee offers no view on the professional competence of the officers.

## SETTLEMENT OF THE CIVIL ACTION RAISED BY SHIRLEY MCKIE

### History of the civil action

302. Having been cleared of perjury, Shirley McKie raised an action for damages against Strathclyde Police's Chief Constable for £100,000 in respect of the events surrounding her arrest on a charge of perjury in March 1998. This action was unsuccessful. Lord Emslie said the action was "fundamentally irrelevant" because she was unable to show that the officers involved in her arrest had acted with malice.<sup>187</sup>

303. In October 2001, Ms McKie raised an action against Strathclyde Joint Police Board, the Scottish Ministers and the four SCRO officers who signed the report of 10 April 1997 (Hugh Macpherson, Charles Stewart, Fiona McBride and Anthony McKenna).

304. As originally pleaded, the ground of action was that she had suffered loss "through the fault and negligence or deliberate acts" of the four SCRO fingerprint officers.

305. There was doubt as to who was vicariously responsible for the SCRO fingerprint officers due to the complexity of the arrangements through which SCRO was funded and managed. However, in December 2002, Scottish Ministers took what Lord Hodge later described as "the pragmatic approach"<sup>188</sup> of accepting that the responsibility was theirs. As a result, the action against the Police Board and the four fingerprint officers was dismissed. From that point, the action proceeded against Scottish Ministers alone.

<sup>186</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.7.41

<sup>187</sup> Opinion of Lord Emslie, Shirley Jane McKie v John Orr, 14 February 2002

<sup>188</sup> Opinion of Lord Hodge, Shirley Jane McKie v the Scottish Ministers, 30 March 2006, para 11

306. In October 2003 there was a legal debate before Lord Wheatley in relation to Ms McKie's action.

307. Ms McKie's Senior Counsel explained that the case Ms McKie sought to prove was that the SCRO fingerprint officers had initially made a mistake in identifying mark Y7, that they had acted in concert to cover up their mistake and the doubts of other colleagues in order to protect SCRO and not to compromise the prosecution of Mr Asbury. Senior Counsel's contention was that but for the misidentification of the fingerprint, there would have been no prosecution against Ms McKie for perjury. The failure to disclose the doubts of some of their colleagues within the SCRO about the identification of mark Y7 to Ms McKie or her advisers or the Crown or to the jury at her trial, was indicative of malice in the preparation for and the giving of evidence by the SCRO fingerprint officers.<sup>189</sup>

308. In his judgement of 24 December 2003, Lord Wheatley analysed arguments that the SCRO fingerprint officers enjoyed an absolute immunity from any kind of prosecution for compensation and the alternative view that any immunity that might exist was not available to cover acts done maliciously. He rejected Scottish Ministers' contention that the SCRO officers were immune from suit. In his judgement, he said "this immunity .... does not cover what is done maliciously ..."<sup>190</sup>

309. Lord Wheatley identified various difficulties with Ms McKie's pleadings particularly in relation to the inferences that would require to be drawn to prove malice and in relation to proving concert by the SCRO officers. However, overall, he was satisfied that Ms McKie should be entitled to an enquiry on her claim that she suffered a malicious prosecution without reasonable and probable grounds and allowed the case to proceed.

310. Lord Wheatley's judgement was appealed by Scottish Ministers. Ms McKie's case was then amended in July 2004. The original plea that her loss was based on "the fault and negligence or deliberate acts" of the four SCRO fingerprint officers was changed to one that SCRO fingerprint officers "acted in a malicious manner leading to [her] prosecution ....". Changes were also made to aver a case of concert against the SCRO fingerprint officers.<sup>191</sup>

311. Shortly after these changes, the court, with consent, agreed that Scottish Ministers' alternative defences of absolute and qualified privilege be restored and the appeal was allowed to that agreed extent.<sup>192</sup>

312. The case was to go to proof on that basis. Ms McKie contended that the original identification had been an error and thereafter the SCRO fingerprint officers had acted in a malicious manner leading to her prosecution. Scottish Ministers' position was that if mark Y7 was not Ms McKie's print (and she would have to prove that) any mistake was one made in good faith.

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<sup>189</sup> Opinion of Lord Hodge, *Shirley Jane McKie v the Scottish Ministers*, 30 March 2006, para 13

<sup>190</sup> Opinion of Lord Wheatley, *Shirley Jane McKie v Strathclyde Joint Police Board*, 24 December 2003, para 15

<sup>191</sup> Opinion of Lord Hodge, *Shirley Jane McKie v the Scottish Ministers*, 30 March 2006, para 15

<sup>192</sup> *Ibid*

313. However, after receiving the second MacLeod Report in October 2005, Scottish Ministers announced that they would admit that the SCRO fingerprint officers had made a mistake in the identification of mark Y7 and that they would enter into negotiations to settle the action. Scottish Ministers' pleadings were subsequently changed to reflect that admission.<sup>193</sup>

314. Once Scottish Ministers accepted that mark Y7 was not made by the pursuer, their defence rested on the assertion that the mistake was made by SCRO fingerprint officers in good faith.

315. There followed a joint consultation on 21 September 2005 when Ms McKie's legal team produced a detailed quantification of her claim which they valued at approximately £1.2m. Scottish Ministers' advisers valued the claim at £328,000. No settlement was reached at that stage.

316. On 3 November, negotiations proceeded further. On 21 December, Scottish Ministers lodged a formal offer in court of £500,000. It was not accepted although Ms McKie's advisers offered to settle at £1.1m. A further tender was lodged on behalf of Scottish Ministers on 3 February 2006 for £600,000. In response, Ms McKie's advisers indicated that they would accept £750,000. In negotiations on the morning of the proof of 7 February, Scottish Ministers offered £750,000 without admitting liability and the case settled.<sup>194</sup>

317. In his opinion in relation to the expenses of the action, Lord Hodge commented on the basis for the settlement figure—

“The settlement figure, if based on an assessment of the prospects of success in the legal action, might suggest that the Scottish Ministers considered that there was a material risk that they would lose the action. For, while it would not be correct to call the sum of £750,000 a full liability settlement unless one were aware of the assumptions made as to the pursuer's career prospects, the sum of money was on any view not a nuisance settlement. On the other hand, for all I know, the settlement figure may have been the product of a decision to compensate the pursuer taken in the summer of 2005, when the Scottish Ministers announced that they would seek to settle the action, followed by tough negotiating on the part of the pursuer's advisers.”<sup>195</sup>

### **Evidence from the Minister for Justice on the civil action**

318. In oral evidence to the Committee the Minister for Justice explained that in order to inform its defence the Scottish Executive sought to obtain an expert opinion on the consideration of the mark. The Minister indicated that John MacLeod was initially proposed in August 2002 and was subsequently appointed and invited to undertake consideration of the mark.<sup>196</sup>

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<sup>193</sup> Opinion of Lord Hodge, *Shirley Jane McKie v the Scottish Ministers*, 30 March 2006, para 17

<sup>194</sup> Opinion of Lord Hodge, *Shirley Jane McKie v the Scottish Ministers*, 30 March 2006, para 18

<sup>195</sup> Opinion of Lord Hodge, *Shirley Jane McKie v the Scottish Ministers*, 30 March 2006, para 36

<sup>196</sup> *Official Report*, Justice 1 Committee, 12 September 2006; c 3715



319. The Minister for Justice explained to the Committee that John MacLeod was asked to consider mark Y7 and also to determine whether reasonable care had been taken by the SCRO fingerprint officers in their identification.<sup>197</sup>

320. John MacLeod produced two reports for the Scottish Executive. In his first report, dated July 2004, he answered the questions raised by the Scottish Executive—

“It is my opinion that the differences between the characteristics in the mark Y7 and those in Shirley McKie’s left thumb can be clearly seen and that reasonable care could not have been taken during the comparisons that wrongly made this identification.”<sup>198</sup>

321. In October 2005 he produced a further report in which he was asked to comment further on the ridge characteristics used by the SCRO fingerprint officers as the basis for their findings. In his first report, John MacLeod had identified three or four dissimilarities between mark Y7 and the left thumbprint of Shirley McKie. However, in his second report he identified 15 dissimilarities.

322. The Minister for Justice explained to the Committee why she had taken the decision to settle—

“In reaching the decision to settle, on the basis that there was no evidence of malice, we clearly accepted that there was no lack of integrity on the part of the officers, as there was no malicious intent. However, I point out that Mr MacLeod’s report raised the issue of whether appropriate care had been taken. People may or may not disagree with that. There may be questions around the subtleties of what the MacLeod report said. Does it mean that people did not pay proper attention, does it mean that they were not trained properly or does it mean a range of other things? However, that was Mr MacLeod’s opinion in his report.”<sup>199</sup>

323. The Committee considered that it was extremely important to understand clearly why the Scottish Executive decided to settle the action out-of-court. The Minister for Justice was closely questioned on the basis for the settlement. She responded—

“Like everyone, I, as the Minister, was aware that the case was a very high-profile case with strongly held views on all sides. I have mentioned that in previous parliamentary statements and debates. I felt that it was my responsibility to consider all the evidence and advice that could be presented to me and to make a decision on the best way forward. On the basis of the advice that was provided to me, including the expert report and the range of other issues that I had to consider, I took the decision that the best thing was to try to make the settlement, especially given the length of time that had elapsed, and to move on.

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<sup>197</sup> *Official Report*, Justice 1 Committee, 12 September 2006; c 3715

<sup>198</sup> John MacLeod’s Report to the Scottish Executive July 2004

<sup>199</sup> *Official report*, Justice 1 Committee, 12 September 2006; c 3725

I did that for a number of reasons—partly because I was concerned about all the individuals involved in the situation and partly because I was concerned about the future of the Scottish fingerprint service and how we should move on. I did not think that it was in anyone's interests for the process to continue and for no one in the situation to be able to move on. When I took the decision, I recognised that it would not necessarily be popular.”<sup>200</sup>

324. In written evidence the Minister for Justice's explained to the Committee the basis on which the civil action had proceeded—

“Initially, in 2001, Ms McKie simply submitted that four named officers had negligently, recklessly or deliberately committed a civil wrong against her in maintaining that Y7 was her print. By October 2003 and the debate before Lord Wheatley, Ms McKie's amended case was that following the original identification of Y7, which it was claimed was wrong and at least negligent, the continued maintenance of the veracity of the identification was done to protect the reputation of SCRO and was done so knowing that it was false. It was specifically averred that the failure to disclose doubts on the part of SCRO officers was indicative of malice. Lord Wheatley was critical of the averments in Ms McKie's case in relation to malice, noting that the case supportive of malice was based on inferences and that these inferences could be drawn only with "some difficulty". He also noted that there was a lack of averments explaining how negligence came to be converted into malice. While he did not strike out the averments relating to negligence as irrelevant, Lord Wheatley did state that Ms McKie would have to prove malice in order to succeed. Therefore, the case from that point proceeded on the grounds of malice only and it was this which would have required to be proved by Ms McKie had the case proceeded to court.”<sup>201</sup>

325. The Committee also raised concerns about the considerable delay between the inception of the action and the settlement. In response to questioning from Members, the Minister for Justice sought to explain why there had been a delay in reaching a settlement—

“It is important to recognise that even at the points when it might have looked to the outside world as if nothing was proceeding, there were still a number of complexities around some of the legal arguments and other pieces of litigation with which Ms McKie was involved at various stages. I do not wish anyone to get the impression that I wanted to get the matter out of the way because it was an inconvenience. I was acutely conscious of the fact that we were talking about people's lives—not only the lives of Ms McKie, her family and immediate circle, but those of the SCRO officers and people in the wider fingerprint service. I was firmly of the view that although we had to arrive at a resolution, it would not please everybody and it had to allow the SCRO and the wider Scottish fingerprint service to move on. I wanted to try, if at all possible, to come to a position whereby all those things could be addressed. That is why it took longer than others might have liked. Many MSPs wrote to

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<sup>200</sup> *Official Report*, Justice 1 Committee, 12 September 2006, c 3716

<sup>201</sup> Minister for Justice, supplementary written evidence

me about, and raised with me constantly, the fact that they felt there was an undue delay.”<sup>202</sup>

### **Conclusion on the civil action**

326. The Committee notes that HMIC, ACPOS, the chief executive of the Scottish Police Services Authority and Scottish Ministers have all accepted that mark Y7 was misidentified as having been made by Shirley McKie. The Committee also recognises that John MacLeod, in his first report to the Scottish Executive, concluded that the SCRO fingerprint officers, in reaching their findings on mark Y7, had demonstrated a lack of reasonable care.

327. The Committee did not specifically seek to determine whether the SCRO fingerprint officers acted with malice, however, on the basis of the evidence that it has taken, there is no basis to say that the SCRO fingerprint officers had acted maliciously in their identification and verification of mark Y7. It would appear to the Committee that proving malice may have been challenging for Ms McKie’s lawyers had the action proceeded to proof.

328. However, the Committee recognises that the Minister for Justice took account of a range of issues in coming to her decision to settle out-of-court. There was a judgement call to be made as to what the result of any court action would have been, including the amount of damages which may have been awarded had Ms McKie been successful in her action.

329. At a more basic, human level, the Committee notes that the Minister for Justice was trying to do the right thing for Ms McKie to ensure that she received fair recompense for the loss of her career and the anguish that she had had to endure over the preceding nine years. The Minister was also concerned about the other individuals involved in the case and about the future of the Scottish Fingerprint Service. The Committee notes that by settling with Ms McKie the Minister wanted all concerned to move on.

330. The Committee recognises that with such significant amounts of public money at stake, detailed consideration had to be devoted to whether the action should be defended or settled. Having decided to settle the action, there needed to be detailed negotiation of a fair and appropriate figure. Some people may consider that the action should have been defended to the end or that the settlement figure was too high a price to pay in the circumstances.

331. The Committee considers it very important to note that the settlement was made with no admission of liability on the part of Scottish Ministers.

332. Since one of the stated objectives of the Executive was to draw a line under the issue, the Committee is clear in its view that the absence of an agreement for there to be no further comment on mark Y7 following the settlement was a serious omission. In the absence of such an agreement, it is arguable whether a final settlement should have been reached. The

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<sup>202</sup> *Official Report*, Justice 1 Committee, 12 September 2006; c 3721

**Committee considers that the Executive should have insisted on the inclusion of an agreement for no further comment to be made. The Committee considers that such an agreement should have been achievable.**

#### COMMITTEE CONCLUSIONS ON MARK Y7

333. In coming to its overall conclusions on the various issues which stem from the original identification of mark Y7 as having been made by Shirley McKie, the Committee is, above all else, mindful of its remit to consider the implications of the McKie case and to address the issue of public confidence in the standard of fingerprint evidence in Scotland.

334. The Committee considered that, in order to understand the steps that the Scottish Criminal Record Office and the Scottish Fingerprint Service must take to restore public confidence, it was first necessary to go back to the controversy which surrounds the status of mark Y7.

335. While this part of the inquiry was difficult for witnesses, the Committee considered it vital that those who wished to express a view on mark Y7 were given an opportunity to do so.

336. This was particularly important in respect of the individual SCRO fingerprint officers. Over a period of years, following the acquittal of Shirley McKie, these individuals have been constrained from commenting on a number of issues with which they were intimately involved. Indeed, to a large extent they were on the receiving end of criticism from a number of sides and, until this inquiry, they had not had the opportunity to respond. It was right that this inquiry afforded the opportunity for these individuals to have their say.

337. Furthermore, it was right that the Committee should take evidence from experts from all sides of the argument around mark Y7. The Committee was fully aware of the passions that this subject invokes and therefore took great care in being as dispassionate and fair as possible in its management of the inquiry.

338. As was stated in the introduction to this report, it was not appropriate for the Committee to pass judgement on any allegations of criminality and certainly not to allege criminality on the part of any individual. Likewise it was not appropriate for the Committee to act as a disciplinary tribunal for the SCRO officers or, indeed, anyone else. Neither was it appropriate for the Committee to re-try Shirley McKie.

339. The Committee considered it important to go into considerable detail in ascertaining why witnesses either did or did not consider that mark Y7 was made by Shirley McKie. This was done in the full knowledge that it has been acknowledged by HMIC, ACPOS, the chief executive of the Scottish Police Services Authority and Scottish Ministers that a misidentification was made.

340. In this part of the report, the Committee has set out the way in which the various fingerprint experts arrived at their conclusions on mark Y7. As part of this process, the Committee has exposed the level of disagreement which exists between the experts.

341. What emerged from the evidence-taking process was that the differences of opinion as to the identification of mark Y7 are so fundamental that they cannot, in the opinion of the Committee, be reconciled. Illustrative of this complete lack of consensus is the fact that John Berry and Peter Swann could, between them, find 32 ridge characteristics in agreement between mark Y7 and Shirley McKie's left thumbprint and yet Arie Zeelenberg could find none in agreement and 20 in disagreement.

342. The Committee found it staggering that respected and highly experienced experts could have such widely divergent professional opinions on the identification of mark Y7.

343. But the level of disagreement goes far deeper than one group of experts simply coming to a different conclusion on the identification of mark Y7. There appears to be fundamental disagreement among the experts on most matters relating to the analysis to which mark Y7 has been subject. One such area is that there is no agreement on the way in which dissimilarities between marks are accounted for.

344. In this section of the report, the Committee has been able to detail the numerous areas on which there is disagreement and, in so doing, has hopefully clarified for the general public why mark Y7 has proved so contentious. The Committee recognises, however, that the general public will still not know *why* the different experts hold such opposing views on so many matters relating to mark Y7.

345. It should be noted that it is not uncommon for disputes over identifications to occur between experts within a fingerprint bureau. In these circumstances if a resolution cannot be found then a mark is deemed not to have been identified and will proceed no further. It is far less common for a dispute to arise after an identification has been verified by other experts within a bureau and presented as evidence in a court case.

346. However, it is important to note that it is not unprecedented for a single fingerprint to be the subject of such a complete breakdown in consensus among experts. Scotland is not the only jurisdiction with experience of such a case. The Committee notes the example of Danny McNamee. In 1987, Danny McNamee was sentenced for conspiracy to cause explosions in Hyde Park in 1982. As part of the appeal process in 1998, 14 experts analysed a single thumbprint. The appeal judgement includes the comment—

“Remarkably, and worryingly, save for those who said that the print was unreadable, there was no unanimity between them, and very substantial areas of disagreement.”<sup>203</sup>

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<sup>203</sup> Shelley Jofre, written evidence, The Judgement in *R. v Gilbert Thomas Patrick McNamee*, available in volume 2 of this report

**Mark Y7 in the context of the inquiry remit**

347. The Committee has not given a view as to whether mark Y7 was correctly identified or not. It was not part of the remit of the inquiry to give a view on this matter. Indeed, any opinion proffered by the Committee as to whether mark Y7 was or was not made by Shirley McKie would be reported as being the verdict of a re-trial of Ms McKie.

348. Instead, the remit of the inquiry is forward-looking and is focussed on the efficiency of SCRO and the Scottish Fingerprint Service. The primary reason for undertaking the inquiry was to contribute to the process of restoring public confidence in the Scottish Fingerprint Service.

349. The Committee is of the view that it is the efficiency and effectiveness with which this organisation is run in 2007 that is critical to whether the general public can have confidence in the use of fingerprint evidence in the Scottish criminal justice system.

350. On the issue of public confidence in fingerprint evidence, it is worth noting that, in light of the controversy that has ensued over the status of mark Y7, it might have been thought that there would have been an upsurge in appeals to criminal convictions predicated on the notion that fingerprint evidence is no longer reliable. This has not happened.

351. Equally, however, the Committee considers that it would be complacent and wrong to dismiss mark Y7 as a one-off. Accordingly, it was highly relevant for the Committee to look back in time to examine what lessons can be learned from the key events that surrounded the initial identification process in relation to mark Y7 as well as looking at the inquiries, inspections and reports that followed.

352. It is clear to the Committee that, at best, the case highlighted inconsistencies in the identification and verification procedures within the SCRO Fingerprint Bureau. Procedures, in so far as they were written down at all, appear not to have been properly followed or to have been ignored. Furthermore there appear to have been a number of instances when ad hoc procedures were adopted.

353. The obvious next step is for the Committee to address whether these inconsistencies were confined to the identification and verification process applied to mark Y7 or whether they were indicative of wider problems affecting the operation of the SCRO Fingerprint Bureau in 1997 and beyond. Accordingly, the next section of the report explores the HMIC inspection of the SCRO Fingerprint Bureau in 2000 and the problems it identified in the operation of the Bureau.

### **SECTION 3: REVIEWS OF THE SCRO FINGERPRINT BUREAU**

#### **Introduction**

354. The Committee has given detailed consideration to the implications of the McKie case for fingerprint services in Scotland. The case prompted an unprecedented level of inspection, scrutiny and review of the SCRO Fingerprint Bureau in particular.

355. Since 2000, the SCRO Fingerprint Bureau in Glasgow and the Scottish Fingerprint Service have been the subject of a great number of formal inspections and reviews. The following reports have been examined by the Committee—

- HMIC Primary Inspection of SCRO Fingerprint Bureau 2000 (May 2000)
- ACPOS Change Management Review Team (October 2000)
- Mackay inquiry report (synopsis - August 2006) (Original report - October 2000)
- HMIC Primary Inspection of SCRO 2000 (December 2000)
- HMIC Second Year Review of SCRO Primary Inspection 2000 (2001)
- HMIC Third Year Review of SCRO 2000 (2003)
- HMIC SCRO Primary Inspection 2004

356. By considering the key findings, recommendations and action points arising from each of these reports, the Committee has been able to build up a picture of the problems facing the SCRO Fingerprint Bureau and the process by which these problems were addressed.

357. As a first step, the Committee considered the findings of the HMIC Primary Inspection of the SCRO Fingerprint Bureau 2000. The Committee used this report's findings as a baseline to assess the extent of the reforms which have taken place since 2000. The Committee has given particular consideration to certain key themes which emerged from the recommendations made by HMIC.

358. In conjunction with the HMIC report, the Committee also considered the findings and recommendations of the initial ACPOS response to HMIC's conclusions, prepared by the Change Management Review Team, including the steps taken by SCRO and other stakeholders to implement the HMIC recommendations.

359. Evidence from the synopsis of the Mackay inquiry report, as provided to the Committee by the Lord Advocate, which relates to organisational and operational matters within the SCRO Fingerprint Bureau, is also considered in this section.

360. Finally, in this section of the report, the Committee focuses attention on the findings of subsequent inspections carried out by HMIC to assess the extent of change made to the Glasgow Bureau by the time of the next HMIC Primary Inspection of SCRO in 2004.

HMIC PRIMARY INSPECTION OF SCRO FINGERPRINT BUREAU 2000

**Background and Remit**

361. HMIC was scheduled to conduct a Primary (full) Inspection of the Scottish Criminal Record Office in December 2000 as part of its regular cycle of inspections. A primary inspection of SCRO had last been conducted in 1995 followed by a review inspection in 1998.<sup>204</sup>

362. On 18 January 2000, a BBC *Frontline Scotland* television programme was broadcast in which it was alleged that SCRO fingerprint officers had made a mistake in their identification of mark Y7.

363. In his oral evidence to the Committee, Sir William Rae explained how ACPOS responded to the programme's broadcast—

“The programme contained information about the way in which the fingerprint was identified. It started a media scrum, as a consequence of which the chief constable of Strathclyde Police at the time asked ACPOS to put the matter on the agenda for our meeting of 7 February 2000. At that meeting, the chief constables discussed the furore on the fingerprint identification. From our perspective, the conclusion was that the best interests of the criminal justice system would be served by the fingerprint identification being independently assessed by Her Majesty's Chief Inspector of Constabulary.”<sup>205</sup>

364. Sir William explained that at that stage it was not within the chief constables' power to initiate such an inspection. However, on that same afternoon, a meeting of the SCRO Executive Committee (comprising the eight chief constables, HM Chief Inspector of Constabulary and representatives of the Scottish Executive and COSLA) was also held at which a presentation was given by some of the SCRO staff on the fingerprint identification. Following the presentation and in the context of the SCRO Executive Committee meeting, the Committee decided to ask HMIC to commission an independent assessment of mark Y7.<sup>206</sup>

365. Following the request from the SCRO Executive Committee, the then HM Chief Inspector of Constabulary, William Taylor QPM, agreed to re-visit the disputed fingerprint identification in the case of HMA v Shirley McKie as part of an inspection of the SCRO Fingerprint Bureau. The inspection was brought forward and pre-inspection work started in April 2000. This culminated in the formal Primary Inspection visit by Mr Taylor which took place on 22 and 23 May 2000.<sup>207</sup>

366. It is important to note that this was the first time that HMIC had conducted an inspection of the SCRO Fingerprint Bureau in isolation from the rest of SCRO. The detailed level of scrutiny applied by HMIC during the inspection is reflected in its report.

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<sup>204</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 1.6.3.1

<sup>205</sup> *Official Report*, Justice 1 Committee, 20 June 2006; c 3434

<sup>206</sup> *Ibid*

<sup>207</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, Executive Summary, para ii



367. It is clear to the Committee that the important decisions to bring forward the HMIC inspection process and to isolate the Fingerprint Bureau from the rest of SCRO were taken in direct response to the broadcast of the *Frontline Scotland* programme and subsequent media coverage of the McKie case.

368. In oral evidence, Mr Taylor explained that he was asked to bring forward the inspection and to separate the fingerprint bureau from SCRO as a whole because of particular concern about the identification in one case, namely that of Shirley McKie.<sup>208</sup> In a supplementary submission, Mr Taylor confirmed that the remit for the inspection was set by and was the responsibility of HMIC.<sup>209</sup>

369. The final inspection report makes clear that it was unusual for an inspection to be brought forward on the basis of there being concerns raised by a single criminal case. However, the report also makes clear that the methodology for the inspection was normal and the purpose was standard, namely to examine the efficiency and effectiveness of the SCRO Fingerprint Bureau and to make recommendations with a view to securing continuous improvement.<sup>210</sup>

370. The inspection involved an examination of the acquisition, examination and presentation of fingerprint evidence and a review of the training skills and quality assurance aspects of the processes in operation within the SCRO Fingerprint Bureau.<sup>211</sup>

### **HMIC report - conclusions and recommendations**

371. The inspection report was formally published on 14 September 2000. In its overall assessment, HMIC concluded that the SCRO Fingerprint Bureau was “unable to provide a fully efficient and effective service with its present level of staffing, resources, processes and structures.”<sup>212</sup>

372. The report made a total of 25 recommendations and 20 suggestions for improvement. A summary of the recommendations and the subsequent HMIC inspection at which they were discharged can be found in Annexe B to this report.

373. HMIC directed particular criticism towards oversight management arrangements and under-resourcing of the Bureau, including the lack of sufficient fingerprint officers, infrastructure, administrative support and deficiencies in the working environment. Key areas such as training and quality assurance were identified as having “not been given the priority and attention... necessary to secure their worth.”<sup>213</sup> In relation to these matters, the report concluded—

“A number of the short term solutions being put in place to manage demands are unsatisfactory and unsustainable. Without a substantial injection of finance, a radical re-organisation of the provision of fingerprint services in Scotland and more active management of the functions this key element of the

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<sup>208</sup> *Official Report*, Justice 1 Committee, 6 September 2006; c 3611

<sup>209</sup> William Taylor, written evidence, available in volume 2 of this report

<sup>210</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 10.1

<sup>211</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 1.4.1

<sup>212</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 10.4

<sup>213</sup> *Ibid*

Scottish criminal justice system is unlikely to return to full effectiveness and efficiency.”<sup>214</sup>

374. The key themes and recommendations arising from the HMIC report are discussed later in this section.

### **ACPOS response to HMIC report**

375. Following the release by HMIC of the emerging findings of the inspection in June 2000, ACPOS set up a Presidential Review Group (APRG)<sup>215</sup> under the direction of the then ACPOS President, William Rae. ACPOS also established a Change Management Review Team (CMRT) to undertake a 90-day scrutiny of the SCRO Fingerprint Bureau. The Team was led by Kenny McInnes, Deputy Chief Constable, Fife Constabulary.

376. The CMRT was given the task of providing the APRG with an action plan “to allow early implementation of measures necessary to ensure a fully effective and efficient fingerprint service for the Scottish Police Service” including references to management, staffing, resources, standards of performance and quality control issues.<sup>216</sup>

377. In its report, published in October 2000, the CMRT responded to each recommendation and suggestion made by HMIC, including identifying lead organisations responsible for addressing specific action points accompanied by defined target timescales.

378. Building on the work carried out by HMIC, the report included detailed consideration of the structural, management and resource issues facing both the SCRO Fingerprint Bureau and wider fingerprint service in Scotland at that time.

### **Mark Y7 element of the inspection**

379. As part of the inspection, it was agreed that HMIC would examine the circumstances of the McKie case in the context of the processes employed by the SCRO Fingerprint Bureau and by fingerprint experts in forces bureaux across Scotland. In addition, HMIC agreed to arrange a further examination of the disputed identification of mark Y7.<sup>217</sup>

380. When he appeared before the Committee, Mr Taylor stressed that the process was an inspection and not an investigation and, as such, it looked at the organisation rather than individuals, and at areas of performance and potential improvement rather than liability and culpability.<sup>218</sup>

381. In supplementary written evidence, responding to a request from the Committee for clarification as to whether the inspection remit included

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<sup>214</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 10.5

<sup>215</sup> In the HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau report, the APRG is referred to as APRT.

<sup>216</sup> ACPOS Presidential Review Group - CMRT scrutiny report; para 11.3.3

<sup>217</sup> Ibid

<sup>218</sup> *Official Report*, Justice 1 Committee, 6 September 2006; c 3609

identification of improper conduct by staff or management within the bureau, Mr Taylor confirmed that if any issue is identified that HMIC considers requires reference to others, e.g. the Procurator Fiscal, then this would be done. However, in this instance, Mr Taylor provided confirmation that this had not occurred—

“There was no matter (beyond that in the recommendations) that required specific attention or reference to a third party - such as allegations of crime or breaches of civil law. Any action by others subsequent to the Inspection by HMIC was their responsibility and was not as a result of a direct report from HMIC seeking specific action.”<sup>219</sup>

382. In relation to the examination of mark Y7, Mr Taylor confirmed that he was asked by the SCRO Executive Committee to do so as part of the inspection process. He explained that, overall, 24 cases were examined to see how matters were handled, which was normal practice, but he continued—

“In this case we went the extra mile by having an expert examine the mark. It was my view that that would not necessarily add a great deal to the inspection process. The debate involved my making it clear that I would examine the case in order to inform the inspection process. It was not an investigation and it had no criminal, civil or disciplinary implications – that was not my role.”<sup>220</sup>

#### *Selection of international experts*

383. Mr Taylor also confirmed that it was he who took the decision to select Arie Zeelenberg and Torger Rudrud as the experts to examine the mark having spoken with chief constables in Europe in order to identify someone to help.<sup>221</sup>

384. Anthony McKenna, one of the SCRO fingerprint officers who had verified the original identification of mark Y7 submitted evidence that he and his colleagues had been given assurances that whoever was selected by HMIC to re-examine mark Y7 would be acceptable to them.<sup>222</sup> His colleague Charles Stewart submitted—

“...when we were promised by the HMIC that they would use experts we would consider to be our equals, we warned them not to use the Dutch and explained the basis and conclusions of the Evett and Williams report to them, and explained how it found the Dutch to be lacking in fingerprint identification skills as they spectacularly failed to identify the correct number of identifications.”<sup>223</sup>

385. Arie Zeelenberg and Torger Rudrud independently conducted a comparison of the latent mark found at the crime scene and the fingerprints taken from Shirley McKie for elimination purposes. Both experts were clear in their opinion that there

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<sup>219</sup> William Taylor, written evidence

<sup>220</sup> *Official Report*, Justice 1 Committee, 6 September 2006; c 3612

<sup>221</sup> *Official Report*, Justice 1 Committee, 6 September 2006; c 3613 and c 3631

<sup>222</sup> Anthony McKenna, written evidence, available in *Justice 1 Committee, 5th Report, 2006 (Session 2) - Written evidence received on Scottish Criminal Record Office inquiry* (SP Paper 558)

<sup>223</sup> Charles Stewart, written evidence

was sufficient detail in the mark found at the crime scene to make an identification.<sup>224</sup> The Primary Inspection report stated that—

“Two of the experts, independently, conducted a comparison of the latent mark found at the crime scene and the fingerprints taken from Shirley McKie for elimination purposes. The two experts who made the comparison were clear in their opinion that there was sufficient detail in the mark found at the crime scene to make an identification. Both experts are unequivocally of the opinion that the mark was not made by Shirley McKie. It is their view that [that] decision could have been reached at an early point in the comparison process.”<sup>225</sup>

386. As a result of this opinion, HMIC held a meeting on 21 June 2000 with members of the SCRO Executive Committee, the SCRO Deputy Director (Supt. Brian Gorman) and representatives from the Scottish Executive, ACPOS and Crown Office at which HMIC presented the emerging findings of the inspection.<sup>226</sup>

387. HMIC made the result of the re-examination known to the McKie family at “the earliest practicable opportunity”.<sup>227</sup> In oral evidence Mr Taylor told the Committee that his lead staff officer had advised the McKie family of the outcome of the fingerprint examination on 22 June 2000, the day that Mr Taylor announced his emerging findings.<sup>228</sup>

388. On 22 June 2000, HMIC's emerging findings were reported to the Scottish Parliament in a statement by Jim Wallace MSP, the then Deputy First Minister and Minister for Justice.

389. In advance of the publication in September 2000 of the formal report by HMIC, Sir William Rae, then Chief Constable of Dumfries and Galloway Constabulary and incoming President of ACPOS, met with the McKie family and personally apologised for the trauma and distress suffered as a consequence of the misidentification of the fingerprint mark.<sup>229</sup>

*Committee conclusions on mark Y7 element of inspection*

390. Despite being described as a routine inspection, the Committee considers that the HMIC inspection of the SCRO Finger Print Bureau in 2000 differed from normal practice—

- In addition to the normal terms of reference, the inspection also focused on the difference of opinion regarding the identification of one particular mark - Y7 (which involved the decision to go outside the bureau and ask a Dutch and a Norwegian expert to examine the disputed mark); and
- The HMIC emerging findings were reported to the media three months before the release of the final report.

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<sup>224</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 1.2.6

<sup>225</sup> Ibid

<sup>226</sup> Ibid

<sup>227</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 1.2.8

<sup>228</sup> *Official Report*, Justice 1 Committee, 6 September 2006; c 3635

<sup>229</sup> ACPOS, written evidence

391. With the benefit of hindsight, the Committee considers that much of the subsequent controversy over the status of mark Y7 could have been avoided if HMIC had secured the advance agreement of the SCRO fingerprint officers to accept the conclusions of these independent experts and, to this end, had consulted the SCRO fingerprint officers on the selection of the independent experts. The Committee recognises, however, that this could have raised issues about the independence of this element of the inspection and that the final decision on selection of the experts had to rest with HMIC.

392. In relation to the early announcement of HMIC's emerging findings, it is clear to the Committee that there had been exchanges between HMIC and ACPOS as the inspection progressed. Given the emerging findings, ACPOS decided that early action was required. The Committee agrees that it was right that this early action took place given the nature of the problems identified by HMIC. The Committee, however, considers that the manner in which HM Chief Inspector of Constabulary William Taylor chose to make public his emerging findings undermined the good intentions he had in so doing.

393. The Committee is concerned that HMIC made arrangements to inform the McKie family of the emerging findings in advance of the public announcement.

**394. The Committee has strong concerns that HMIC went to press with emerging findings in the absence of a written report which set these findings in context. The failure of HMIC to publish an interim report to substantiate the emerging findings prevented elected members and others with a legitimate interest from considering the findings in context and subjecting them to detailed scrutiny at that time.**

**395. The Committee considers that these failings enabled criticism to be levelled that, by taking the approach that he did, HM Chief Inspector of Constabulary was primarily acting in response to intense media pressure and a high profile campaign.**

**396. Despite these concerns, the Committee considers that the HMIC inspection of processes and procedures within the SCRO Fingerprint Bureau was extremely detailed and thorough. The Committee is satisfied that the HMIC inspection highlighted serious operational problems within the Bureau. The Committee now turns its attention to the findings contained in the HMIC report.**

#### KEY THEMES

397. The Committee considers that the key themes which emerged from the HMIC inspection of the fingerprint bureau may be broadly grouped into five general headings—

- Structure of fingerprint services in Scotland;
- Leadership and management;
- Human resources;

- Procedures; and
- Quality Assurance.

398. The Committee considers below the findings of HMIC, the response of the ACPOS Change Management Review Team and other evidence received from witnesses to the inquiry in relation to each of these themes.

### **Structure of fingerprint services in Scotland**

399. HMIC considered recommendations made by the Scottish Fingerprint Service Working Group (SFSWG) and subsequent consultants' reports for a rationalisation of the existing structure of fingerprint services in Scotland.

#### *Scottish Fingerprint Service Working Group (SFSWG)*

400. The SFSWG was established in May 1997 by the SCRO Controlling Committee to consider concerns raised in 1996 by the Head of SCRO over 'impending difficulties' within the SCRO Fingerprint Bureau which 'required urgent resolution to prevent a serious reduction to the quality of service provided by SCRO'. The Group was chaired by John Hamilton, Chief Constable of Fife Constabulary.<sup>230</sup>

401. The SFSWG examined the impact which the Automatic Fingerprint Recognition (AFR) system, *Livescan* and other technical developments were having on fingerprint services in Scotland, and SCRO in particular.

402. The difficulties experienced by the SCRO Fingerprint Bureau were closely related to the introduction of *Livescan*, a national system which allowed an individual's fingerprints to be captured by optical and electronic scanning.

403. From April 1997, SCRO began operating a 24 hour identification service on behalf of all Scottish police forces utilising the *Livescan* and AFR systems. This would, where possible, process the fingerprints of a person held in custody by a local police force and confirm identity back to that location within two hours of receipt. The CMRT reported that in 1999/2000 this was achieved in 95.5% of cases.<sup>231</sup>

404. However, this level of service required significant staff resourcing to ensure that it operated within the target timescale. The CMRT found that the resource commitment to this service in terms of fingerprint officers was such that mark identification demands were not being met and a significant backlog of work built up.<sup>232</sup>

405. In an interim report, the SFSWG identified that the problems caused by *Livescan* were significant to the overall structure and management of fingerprint services in Scotland and suggested that minor adjustments to structure would be

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<sup>230</sup> ACPOS Presidential Review Group - CMRT scrutiny report; section 7.2

<sup>231</sup> ACPOS Presidential Review Group - CMRT scrutiny report; section 5.5

<sup>232</sup> Ibid

insufficient.<sup>233</sup> As a response, the SFSWG then considered four options for the management of fingerprint services in Scotland—

- no change;
- growth at the centre;
- central control; and
- devolved control.<sup>234</sup>

406. In its conclusion, the SFSWG proposed a model of devolved control for the fingerprint service in Scotland, effectively rejecting a centralised single bureau in favour of retaining bureaux aligned to police forces around the country. In addition, it recommended:

- development of a system of management information;
- a move towards parity in terms of pay and conditions across Scotland; and
- the preparation of an implementation strategy, as the next phase of development, incorporating the re-launch and marketing of a new fingerprint service for Scotland.<sup>235</sup>

*Leishman Management Consulting reviews*

407. As a consequence of the conclusions of the SFSWG, an implementation group was formed and in March 1998 Leishman Management Consulting was engaged to assist with the development of an implementation strategy. The consultancy was carried out in two stages. Stage 1 examined the existing structure, work practices, staffing levels and grades within the SCRO Fingerprint Bureau and considered the ability of the Bureau to meet the workload requirements. Stage 2 considered strategic issues related to the SFSWG chosen option of “devolved control” for the fingerprint service in Scotland.

408. However, at the conclusion of the Stage 2 review, the consultants proposed the creation of a new model for fingerprint services in Scotland based upon central management and delivery. The consultants did say that should such a move be seen as being ‘a step too far’ then, “as a minimum, central management should be introduced (with distributed delivery)”.<sup>236</sup>

*The 8 Force Standard Working Group (8FSG)*

409. Following receipt of the Leishman Stage 2 report, the SCRO Controlling Committee agreed that as an initial step in testing the concept of a ‘centralised’ model, force bureaux and the SCRO Fingerprint Bureau should agree standardised practices. The 8FSG was formed, again chaired by John Hamilton, who agreed to consult police forces, progress policies towards standardisation of

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<sup>233</sup> ACPOS Presidential Review Group - CMRT scrutiny report; section 7.2

<sup>234</sup> Ibid

<sup>235</sup> Ibid

<sup>236</sup> Conclusions of Leishman Management Consulting reviews, as quoted in ACPOS Presidential Review Group - CMRT scrutiny report, Chapter 7.

procedures and develop protocols to be referred to as the ‘Eight Force Fingerprint Standards’.<sup>237</sup>

410. The first meeting of the 8FSG took place November 1999. However, events surrounding the McKie case intervened and although a draft strategy document was prepared, the group was suspended.

411. Following publication of the HMIC’s Primary Inspection Report on the SCRO Fingerprint Bureau in September 2000, the 8FSG was reconvened by Kenny McInnes, the CMRT leader, with a view to it being permanently re-established and leading a renewed drive towards the development of common and agreed standards across fingerprint bureaux in Scotland.<sup>238</sup>

*Structural options for fingerprint services*

412. Having considered the SFSWG and consultant’s reports, HMIC recommended that a centralised model for a national fingerprint service be considered by the SCRO Executive Committee.<sup>239</sup> In the immediate and short term, HMIC conceded that centralisation with devolved elements was the way forward.<sup>240</sup>

413. The CMRT gave detailed consideration to the options for reform of fingerprint services in Scotland as presented by the Leishman, SFSWG and HMIC in their respective reports.

414. The CMRT favoured Leishman’s preferred option which was for central management and central delivery of fingerprint services in Scotland, but recognised the “major challenges and potential risks that it involves”.<sup>241</sup>

415. The CMRT identified the significant risk of losing a proportion of the existing fingerprint officers in Scotland (42 at the time of the report) if the service was centralised within SCRO at its new Pacific Quay headquarters and those fingerprint officers from outside of Glasgow could not be persuaded to relocate or travel. For this reason, the CMRT stated that progress towards this model could only be achieved over a number of years in a phased approach.<sup>242</sup>

416. The CMRT also acknowledged that there might be reservations about SCRO’s ability to deliver this new structure but it saw no value in separating the functions currently performed by SCRO. The CMRT expressed support for an idea floated by HMIC<sup>243</sup> that the Scottish Fingerprint Service should be part of a new national Identification Service for Scotland which would combine three services; fingerprints, criminal history (records) and vetting. The CMRT considered that in time it could also become linked with forensic science services

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<sup>237</sup> ACPOS Presidential Review Group - CMRT scrutiny report; para 7.6.1

<sup>238</sup> ACPOS Presidential Review Group - CMRT scrutiny report; para 7.6.4

<sup>239</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; recommendation 3

<sup>240</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 2.15.5

<sup>241</sup> ACPOS Presidential Review Group - CMRT scrutiny report; para 16.6.3

<sup>242</sup> ACPOS Presidential Review Group - CMRT scrutiny report; paras 16.6.4 and 16.6.6

<sup>243</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 2.15.4



to provide one organisation which delivers all physical evidence types as part of a Scottish forensic science strategy.<sup>244</sup>

**417. The Committee notes that the CMRT's preferred option was for a centralised service albeit that the CMRT recognised that there were risks associated with this option. The Committee further notes that ultimately this option was not pursued and the Scottish Fingerprint Service was established as a centrally managed service but with delivery through local bureaux in Aberdeen, Dundee and Edinburgh. This was in line with the short term solution advocated by HMIC.**

### **Leadership and management**

418. Prior to change in 1999, oversight management of the SCRO was carried out through the SCRO Controlling Committee. This committee comprised the chief constables of the eight Scottish forces and representatives from SCRO and the Scottish Executive and was chaired by the chief constable holding office as President of ACPOS. Oversight of fingerprint services provided by SCRO was carried out by the SCRO Fingerprint Standing Committee. It comprised police chief officers, or deputies at a senior level, from the eight Scottish forces attended along with representatives from SCRO and the Scottish Executive and was chaired by a chief constable.

419. HMIC reported that a review by independent management consultants (see paragraphs 407-408 below) conducted in 1998/99 had reported that both the Head of SCRO and the service provided by SCRO were inhibited by the reporting and decision making process that existed at that time. That report recommended that the process should be streamlined. These recommendations were agreed and implemented.

420. Two new committees were established—

(i) An Executive Committee chaired by the President of ACPOS and comprising the eight chief constables, Her Majesty's Chief Inspector of Constabulary and representatives from the Scottish Executive and COSLA; and

(ii) A Management Committee chaired by a senior civil servant from the Scottish Executive and comprising ACPOS representatives from the eight Scottish forces, COSLA and the Director and Deputy Director of SCRO.<sup>245</sup>

421. HMIC noted that forces had been represented on the Management Committee by their heads of Crime Management Services. This had been found to be a positive move in so far as it kept these officers informed and up-to-date with current developments, but HMIC questioned the role of this committee in actual "management" terms. Some members of the committee had also questioned their management function.<sup>246</sup>

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<sup>244</sup> ACPOS Presidential Review Group - CMRT scrutiny report; paras 16.6.7 and 16.6.11

<sup>245</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 2.7.3

<sup>246</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 2.7.4

422. HMIC was of the view that the new SCRO Executive and Management Committee offered “only limited improvement on the former committees in that it remains an unwieldy and top-heavy structure, which inhibits speed of response and fails to focus accountability.” HMIC recommended that the management oversight structure be reformed as part of re-positioning SCRO within a new Common Police Services arrangement.<sup>247</sup>

#### *Senior Management Posts*

423. At the time of the HMIC inspection, the most senior management posts within SCRO were held by police officers. The Director and Deputy Director were both seconded from Strathclyde Police. They held the ranks of chief superintendent and superintendent respectively. The head of the Fingerprint Bureau was a chief inspector on a three-year secondment to SCRO from Lothian and Borders Police and the Livescan<sup>248</sup> manager was an inspector, seconded from Tayside Police.<sup>249</sup>

#### *Deputy Head of Fingerprint Bureau*

424. The post of deputy head of the fingerprint bureau had been “civilianised” in 1996 it having previously been a post held by a police inspector. The post was advertised and a senior fingerprint officer within the SCRO Fingerprint Bureau was appointed. The main functions of this post included deputising for the head of bureau (a chief inspector); assisting in the day to day running of the bureau; having responsibility for the development and co-ordination of quality assurance; training initiatives; and researching and developing new systems and/or amending current procedures.<sup>250</sup>

#### *Quality Assurance Officer*

425. The post of quality assurance officer/training officer was created in 1996. The position was filled internally by a principal fingerprint officer. HMIC noted that the quality assurance aspect of the role was quickly taken over by the training aspect. To address this, another fingerprint officer was appointed to undertake a full-time training role. While this assisted in meeting training demands, HMIC noted that it did not result in the first officer being released to focus on quality assurance duties.<sup>251</sup> At the time of the inspection, HMIC found that about 90% of this officer's time was devoted to training. In order to address the need for greater commitment to quality assurance matters, a full-time training post had been advertised, but had not been filled at the time of the inspection.<sup>252</sup>

426. HMIC recommended the separation of the quality assurance and training roles<sup>253</sup> and, in light of continuing heavy training demands on the quality assurance officer, HMIC suggested that the issue of the number of training staff be addressed by the ACPOS review team<sup>254</sup> (see paragraph 772 below).

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<sup>247</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 2.7.5

<sup>248</sup> Livescan is a national system which allows an individual's fingerprints to be captured by optical and electronic scanning.

<sup>249</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 2.9.1

<sup>250</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 2.10.1

<sup>251</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 2.11.1

<sup>252</sup> Ibid

<sup>253</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; recommendation 2

<sup>254</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; suggestion 4

*CMRT Review of SCRO senior management structure*

427. In its review of management structures, the CMRT noted that, traditionally, strategic management of SCRO had been delivered by senior police officers on secondment to the organisation. The Director and Deputy Director roles had, in the past, been filled by well qualified and experienced officers nearing the end of their service. Recent post-holders had subsequently retired from post. The CMRT commented that “the usual appointment period of about three years can act to frustrate the development of the organisation.”<sup>255</sup>

428. The CMRT expressed the view that the police service should be strongly represented at strategic management level. However, the CMRT believed that the Head of the SCRO Fingerprint Bureau (and ultimately the Head of the Scottish Fingerprint Service) should be a civilian manager who had experience as a fingerprint expert or a forensic scientist. The CMRT recommended the early appointment of an appropriate individual, with the necessary understanding of fingerprint services, but whose strengths were strongly biased towards management. The benefit of such an appointment would be the ability to understand and influence the ultimate shape and structure of the service for which he or she would be accountable in the future; thus countering criticisms of transitional management in the past.<sup>256</sup>

*Management turnover*

429. The Committee requested from SCRO a series of organisational diagrams showing the management structure of the fingerprint bureau and all changes in key personnel from 1999 to the present day. These organisational diagrams are provided at Annexe B to this report.

430. The Committee notes the frequent changes of personnel at the level of the Head of Bureau and above. For example, in the period 1997 to 2006 the Director of SCRO and Deputy Director have changed on four occasions, while the Head of the Glasgow Bureau has changed three times.

**431. The Committee considers that such frequent changes in the management regime must have created a lack of continuity and had an unsettling effect thereby contributing to a lack of confidence among staff in the management of the Bureau. The Committee strongly questions whether the deployment of senior managers (whether serving police officers, who were either on secondment or close to retirement age, or retired police officers) for short periods of tenure was appropriate in an organisation facing operational difficulties, rapid change and intense scrutiny. ACPOS and the incoming Scottish Police Services Authority should reflect on this matter in order to ensure that there exists the necessary level of management continuity in future.**

**432. The Committee also notes the recommendation of the CMRT that the Head of the SCRO Fingerprint Bureau should be a civilian manager with experience as a fingerprint expert or a forensic scientist. The Committee is aware, however, that although the current Head of the Glasgow Fingerprint**

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<sup>255</sup> ACPOS Presidential Review Group – CMRT scrutiny report; para 15.7.2

<sup>256</sup> ACPOS Presidential Review Group – CMRT scrutiny report; paras 17.3.1 – 17.3.2

**Bureau/Head of SFS has considerable management experience, he does not have a background in either fingerprint services or forensic science.** The Committee gives further consideration to this matter in the next section of this report.

### Human Resources

433. Each of the reviews of fingerprint services in Scotland considered above highlighted that resource constraint in the SCRO Fingerprint Bureau was a serious issue which required concerted action. The Committee considers below the impact which this resource constraint had on the operation of the Bureau.

#### *Case backlog*

434. At the time of the Primary Inspection in 2000, HMIC found that a backlog had accrued in scene-of-crime work requiring analysis by fingerprint officers. This backlog included 703 cases from 1998 (1 July to 31 December) and 1,957 cases from 18 February 2000. HMIC found that efforts had been made to address this but these had been suspended to allow staff to focus on cases from the current year (2000) in an attempt to stop a similar backlog accruing. At December 1998, the backlog had been 7500 cases.<sup>257</sup>

435. Commenting on the SCRO response, former Director Harry Bell suggested that “within a year, with some reorganisation, the assistance of other bureaux and additional financial support, the backlog was dramatically reduced to a level which the Bureau could sustain on the basis of ‘Work in Progress’.”

436. HMIC reported that a number of initiatives had been taken to address the backlog, including—

- March 1999: SCRO returned 995 cases to forces bureaux for them to conduct searches on the AFR system locally.
- June 1999: SCRO asked forces for further assistance. It emerged that these forces were unable to provide assistance at that time.
- December 1999: Grampian Police, having cleared a backlog previously returned to them from SCRO in respect of their own cases, accepted 57 Northern Constabulary cases.<sup>258</sup>

437. HMIC also noted that the backlogs had developed over a period when the number of cases received at SCRO had fallen by 11%, including a 7.7% reduction in the number of cases submitted by Strathclyde Police and Dumfries and Galloway Constabulary.<sup>259</sup>

#### *Staff resources*

438. In relation to staff resources, HMIC reported that during 1998/99, the SCRO Fingerprint Bureau had 26 fingerprint officers, which was eight officers short of the figure previously regarded as its 'authorised establishment' figure. In addition to staff leaving, nine officers were re-deployed on Livescan work. The SCRO Annual

<sup>257</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 3.1.1

<sup>258</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 3.1.2 to 3.1.4

<sup>259</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 3.1.6

Report for 1998/99 had highlighted that this combined loss resulted in a reduced strength of 55% in respect of officers available to undertake crime scene mark examination.<sup>260</sup>

439. In the five year period from 1995 – 1999/2000, the number of full-time equivalent fingerprint officers had declined from 36 to 28.5.<sup>261</sup> This was, in part, attributed to the salary grading of fingerprint officers at SCRO. HMIC reported that a regrading of officers was approved in 1999 to prevent “a continuing drain of expertise to other bureaux where experts were receiving higher grading and salaries.”<sup>262</sup>

#### *Recruitment*

440. At the time of the inspection, HMIC found that the SCRO Fingerprint Bureau continued to have difficulty in recruiting staff. The bureau had vacancies for seven fingerprint officers (six full-time posts and one part-time). Circulation of these vacancies to fingerprint bureaux in the UK, Channel Islands and Eire and advertising in the Police Review had proved unsuccessful. However, an initiative to place the same advertisements on the Internet had resulted in two fingerprint officers being recruited in January and May 2000.<sup>263</sup>

441. HMIC found that the finance available to pay the salaries for the unfilled posts was being spent on overtime payments to existing staff. HMIC commented that this was clearly not the ideal solution to the problem—

“Long hours in a field of work, which demands high levels of concentration and focus, present a risk of tiredness and the potential for mistakes.”<sup>264</sup>

442. Short-term strategies, including a redefinition of work practices and processes, had resulted in other steps being taken in an effort to maximise the availability of experts for expert work. However, the HMIC report concluded—

“Despite these measures (and not all are acting in favour of victims and the efficacy of the criminal justice system) the demands continue to outstrip the capacity of the organisation to service them.”<sup>265</sup>

443. As a response, HMIC recommended that APRT “scope the demands now and into the near future to determine the staff levels required.”<sup>266</sup>

444. As part of its consideration of options for restructuring fingerprint services in Scotland, the CMRT identified the extent of the staffing shortages in the SCRO Fingerprint Bureau—

“The fact that the SCRO Fingerprint Bureau has been under intense pressure since 1997 is inescapable. There is a resourcing issue within the SCRO

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<sup>260</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 3.3.2

<sup>261</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 4.2.1 and Figure 10

<sup>262</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 4.4.1

<sup>263</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 4.1.1

<sup>264</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 4.1.2

<sup>265</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 3.1.8

<sup>266</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; recommendation 4

Fingerprint Bureau which will now require the recruitment of 10 fingerprint experts, 7 fingerprint trainees and 13 Tenprint Identification Officers and bring it to a strength which is likely to enable it to carry out its current responsibilities.”

“Irrespective of any option being selected, this problem must be addressed as a top priority. Without adequate resources within the SCRO Fingerprint Bureau, a full service cannot be provided, backlogs will continue and revised procedures cannot be successfully implemented. Against a background of intense pressure within a very busy and productive bureau, the risk of misidentification or other error must be greater. This is an issue of concern to the whole of the Scottish Police Service and the wider community it serves. The issue of staffing levels within the SCRO Fingerprint Bureau must be addressed without delay.”<sup>267</sup>

445. The CMRT highlighted various barriers to recruitment and retention of fingerprint experts. These included competitive market conditions for qualified staff with some bureaux in England and Wales offering ‘market rate enhancement’ to salaries worth around £2000 - £3000 per annum (10% - 15% of top rate salary) extra for an expert. The CMRT also reported that there was a “general perception of SCRO as an organisation in turmoil, with poor working conditions and an excessive backlog. It was not viewed as an attractive organisation.”<sup>268</sup>

446. Nonetheless, the CMRT considered that development of existing staff (principally tenprint identification officers) coupled with a positive approach to recruitment could provide sufficient fingerprint experts. The CMRT suggested that this would be aided by “an aspiring management philosophy committed to change, progress and achievement of the highest possible quality standards.”<sup>269</sup>

#### *Sickness absence and staff welfare*

447. As part of the inspection process, HMIC considered the management of sickness absence in the SCRO Fingerprint Bureau. To contextualise the situation at the time of the inspection, HMIC quoted statistics from 1998 when the sickness level was reported to be 5.5 percent of total available working days lost due to sickness. HMIC reported that this was described by SCRO management at the time as a 'crisis' in staffing terms.<sup>270</sup>

448. At the time of the inspection, two fingerprint officers were on long term sick leave. Two other fingerprint officers, although working, had 'soul and conscience reports' excusing them from giving evidence at court due to stress. Another officer had been removed from scene of crime work due to failing eyesight.<sup>271</sup>

449. Sickness absence within SCRO was managed in accordance with the sickness absence management policy of Strathclyde Police. The collation of all

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<sup>267</sup> ACPOS Presidential Review Group – CMRT scrutiny report; paras 16.1.1 – 16.1.2

<sup>268</sup> ACPOS Presidential Review Group – CMRT scrutiny report; para 17.5.4

<sup>269</sup> ACPOS Presidential Review Group – CMRT scrutiny report; para 17.7.3

<sup>270</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 4.7.1

<sup>271</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; paras 4.7.5 – 4.7.6

information relating to sickness absence within SCRO was undertaken by staff within the personnel department of Strathclyde Police.<sup>272</sup>

450. HMIC was informed that, although the chief inspector in charge of the Bureau maintained an awareness of the absence levels prevailing at any given time, the monitoring of trends was not possible. This was because there was no management information readily available which would highlight such trends. HMIC believed this to be an unacceptable situation.<sup>273</sup>

451. While management had offered the view that sickness absence in 2000 had improved since 1998, HMIC found no evidence to support this assertion, indeed it reported that recent figures relating to SCRO as a whole showed a worsening trend.<sup>274</sup>

452. HMIC recommended that action should be taken to obtain data which would inform management of sickness absence levels in a manner which could be used to monitor trends, set targets and manage sickness absence.<sup>275</sup>

453. HMIC recommended that a strategy be introduced for staff within all fingerprint bureaux and identification branches to offer staff support and to assist in the detection and prevention of stress related illness resulting in absence from work.<sup>276</sup>

454. In relation to the monitoring of sickness absence, the CMRT noted that with a slight variation in the way SCRO processed its absence notifications, SCRO had been able to take advantage of facilities provided by Strathclyde Police personnel department, which monitored trends and produced management reports.

455. The CMRT also gave consideration to the issue of stress related illness among staff. Although the CMRT considered that management was acutely aware of the difficulties, it left it to the 8FSG to give the matter further consideration.

**456. The Committee notes the concerns raised by HMIC in 2000 about the rate and management of sickness absence in the SCRO Fingerprint Bureau and support structures for staff more generally. The failure of the organisation to monitor sickness absence levels in order to manage the situation was a glaring example of management failure at that time. The Committee considers that the response of the CMRT was worryingly inadequate.**

457. In section 4 of this report, the Committee considers the level of sickness absence and the response of management to this issue in recent years.

*Training for trainee fingerprint officers*

458. Chapter 7 of the HMIC report focused on the training arrangements for the staff of the SCRO Fingerprint Bureau.

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<sup>272</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; paras 4.7.2 and 4.7.4

<sup>273</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 4.7.3

<sup>274</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 4.7.7

<sup>275</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; Recommendation 9

<sup>276</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; Recommendation 10

459. Prior to 1993 SCRO fingerprint staff were all trained "in-house" and did not receive any external training input. In 1993 the format of SCRO fingerprint training courses was restructured to include two of the courses at the National Training Centre (NTC) for Scientific Support to Criminal Investigation at Durham. SCRO informed HMIC that the inclusion of these courses was to "augment" the SCRO training and provide an independent assessment of standards.<sup>277</sup>

460. Between 1993 and 1999 training for SCRO trainee fingerprint officers incorporated several mandatory courses which each trainee was required to complete before attaining expert status. These were—

Course	Provider
Initial Fingerprint Course (4weeks)	National Training School, Durham
Intermediate Fingerprint Course (3 weeks)	Scottish Criminal Record Office
Intermediate Fingerprint Course (3 weeks)	National Training School, Durham
Advanced Fingerprint Course (3 weeks)	Scottish Criminal Record Office
Expert Fingerprint Course (3 weeks)	Scottish Criminal Record Office

461. HMIC was told that SCRO trainees did not attend the Advanced Course at Durham because SCRO considered it to be too focused on English courts and legislation to be relevant to staff working in Scotland. SCRO was also considering its position in relation to the two courses which its trainees did attend as there was concern that these too had become less relevant to Scottish experts because of the training provided in the English "NAFIS"<sup>278</sup> system. HMIC reported that SCRO considered that the 'in-house' training given to its trainees not only met that in the rest of the UK but was enhanced by a more relevant focus on the Scottish criminal justice system and legislation.<sup>279</sup>

462. HMIC considered that "the continued focus on 'in-house' training by fellow staff members at SCRO presents a risk that bad practices may be spread, elitist attitudes reinforced and new ideas stifled."<sup>280</sup>

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<sup>277</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 7.2.1

<sup>278</sup> "NAFIS" stands for National Automated Fingerprint Identification System and is the equivalent in England and Wales and Northern Ireland of the Automatic Fingerprint Recognition (AFR) system used in Scotland.

<sup>279</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, paras 7.2.3 and 7.2.6

<sup>280</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 7.2.8



463. HMIC suggested that a strategic re-assessment of how training was delivered was necessary and that this should be undertaken by the APRT.<sup>281</sup>

464. In response to the HMIC suggestion, the CMRT reported that the in-house course and teaching at SCRO had not been subject to external validation and scrutiny. The CMRT stated that, this training had been suspended and SCRO trainees would follow the Durham training centre programme.<sup>282</sup>

465. The CMRT considered that this approach had a secondary benefit of allowing trainees a greater opportunity to make contact with other trainees at a similar level from both around the UK and abroad. The CMRT commented that this would broaden the perspective of the trainee and may assist in reducing the perceived 'introverted' culture within SCRO. The CMRT noted that this accorded with the view of HMIC articulated at Suggestion 17 of the 2000 report that networking among staff from other bureaux should be encouraged among all fingerprint staff and contributed to addressing Suggestion 18 that there was a need for a more open and transparent culture within the organisation as a whole.<sup>283</sup>

466. Following consultation with the CMRT, the Durham training centre agreed to consider tailoring courses for specifically Scottish issues where appropriate. The CMRT suggested that the 8FSG should assess the correct level and form of training for fingerprint officers in Scotland including what training should take place in-house to supplement the national core courses.<sup>284</sup>

#### *Refresher training for fingerprint experts*

467. HMIC found that little provision was made for refresher training for fingerprint experts. Given that many of the fingerprint experts throughout Scotland had been in post for many years and received their training in-house and 'on-the-job', HMIC considered that there had been opportunity for 'bad habits' to develop and to be reinforced over time.<sup>285</sup>

468. HMIC found that some experts held the view that once qualified and experienced in the role of expert there was little to be gained by further training. HMIC did not support this view and recommended that regular refresher training should be incorporated into a national training standard for fingerprint experts to ensure that expertise was maintained at the highest level taking account of developments in theory and technology. HMIC suggested that the training required for the introduction of a non-numeric standard provided an opportunity to begin such a training programme.<sup>286</sup>

#### *Mackay inquiry comment*

469. While the Mackay inquiry remit did not include consideration of training, in the synopsis of the Mackay report it was commented that "it was apparent that training

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<sup>281</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 7.2.8 and Suggestion 16

<sup>282</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.7.24

<sup>283</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.7.25

<sup>284</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.7.26

<sup>285</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 7.5.1

<sup>286</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 7.5.4 and Recommendation

of various individuals within SCRO could have been less insular and more objective.”<sup>287</sup>

470. The synopsis of the report also suggested that when SCRO staff attended conferences and seminars, the emerging issues, procedures and findings should be promulgated to the entire staff rather than confined to those attending the seminar.<sup>288</sup>

#### *CMRT view of training*

471. The CMRT stated that it valued the professional competency and expertise found in the SCRO Fingerprint Bureau. However, it believed that, in keeping with the recommendation made by HMIC<sup>289</sup>, there was a responsibility on the organisation to provide professional development for its staff and considered that regular refresher training for fingerprint officers should be introduced.<sup>290</sup>

472. Echoing the finding of HMIC, the CMRT reported that there was a view among fingerprint experts that, once trained, no further ongoing training was necessary and professional skills were developed on the job by examining progressively more complex marks. The CMRT did not support this view. The CMRT considered that this attitude was perhaps due to a narrow interpretation of refresher training which the CMRT saw as more appropriately termed ‘continuous professional development’ (CPD).<sup>291</sup>

473. The CMRT reported that recent training courses arranged by the SCRO Bureau on court presentation skills, ridgeology and the emerging non-numeric standard had been universally welcomed by the staff and had had a beneficial effect on their morale, with staff seeing themselves being valued by the organisation. The CMRT saw great value in structured, ongoing training of this type being delivered. It was envisaged that this future training might cover different parts of fingerprint identification including technological advances, developments in recovering latent prints, legislative developments, presentations from other agencies involved in the criminal justice process, and case presentations. The CMRT also considered there would be value in mutual exchanges being arranged between fingerprint experts and scene-of-crime officers in order to allow both disciplines to have a greater understanding of each others’ needs and contribute to a higher quality of work by both groups.<sup>292</sup>

474. The CMRT considered that there would be merit in the 8FSG considering the structure and content of CPD for fingerprint experts.

#### *Charting PC*

475. Fingerprint bureau staff raised concerns with HMIC about the charting PC system which had been purchased in 1996 at a cost of £30,000. The intended purpose of this computer was to assist in the preparation of visual aids for presentation of fingerprint evidence in court. Prior to introduction of the charting

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<sup>287</sup> Synopsis of the Mackay Report; report reference 14.3 (Recommendations)

<sup>288</sup> Synopsis of the Mackay Report; report reference 14.3 (Recommendations)

<sup>289</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, Recommendation 17

<sup>290</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.7.32

<sup>291</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.7.33

<sup>292</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.7.34

PC, SCRO fingerprint officers were required to obtain photographic enlargements of the marks and prints in question from the Identification Bureau of Strathclyde Police. These would then be "marked up" by the fingerprint officers to show the sixteen characteristics, which were identical in sequence and agreement in both the mark and the fingerprint. These sixteen identical "points" would then form the basis on which the identification was founded.<sup>293</sup>

476. HMIC noted that the view among staff was that the quality of the digital image produced by the charting PC was not as sharp as a good photographic enlargement would be. According to HMIC, fingerprint officers had found themselves being challenged in court on the quality of the images produced in the photograph album. Lack of detail had led to comments about "pixelling"<sup>294</sup> and the fact that some of the numbered red lines which were intended to indicate "points" actually appeared to stop in mid air as the digital image had not replicated the depth of detail existing in the original mark or print.<sup>295</sup>

477. HMIC found that some fingerprint officers had lost confidence in the charting PC and were reluctant to use it again, preferring to return to the truer image produced in a photographic enlargement. HMIC agreed that staff should be provided with the most accurate representation available to assist them to explain their evidence. Although use of the charting PC had been suspended, HMIC considered it a matter of importance that those responsible for the prosecution case ensure that the best means of producing the most accurate representations were agreed for future cases.<sup>296</sup>

478. In evidence to the Mackay inquiry team, Pat Wertheim criticised the use of a digital system rather than traditional photography to produce the charted enlargements. He stated that the images of mark Y7 produced by SCRO were blurred and indistinct and had been "degraded rather than enhanced" by the use of the digital system.<sup>297</sup>

479. In the synopsis of the Mackay report it is noted that several SCRO staff members stated that they had been unhappy with the standard of enlargements produced by the charting PC from the outset but continued to use it because they believed the enlargements were simply an illustration for the jury and the actual size photographs and tenprints were "best" evidence.<sup>298</sup>

**480. The Committee is concerned that a piece of equipment which was intended to assist in the production of enlargements for use by fingerprint officers in court was clearly not fit for purpose. Evidence received by the Committee regarding the quality of court enlargements used during the perjury trial of Shirley McKie suggests that images produced by SCRO**

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<sup>293</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para; 3.11.2

<sup>294</sup> In computer graphics, "pixelling" or "pixilation" is an effect caused by displaying an image at such a large size that individual pixels, small single-colored square display elements that comprise the bitmap image, are visible to the eye.

<sup>295</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 3.11.4

<sup>296</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau; para 3.11.5

<sup>297</sup> Synopsis of the Mackay Report; report reference 17.14.1.18, precognition of Pat A Wertheim dated 26 May 2000

<sup>298</sup> Synopsis of the Mackay Report; report reference 17.16.5

**officers using the charting PC were of an unacceptable quality. It was only after a review of court productions in this case that use of the system was suspended. The Committee questions why management failed to respond more quickly to officers' concerns about use of this equipment. This appears to be an example of poor communication between management and staff within the Bureau.**

*Court presentation skills*

481. In relation to training for the presentation of fingerprint evidence, HMIC found that some fingerprint officers had never given evidence in court. HMIC commented that this could be for a number of reasons such as, the acceptance of expert evidence prior to trial by way of minute of agreement, the introduction of interim diets and the longstanding perception of the irrefutable nature of fingerprint evidence. In cases where fingerprint officers did give evidence, HMIC noted that they were seldom cross-examined.<sup>299</sup>

482. HMIC found that SCRO staff acknowledged that there was room for improvement in their presentation skills and some positive steps had been taken. Shortly after the McKie case, the deputy head of the Bureau had visited the FBI academy in the United States to examine training in respect of presentation skills. SCRO staff subsequently received a one-day training course in March 2000 from independent training consultants. HMIC stated that this had been well received by staff.

483. As discussed in section 2 of this report, the Mackay inquiry also considered the implications of the McKie case for training of fingerprint officers in presentation of evidence in court. Although the Mackay synopsis reported that an advocate who was involved in the McKie perjury trial suggested that the SCRO fingerprint officers believed in the accuracy of what they were describing in relation to their 16 point identification, that advocate suggested that the officers had “had difficulty in explaining their positions in relation to the distorted part of mark Y7”. Another advocate recalled the SCRO fingerprint officers’ evidence as “sound and convincing” but felt that “their presentation could have been better”. Evidence to Mackay inquiry from another advocate suggested that while there was “no obvious sign of collusion or corruption” in the manner in which the SCRO fingerprint officers gave their evidence he voiced concerns that the fingerprint officers had displayed an “arrogant manner” when giving evidence.<sup>300</sup>

484. This report of events at the McKie trial and the statements made by the advocates to the Mackay inquiry could appear to be at odds with evidence submitted to the Committee’s inquiry by the SCRO fingerprint officers and the former SCRO Director Harry Bell. They suggested that at a meeting with the Advocate Depute following the conclusion of the perjury trial, the Advocate Depute made no criticism of the evidence given by SCRO fingerprint officers. In Mr Bell’s written submission, he stated—

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<sup>299</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 7.6.2

<sup>300</sup> Synopsis of the Mackay Report; report reference 7.16.4.1 – 7.16.4.4

“It was clear that the Crown were satisfied with the fingerprint evidence of the SCRO experts and indeed their credibility and the integrity of experts at the SCRO Fingerprint Bureau.”<sup>301</sup>

485. Having also considered court transcripts from trials involving SCRO fingerprint officers, Mackay proposed that training be provided to enhance their presentation skills. Mackay commented that when faced with challenges to their evidence, fingerprint officers simply made reference to the fact that they were ‘experts’ and did not give sufficient reason for the action taken, the sequence of events in which they reached their ultimate decision or why they took a particular route in arriving at that decision.<sup>302</sup> The Mackay report synopsis contains the following conclusion—

“The standard of court evidence provided by SCRO fingerprint experts is sadly lacking in professionalism and borders on an arrogance that the witness is an expert and not subject to the rigours of robust cross-examination. The *laissez faire* attitude has been compounded over a number of years by the defence being devoid of expertise with the ability to challenge. Having regard to this, there has developed a complacency and empirical approach earlier in the chain of events and one clearly detects an entrenched institutionalised philosophy compounded by an insular attitude towards the professional sphere of fingerprints.”<sup>303</sup>

486. The CMRT commented that court presentation skills, including detailed questioning on the theory and science behind fingerprint examination, form a major part of the national training course, with students undergoing a series of mock trials with the aim of both setting standards and giving the individual confidence in his/her own abilities. Echoing the finding of HMIC, the CMRT reported that the recent training initiative had been rated by staff as an extremely valuable exercise.<sup>304</sup>

487. In view of the fact that court presentation was considered to be a key part of a fingerprint expert’s role, the CMRT considered that such training should be progressed by the 8FSG. The Crown Office had also indicated that they would be willing to comment on any proposals designed to bring both consistency, quality and best practice to the presentation of fingerprint evidence in court. The CMRT reported that at an early meeting of the 8FSG there was clear support for the standardisation of processes, procedures and training and for a training forum to progress matters.<sup>305</sup>

488. On a related issue, the CMRT commented on the practice which enabled one expert to complete the initial identification/verification process and another expert to give evidence in court. In SCRO, this occurred in a situation where two fingerprint officers could not attend court on medical grounds, but also on other occasions as a matter of convenience. In these cases other fingerprint officers who had not previously been involved in the case would be asked to examine the

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<sup>301</sup> Harry Bell, written evidence

<sup>302</sup> Synopsis of the Mackay Report; report reference 14.5 (Recommendation)

<sup>303</sup> Synopsis of the Mackay Report; report reference 7.22.5

<sup>304</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.7.43

<sup>305</sup> ACPOS Presidential Review Group - CMRT scrutiny report, paras 13.7.44 – 13.7.45

marks, confirm they agreed with the identification, prepare the necessary statements and attend court when required. The CMRT did not consider this to be good practice—

“The fingerprint expert’s role includes the preparation of evidence for court and the giving of that evidence. As such, it is considered that fingerprint experts should follow a case from identification to trial and only in extreme situations should another expert re-examine and substitute in court for the initial identifier. This maintains the identifying experts accountability for the case.”<sup>306</sup>

**489. The findings of HMIC and the CMRT, along with the comments of James Mackay, strongly suggest to the Committee that the general standard of court presentation displayed by SCRO fingerprint officers had been lacking. The Committee notes that HMIC found that SCRO staff acknowledged that there was room for improvement in their presentation skills. The Committee also notes that officers’ ability to present their findings in court may have been hampered by the poor quality of the enlarged images produced using the charting PC.**

**490. The Committee considers that poor court presentation skills were principally the result of inadequate training for and limited experience of officers facing cross-examination, in particular, hostile questioning.** The Committee considers current court presentation skills training in section 4 of this report.

## **Procedures**

### *SCRO Fingerprint Bureau identification processes*

491. As a key part of the inquiry, the Committee has striven to develop an understanding of the fingerprint identification and verification process within the SCRO Fingerprint Bureau. As a first step, the Committee was interested to know whether any guidance manual, setting down written procedures for the operation of the SCRO bureau existed in 1997.

### *Written procedures and guidance in 1997*

492. In a written submission, following his appearance before the Committee, John McLean, then Director of SCRO, advised that “there were no formal written procedures in 1997 for processes within the bureaux which now make up the Scottish Fingerprint Service.”<sup>307</sup>

493. In an associated submission, Ewan Innes, the current Head of the Scottish Fingerprint Service provided additional information—

“It has not been possible to establish definitively the identification processes that were being operated by the separate force fingerprint bureaux and the SCRO Fingerprint Bureau in 1997. This is due to an apparent lack of written procedures at that time.

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<sup>306</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.7.40

<sup>307</sup> Correspondence from John McLean, 3 May 2006

Nonetheless, the Change Management Review Team (CMRT) Report of October 2000 has looked at this issue and appears to be a reliable reference for that point in time and for 1997. It would appear that the only significant change between the description of the process in 2000 and that which was extant in 1997 is the fact that the practice in 1997 was for an identification expert to be followed by 3 expert verifiers and by 2000 this had been reduced to the identifying expert and 2 expert verifiers. This was in line with the operating practices of other fingerprint bureaux in the UK.”<sup>308</sup>

494. In written evidence to the Committee, William O’Neill, former chief inspector in charge of the SCRO Fingerprint Bureau, stated that he could not remember whether or not there were written down procedures in terms of identification and subsequent verification of crime scene marks. His submission continued—

“As far as I am aware the procedures in vogue in the office at that time were established over many years in accordance with best practice and the demands of the Crown Office.”<sup>309</sup>

495. In oral evidence to the Committee, Alan Dunbar, Quality Assurance Officer for the SCRO bureau since 1996, contradicted the information provided by Mr McLean and Mr Innes. He stated that there had indeed been written procedures in 1997. He referred to “audits, practices and procedures and local work instructions. They were all there; they just needed to be formalised as they are now.”<sup>310</sup>

496. When asked to provide examples of the material he had referred to, Mr Dunbar informed the Committee that this was not possible as when the Bureau progressed to International Organisation for Standardisation (ISO) accreditation in 2000, he personally ensured that all paper instructions and procedural memoranda were withdrawn. He assured the Committee that it was not the case that paperwork did not exist in 1997, but it did not exist any longer. He explained—

“The only thing that survives electronically is the procedures from 2000 and perhaps the odd memorandum stashed away in an unused file that someone has not shredded.”<sup>311</sup>

**497. The Committee is concerned at the contradictory evidence it has received in relation to the existence of written procedures in 1997. Although ten years have passed and SCRO is not obliged to retain documents which have been superseded during that period, the Committee is surprised that no evidence of documented procedures from that time could be provided. In the absence of any such material, the Committee can make no further comment on written procedures in 1997.**

*SCRO fingerprint procedures and guidance in 2000*

498. Chapter 5 of the HMIC report set out in considerable detail the processes employed in the Bureau in 2000. The Committee regards the findings and

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<sup>308</sup> Correspondence from John McLean, 3 May 2006

<sup>309</sup> William O’Neill, written evidence

<sup>310</sup> *Official Report*, Justice 1 Committee, 26 June 2006, c 3592

<sup>311</sup> Alan Dunbar, written evidence

recommendations of HMIC on these matters to be of particular importance as they provide a baseline by which to measure subsequent change.

*Office Management System*

499. HMIC was critical of the Office Management System used to track the progress of cases through the Bureau at that time. The report noted that the system was recognised by staff as not providing an adequate audit trail to follow the progress of a case through the department to identify the stage each case was at or to provide accurate details of the time the case had spent in the department.<sup>312</sup> HMIC commented further on this finding and repeated a recommendation made previously by consultants—

“It is essential to monitor the progress of work to ensure that it is dealt with effectively and in a speedy manner. Similarly it is equally important that all cases have a proper audit trail. The recording of all this information only on the case envelopes, which are subject to regular handling, which may damage them, and which may be lost or open to allegations of being subsequently amended, is not the best solution. HMIC repeats the recommendation made by consultants in June 1999, that an improved automated system of case tracking should be introduced as part of a new office management system at SCRO.”

*Use of case envelopes*

500. HMIC considered the administrative process by which case material was processed through the Bureau. Crime scene marks and associated case material were put into a customised A5 envelope—brown for normal cases and white for special cases. The reference number, force concerned, the locus and the date received were entered on the front of the case envelope. This envelope also had spaces or 'tick boxes' for further information, including:

- Type of identification,
- Identification number, name of person identified, reference number, mark(s) identified and finger/palm identified,
- Who made the identification and when,
- Use of the comparator,
- Which marks are to be used at court,
- Who checked the identification,
- Who was notified of the identification by telephone and when,
- Details of the marks which are insufficient, eliminated or outstanding.

501. HMIC considered that the use of case envelopes had process implications—

“As the envelope is passed from expert to expert for verification of an identification, it shows the receiving expert details of previous examinations. Such details include who has previously examined the case, which marks have been identified, to which finger on the Tenprint Form they apparently relate and who the identified person is. If the receiving expert is junior to the previous expert(s) potential exists for pressure, conscious or otherwise, on the junior expert to confirm the identification. This is not conducive to allowing the

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<sup>312</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 5.8.10



receiving expert to make a truly independent assessment of the mark against the fingerprint in question. Fingerprint experts should be able to express their opinions freely without fear of criticism and regardless of the implications. The present system of checking does not allow that. It is good practice that the checking process should always take place in an 'upwards direction' in terms of the seniority of the checkers."<sup>313</sup>

#### *Diary sheets*

502. HMIC noted that the fingerprint bureau had recently introduced diary sheets in which fingerprint officers recorded all their work in each case, including telephone calls and memos relating to it. These entries were all dated. HMIC considered this to be good practice and suggested it be developed.

503. HMIC considered that the introduction of a better Office Management System, as previously recommended, along with the diary sheets, reduced the opportunity for potentially contaminating influences referred to above. HMIC also suggested that if all work between fingerprint officers was recorded on diary sheets rather than the case envelopes and routed through the office administrator, the work could be logged and properly monitored and fingerprint officers would be unaware of who had previously seen the cases, and the results. Although this would involve more work for the officers, it was argued that this would increase the independence and credibility of their opinions.<sup>314</sup>

#### *The process of fingerprint identification*

504. HMIC set out in some detail the process by which, at the time of the inspection, SCRO fingerprint officers carried out the examination, identification and verification of marks. The Committee has considered the key findings. These are set out below. In addition, a guide to the identification process is set out on pages 36 to 40 of this report.

#### *Identification*

505. When an identification was made, the fingerprint officer recorded, on the photograph of the mark, the digit identified along with their initials. On the case envelope the fingerprint officer recorded the marks identified against each suspect, the marks which were deemed to be of insufficient detail/quality, the marks eliminated and those which remained outstanding along with any other relevant information. The fingerprint officer also signed and dated the envelope. SCRO Form 13B, which was used to inform the reporting officer of the result, was also completed at this stage but was not sent out. The envelope containing all of the case material was then passed on for verification.<sup>315</sup>

#### *Verification*

506. Until February 1999, the procedure was that an identification made by one fingerprint officer required to be checked by three other officers. Since February 1999, identifications had been made by one officer and then checked by two others. Consideration was given to the number of fingerprint officers required to

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<sup>313</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 5.9.1

<sup>314</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 5.9.2

<sup>315</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 5.14

confirm identification of a scene of crime mark. It had been decided, in terms of best value and efficiency, to reduce the number of officers required from four to three. HMIC also noted—

- Where a trainee fingerprint officer made the identification it must be checked by three fingerprint officers.
- In serious cases one other expert confirmed elimination identifications, whereas in other cases no confirmation was required.<sup>316</sup>

507. HMIC found these procedures to be in line with the procedures adopted within other fingerprint bureaux in the UK. HMIC supported this approach provided that the checks and balances offered by quality assured processes and competency testing were in place.<sup>317</sup>

508. HMIC reported that having confirmed the identification, the expert also signed the photograph and the case envelope before passing it to the next expert, where required. Once the identification had been checked by the required number of officers, it was returned to the original officer who made the identification, whose responsibility it was to enter details of the identification in the Register of Identifications and to put the entry number on the case envelope.<sup>318</sup>

509. Later in its report, HMIC recommended a change to the working practices of the bureau. As documentation accompanying cases identified the fingerprint officers who had examined the case and their findings, those verifying an identification would know which fingerprint officers had examined the case previously and what their conclusions were. HMIC considered that it might be inferred that a junior or less experienced fingerprint officer might be influenced by the information that two more senior colleagues had already identified a mark as having been made by a particular individual. HMIC recommended that practices be reviewed with a view to introducing a system that increased the independence within the identification/verification process.<sup>319</sup>

#### *Review of the identification process – CMRT proposals*

510. In response to HMIC's recommendation, the CMRT gave detailed consideration to the process by which fingerprints were identified within the Bureau. In order to ensure that fingerprint officers approached the identification process in as independent a manner as possible, and in order to maintain the integrity of the process, the CMRT proposed that those undertaking the verification role should not know the identity of who carried out either the initial identification or any previous verification. It was recognised that members of a team working in close proximity may find it difficult to achieve complete anonymity, but the CMRT considered that the necessity for experts to come to their own conclusions without any influence, conscious or unconscious, was of paramount importance to the transparency of the process.<sup>320</sup>

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<sup>316</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, paras 5.16.1 to 5.16.3

<sup>317</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 5.16.4

<sup>318</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, paras 5.16.5 and 5.16.6

<sup>319</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 8.15.2 - Recommendation 23

<sup>320</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.4.12

511. The CMRT suggested that the independence of identifying and verifying officers could be achieved by—

- Using a small team to undertake all verifications. This team would not be part of the identifying teams and would maintain a degree of autonomy from them. Those verifying would be senior staff with a wide breadth of experience and credibility and within a large bureau could have a regular change of membership. Small bureaux may achieve this degree of independence in the verification process by having their most senior expert conducting all second verifications.
- Using an Administrative Assistant at a central point for distributing cases for identification and verification. After identification all documentation bearing signatures or initials would be retained before the mark was passed for verification. This would include passing other photographed marks that had not been marked.
- Identifying and verifying officers should make notes on separate diary pages which could be held at a central point after each stage until the end of the identification process.<sup>321</sup>

512. Although the CMRT considered it possible to ensure that those undertaking the verification role were unaware of the identity of the person who conducted the identification, it did not consider it practical to keep the result of the identification from the verifiers. To do so would mean that verifiers had to embark on the entire identification process, which might add considerable time and effort to the procedure. The CMRT considered it essential, however, that those verifying made their own determinations and viewed the process as one of independent scrutiny and not merely confirmation. In structural terms, the CMRT believed that this process would lend itself to a larger bureau where there was the greatest opportunity to pass cases among a pool of experts.<sup>322</sup>

513. In relation to elimination prints, the CMRT did not suggest that that they should be subjected to the process outlined above unless there was an element of doubt due to the quality of the mark being examined. The CMRT suggested that the Eight Force Standard Group (8FSG) rationalise practices in bureaux, maintaining accuracy and integrity at the forefront of its considerations.<sup>323</sup>

**514. The Committee notes that in 2000, HMIC was satisfied that the reduced number of fingerprint officers required to verify an identification in Glasgow was consistent with other UK bureaux.**

**515. The Committee is concerned that elimination identifications appear to have required a significantly lower degree of verification and, potentially, a lower standard of identification.** This is considered in greater detail below.

#### *Elimination process*

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<sup>321</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.4.13

<sup>322</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.4.14

<sup>323</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.4.15

516. HMIC found that in Scotland elimination prints were still taken as a matter of routine from persons with legitimate access to a crime scene in order to determine whether marks discovered at the scene have been made by these individuals. HMIC noted that it was not unusual for a police officer's fingerprints to be found at the scene of a crime that he or she had attended in the course of their duty.<sup>324</sup>

517. At section 5.15.4 of its report, HMIC stated, "the need for accuracy in the examination of elimination prints is self-evidently important too. For example, the misidentification of an elimination print, where a crime scene mark made by the offender is wrongly identified as the householder's, negates any later opportunity for it to be matched with the offender." HMIC noted that the practice in SCRO was in line with the checking of eliminations in most other bureaux but that eliminations needed to be included as part of the quality assurance process and subject to dip-sampling or other audit. HMIC made no further specific recommendation or suggestion on this point.

518. The Mackay inquiry report synopsis made reference to statements provided by Robert Mackenzie and to documentary evidence provided to that inquiry which suggested that a lower standard of verification was required for elimination prints—

"In the case of a serious crime elimination, the mark is examined by two experts who must independently agree the comparison. In 1997, the experts who made the elimination would record their findings on the back of the photograph and would notify the Inquiry Team by telephone. They would also update the copy log, i.e. on Crimescene Marks Worksheet that the mark had been eliminated."<sup>325</sup>

519. The Committee explored with Joanne Tierney, the current SFS Training Manager, her understanding of the process. She explained that four fingerprint officers were required if the evidence was to be presented in court. In relation to eliminations, she stated—

"I was not employed at SCRO at the time but, as I understand it, as with the comparison process, elimination prints that were found at a serious crime scene would have been second-checked by another expert."<sup>326</sup>

520. The Mackay inquiry also found some variation amongst SCRO fingerprint officers interviewed in respect of what identification standard was applied to elimination fingerprints. The synopsis of the Mackay report states that "the number of points required to satisfy some experts fell short of the 16 required for a full identification and in some instances this could be as low as 10."<sup>327</sup>

521. Opinions presented to Mackay also suggested that an elimination could be made if "there is sufficient detail or information available to conclude that the supplied impressions could not belong to any other person". Other experts

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<sup>324</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 5.15.1

<sup>325</sup> Synopsis of the Mackay Report; report reference 7.8.16

<sup>326</sup> *Official Report*, Justice 1 Committee, 26 April 2006, c 2889

<sup>327</sup> Synopsis of the Mackay Report; report reference 7.8.19

expressed the view to Mackay that the standard for elimination prints may be significantly lower than 10 points.<sup>328</sup>

522. In their original report on mark Y7 prepared for HMIC, Rudrud and Zeelenberg suggested that one aspect “that could have contributed to the error [which] occurred” in identifying mark Y7 may have been due to the fact that the print started as an elimination. The report stated—

“It is good practice to separate elimination from identification and only identify elimination prints on special request via the normal procedure..... A clear separation of the two processes upholds significance and the quality of the identification process because it is not corrupted by a second class kind of identification”.<sup>329</sup>

523. The Committee spent considerable time during the course of the oral evidence sessions trying to ascertain from witnesses whether different standards of identification were applied by fingerprint experts to elimination prints as opposed to prints from potential suspects. John MacLeod suggested that “with elimination prints there is always a tendency to be not as thorough as you might be”.<sup>330</sup>

524. However, SCRO officer Alastair Geddes, told the Committee that “the fact that anyone's print is an elimination print makes no difference to my analysis of the mark or to my comparison of it with the other production.”<sup>331</sup>

**525. In light of the controversy surrounding mark Y7, which was identified as part of an elimination process, the Committee is concerned that HMIC did not consider this matter more closely. HMIC's Primary Inspection report of the SCRO Fingerprint Bureau in 2000 contained no specific recommendation or suggestion regarding verification of elimination identifications. The Committee returns to this issue in the next section of this report.**

*Procedures for dealing with disputed identifications, mistakes and misidentifications*

526. HMIC provided an outline of the process which would be implemented within the SCRO bureau if there was disagreement over an identification. If the second or third checker did not agree with an identification they would discuss it with one another and the first expert may show them the points he or she found. If they continued to disagree, the matter would be referred to the quality assurance officer who would report the matter to the chief inspector. The case would then be put to two further experts for their opinion. If agreement was not reached then it would be recorded as a mark which could not be identified.<sup>332</sup>

527. HMIC also commented that if an expert was of the opinion that an identification was a misidentification then it would be immediately referred to the quality assurance officer, the chief inspector and the deputy head of the bureau

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<sup>328</sup> Ibid

<sup>329</sup> Rudrud and Zeelenberg, Report of fingerprint analysis and comparison, 28 July 2000, section 11

<sup>330</sup> *Official Report*, Justice 1 Committee, 26 June 2006, c3502

<sup>331</sup> *Official Report*, Justice 1 Committee, 26 June 2006, c3564

<sup>332</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 5.20.1

and also reported to the head of the bureau. The matter would be discussed and a resolution sought. The deputy head would counsel the individual, and this would be recorded in their personal file. Should the mistake be considered serious enough or more than one mistake is made, then formal action would be considered under the discipline code. This latter action had never been taken by SCRO.<sup>333</sup>

528. HMIC was informed that misidentifications were rare and that management was aware of them. However, these disputes were not recorded at a central point. HMIC was given to understand that SCRO management were aware of the need for this process to be documented and formalised in a policy. It was intended that this would be done as part of the process of achieving ISO 9002 accreditation (discussed at paragraphs 565-574 below).

529. Importantly, HMIC acknowledged that there existed the potential for disagreement between experts—

“Disagreements between experts are always a possibility in an area of opinion rather than fact. To deny the existence of occasional contrary opinions is more likely to damage the credibility of fingerprint evidence than to accept that disagreements do occur. Provided that the bases for these opinions are explored to determine the reasons behind them and, if appropriate, training needs identified and met or processes amended and change recorded, then credibility can be maintained.

The resolution of erroneous and disputed fingerprint identifications is a key part of the credibility of fingerprinting. It is also an issue which is not confined to SCRO but applies to all fingerprint bureaux. To keep the process within a bureau does not promote the principles of objectivity and transparency required for credibility.”<sup>334</sup>

530. HMIC recommended the establishment of a national policy which encapsulated an independent review process to deal with all erroneous and disputed fingerprint identifications.<sup>335</sup>

#### *Disputed identifications - CMRT proposals*

531. With regard to disputes between experts, the CMRT suggested that any dispute should be discussed between the parties and fully recorded. If a resolution was achieved, this should be noted along with the full details of the reasons for the original dispute and how it was resolved.<sup>336</sup>

532. However, if no resolution was achieved, or if the original dispute was of considerable significance, the CMRT recommended that the matter should be referred to the Quality Assurance Officer in the first place and thereafter to the Head of Bureau. The CMRT recommended as good practice that the Quality

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<sup>333</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 5.20.1

<sup>334</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, paras 5.20.3 – 5.20.4

<sup>335</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, Recommendation 13

<sup>336</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.12.14

Assurance Officer should retain a log of such disputes to allow scrutiny of the cases by any auditors.<sup>337</sup>

533. The CMRT did not consider it acceptable practice for an expert to be disregarded if he or she disagreed with the opinion of a colleague. In such circumstances, the CMRT considered that the mark should not be shown around a bureau in order to achieve identification by three experts. If after a discussion, an expert did not make an identification, the CMRT considered that it should not be taken any further.<sup>338</sup>

534. The CMRT also recommended that in cases where a dispute is resolved, full details should be recorded and that the Procurator Fiscal should be informed of the nature of the dispute and allowed access to the diary pages or any other relevant documentation if desired. It was argued that this would give an additional independent element in the process and ensure integrity was maintained.<sup>339</sup>

*Erroneous identifications – CMRT proposals*

535. The CMRT considered that the essential element in dealing with erroneous identifications (or misidentifications) was transparency. The CMRT proposed the introduction of a procedure which would deal with mistakes in a rigorous fashion which could withstand external scrutiny.<sup>340</sup>

536. The CMRT suggested that an erroneous identification should be fully documented on a diary page (or on the enhanced Office Management System) before being taken to the Quality Assurance Officer, or other senior fingerprint officer, who should immediately bring it to the attention of the Head of Bureau.<sup>341</sup>

537. The CMRT's view was that an internal review would follow to determine the cause of the erroneous identification, although the CMRT suggested that consideration should be given, where the situation dictated, to the use of external fingerprint experts for this purpose.<sup>342</sup>

538. The person who made the erroneous identification would be suspended from making further identifications until the cause of the error was established. If the matter was satisfactorily resolved through training, or other means, the officer could be permitted to conduct identifications again under close monitoring for a period to be determined by management. Full details would be entered in the individual's personal file and details of the erroneous identification and subsequent review would be entered on a log that allowed full scrutiny by external auditors.<sup>343</sup>

**539. The Committee notes the recommendation made by HMIC that there should be a national policy for dealing with erroneous and disputed fingerprints and the proposals made by the CMRT. The Committee considers this matter further in the next section of this report.**

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<sup>337</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.12.15

<sup>338</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.12.16

<sup>339</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.12.17

<sup>340</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.12.18

<sup>341</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.12.19

<sup>342</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.12.20

<sup>343</sup> ACPOS Presidential Review Group - CMRT scrutiny report, paras 13.12.20 – 13.12.21

**540. The Committee is concerned that there was no central record of misidentifications or disputed identifications within the SCRO Bureau in 2000.**<sup>344</sup>

*The non-numeric standard*

541. Since the 1950s, in the United Kingdom, evidence of identity for court purposes required that a fingerprint expert be able to report a minimum of 16 characteristics in a mark in order to express the opinion that it had been made by a particular person.

542. HMIC stated that under the 16 point standard, the aim was to find 16 points or characteristics of friction ridge skin detail on a crime scene mark that were identical in sequence and agreement with a fingerprint given by a donor.<sup>345</sup>

543. HMIC noted that the practice in other countries varied from no specific number required to a fixed number which is usually lower than 16.<sup>346</sup>

544. HMIC reported that a number of jurisdictions had moved away from a "numeric standard" and relied upon the expert explaining why he or she believed a mark to have been made by a particular person. This latter approach is commonly known as operating a "non-numeric standard".<sup>347</sup>

545. HMIC considered that the move to a non-numeric standard and the work which had been done by the 8FSG could be enhanced by the production of a National Guidance Manual on Fingerprint Standards and Procedures and recommended that such a manual be issued to all fingerprint staff.<sup>348</sup>

546. Fingerprint bureaux in England and Wales had planned to introduce the non-numeric standard on 3 April 2000 but this had been delayed and was due to take place in October 2000.

547. HMIC noted that there was some confusion about the introduction of a non-numeric standard not only amongst fingerprint experts but also in the wider Scottish criminal justice system. HMIC considered that the impact of a move to a non-numeric standard on fingerprint evidence would be substantial and wide ranging. If such a move were to retain the credibility of fingerprint evidence then all concerned would have to be aware of its meaning and impact. The HMIC reported that, "This was not the case at the time."<sup>349</sup>

548. HMIC considered that a change of this magnitude required a dedicated project approach which included managing the interests of all parts of the criminal

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<sup>344</sup> Terminology used by HMIC and CMRT

<sup>345</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, paras 5.11.1 – 5.11.2

<sup>346</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 6.8.3

<sup>347</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 1.3.2

<sup>348</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 5.11.3 and Recommendation

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<sup>349</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 6.8.8



justice system. HMIC recommended that managing the change to a non-numeric standard needed to be addressed at a very early point by the APRT.<sup>350</sup>

549. Commenting on preparations for the change to a non-numeric standard in England and Wales, the CMRT noted that a project board had been established in December 1996 to manage the process. The extent of preparation required had meant that the implementation date had been delayed from April 2000, originally to October 2000, and then to early in 2001.<sup>351</sup>

550. Scotland had been represented on the Project Board in England and Wales as it was anticipated that Scotland would follow England and Wales in the transition to the non-numeric standard. The early work of the 8FSG at the end of 1999 had included consideration of the move to the non-numeric standard and formed a sub-group to progress the issue. However, further work had been halted due to the events surrounding the inspection of SCRO Fingerprint Bureau.<sup>352</sup>

551. The CMRT reported that discussion had taken place with Crown Office representatives at the Standing Committee on Expert Evidence and subsequently Draft Lord Advocate's Guidelines on Fingerprint Evidence were produced in September 1999. The Draft Guidelines indicated a willingness to review the situation at that time and moving towards a non-numeric standard cautioning that the transition must be accompanied by an appropriate training programme and required standards of competence, auditing and quality assurance.<sup>353</sup>

552. The CMRT recommended that a project board, similar to the model employed in England and Wales, be set up to manage the change. It suggested that ACPOS Crime Standing Committee monitor the work of the Project Board during the transition.<sup>354</sup>

553. In its conclusion on the transition to a non-numeric standard, the CMRT reflected the current state of readiness in Scotland—

“It is apparent from the English and Welsh experience that the transition will take some time, but some work has already been undertaken and considerable knowledge and experience of the main issues already exist in the Scottish fingerprint service.”

“The work of the Project Board will be vital to the advancement of the fingerprint service in Scotland and must be underpinned by the ethos that departure from the 16 point standard to a non-numeric standard must in no way compromise the confidence which has existed for a considerable time in fingerprint evidence.”<sup>355</sup>

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<sup>350</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 6.8.9 and Recommendation 15

<sup>351</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.10.16

<sup>352</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.10.17

<sup>353</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.10.18

<sup>354</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.10.21

<sup>355</sup> ACPOS Presidential Review Group - CMRT scrutiny report, paras 13.10.22 – 13.10.23

554. However, HMIC noted that the same comprehensive project process had not been applied here although force bureaux had met to discuss the standardisation of processes throughout Scotland under the auspices of the 8FSG.<sup>356</sup> This group of senior fingerprint officers from all Scottish bureaux was tasked with discussing national issues affecting fingerprint services in Scotland including the move to the non-numeric standard, standardisation of procedures and training. It met for the first time in November 1998 but was suspended following its second meeting in December 1999 in light of the outcome of the McKie perjury trial and impending HMIC inspection of the SCRO bureau.<sup>357</sup>

### Quality assurance

555. As noted earlier in this report, at the time of the inspection, HMIC found that 90% of the quality assurance officer's time was still being spent on training duties. HMIC had recommended the separation of the quality assurance and training officer roles.

556. HMIC also expressed concern that one of the measures taken to increase expert availability for scene-of-crime work was to reduce the number of quality assurance checks being carried out. The report stated—

“As part of the work required to re-establish the SCRO Fingerprint Bureau, a renewed focus and importance requires to be placed on the quality assurance process.”<sup>358</sup>

557. In considering the steps required to secure an appropriate quality assurance regime for the SCRO Fingerprint Bureau, HMIC considered elements already in place (e.g. competency testing) or planned (e.g. introduction of ISO 9002 standard). HMIC also made suggestions regarding the use of blind trials and benchmarking.

### Competency Testing

558. SCRO senior management informed HMIC that the SCRO Fingerprint Bureau was the first to pilot competency testing of fingerprint officers and HMIC acknowledged the importance of this step. At the time of the inspection, the tests applied were prepared and marked internally.

559. In oral evidence, Robert Mackenzie confirmed that it was he who had developed the competency test in 1995.<sup>359</sup>

560. The 'internal' SCRO competency test (referred to at SCRO as a proficiency test) had been submitted to the FBI for independent assessment. A critique of the test was provided by the FBI, which included a comment that as a test to measure competency, it was considered to be too stringent.<sup>360</sup>

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<sup>356</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 6.8.7

<sup>357</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, paras 1.7.2 – 1.7.3

<sup>358</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 6.1.2

<sup>359</sup> *Official Report*, Justice 1 Committee, 26 June 2006, c 3559

<sup>360</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 6.5.2

561. Management was aware of the view that such testing benefits from independent administration. An approach was made by SCRO to the US company Collaborative Testing Services Inc, described by SCRO as the only independently administered testing service available. The intention was for the head of the bureau and the quality assurance officer to undertake that test, as these post holders are the two senior fingerprint officers who administer the competency testing conducted within SCRO. Difficulties were encountered however as that test is only released at a given date and the SCRO request missed the date in question. HMIC was told that SCRO would apply for it again at the end of 2000.

562. HMIC recommended that this was an aspect that the ACPOS review team needed to pursue with vigour to seek an early, sustainable and defensible programme. The CMRT response is considered below.

563. In response to the HMIC recommendation that all fingerprint officers within the SCRO Fingerprint Bureau should undergo competency testing provided and managed by an external provider as soon as possible<sup>361</sup>, SCRO suspended the use of its internally based proficiency test. The CMRT considered what other options existed and found that the only alternative was a service provided by the US company, CTS, as also identified by SCRO. The CMRT reported that Tayside Police had used the service and other force bureaux in Scotland had also expressed a significant interest.<sup>362</sup>

564. An application had been made to CTS to test all fingerprint officers at SCRO during the next administration of the test in January 2000, at a cost in the region of £5000. The CMRT considered this to be a positive step by the management of SCRO. The CMRT suggested that the test should be administered annually, pending the development of a fuller competency test by the Council for the Registration of Forensic Practitioners (CRFP). The CMRT also suggested that other Scottish bureaux should consider using the test in conjunction with a protocol for dealing with non-conformance by officers during testing. This was being developed by the 8FSG.<sup>363</sup>

#### *ISO 9002*

565. ISO 9002 is a worldwide standard for Quality Assurance systems. It requires organisations to conform to documented systems of quality assurance. External audits are carried out to ensure the organisation is complying with its own standards. Certification of ISO 9002 compliance requires an organisation to prepare a written policy statement on quality assurance, write a quality manual on its own systems and procedures and make available all documents and controls as required.<sup>364</sup>

566. HMIC considered that in order to maintain the confidence of both the criminal justice system and the public in the Quality Assurance processes in SCRO “the achievement of ISO 9002 is an important step. It demonstrates the willingness of

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<sup>361</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, Recommendation 19

<sup>362</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.8.10

<sup>363</sup> ACPOS Presidential Review Group - CMRT scrutiny report, paras 13.8.11 – 13.8.13

<sup>364</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 6.3.1

SCRO to allow independent external examiners to audit their Quality Assurance processes.”<sup>365</sup>

567. HMIC commented that in the move to a non-numeric standard it would be essential to have Quality Assurance processes and procedures in place. This would include a quality procedure manual with internal and external audit systems. HMIC fully supported SCRO in this move towards ISO 9002 accreditation and noted that other bureaux were also considering the use of ISO 9002 for validation of their quality processes.<sup>366</sup>

568. HMIC suggested that all Scottish bureaux should agree common Quality Assurance processes using the co-ordinating influence of the Council for the Registration of Forensic Practitioners (CRFP). In doing so, HMIC considered that “good practice may be promulgated and the time and effort in production of a quality manual reduced.”<sup>367</sup>

569. In response to the HMIC’s findings, the CMRT examined the quality assurance systems of the SCRO bureau and elsewhere in Scotland and found significant variations in standards.<sup>368</sup>

570. The CMRT discussed with the CRFP the suggestion that it might co-ordinate a move toward common processes but it was told that this was outwith the scope of the CRFP and not something they would wish to develop at that stage.<sup>369</sup>

571. The CMRT considered that as consideration of the move towards a non-numeric standard continued in Scotland it was essential that preparatory work be undertaken to ensure that processes and procedures were adequate, provided safeguards for staff were sufficiently well tested to withstand close scrutiny. The CMRT suggested that ISO 9002 offered fingerprint bureaux the opportunity to establish a defensible platform for progression towards a non-numeric standard. The CMRT noted that some 14 forces in England had already adopted ISO 9002 in preparation for the introduction of a non-numeric standard.<sup>370</sup>

572. To assist it in developing an ISO 9002 system, SCRO had enlisted the services of a quality assurance consultancy. The CMRT reported that once fully adopted, the Quality Assurance Officer would be responsible for the co-ordination and administration of the ISO process, including internal audits, follow up procedures and maintenance of the manuals.<sup>371</sup>

573. In order to provide a defensible and sustainable position, the CMRT considered it essential that the job description and person specification of the Quality Assurance post be reviewed as soon as possible, in order to define clearly

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<sup>365</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 6.3.3

<sup>366</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 6.3.4

<sup>367</sup> Ibid

<sup>368</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.9.2

<sup>369</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.9.5

<sup>370</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.9.4

<sup>371</sup> ACPOS Presidential Review Group - CMRT scrutiny report, paras 13.9.6 and 13.9.8

the importance and priorities of that role. The CMRT proposed that this should coincide with the introduction of the new Training Officer post.<sup>372</sup>

574. The Committee gives further consideration to the development of quality assurance systems within the Scottish Fingerprint Service in the next part of the report.

#### *Blind testing*

575. As discussed in relation to mark Y7, the Committee understands that true blind testing consists of a case being submitted to a bureau as if it were genuine for the purpose of testing the procedures applied and the quality and accuracy of the processes involved. HMIC noted that SCRO had never employed this method of quality assurance and HMIC suggested that it was another tool that was worthy of consideration.<sup>373</sup>

576. The CMRT considered the HMIC suggestion. While the practice was understood to have been introduced on a limited scale within some forensic science services, the CMRT found little evidence of its application within fingerprint bureaux. The CMRT reported that the issue was consistently raised during its period of consultation but had been met with general reserve. One force bureau had, however, experimented and saw a potential place for blind testing within the fingerprint service, if managed carefully.<sup>374</sup>

577. The CMRT reported that the reservations of others centred on the complexity and control of the tests. In particular, the need to create 'false' computer and case records on the Criminal History System, potentially the Police National Computer and local force computers and, consequently, the proper management and control of that information were of concern to them.<sup>375</sup>

578. The CMRT considered that while the concept had merit, it needed to be more fully considered in terms of the renewed emphasis which is being placed on openness and accountability within SCRO. The CMRT suggested further research was necessary to consider the fuller implications and scope the level of effort required to manage safely a programme of blind testing and it would be appropriate for the 8FSG to consider the issue in due course, as part of its wider remit.<sup>376</sup>

#### *Benchmarking*

579. During the pre-inspection stage of the inspection, HMIC encountered difficulty in obtaining statistical information to inform the inspection and to determine whether any progress had been made towards the development of a common Scotland-wide model of management information.

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<sup>372</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.9.18

<sup>373</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 6.6.1 and Suggestion 14

<sup>374</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.9.22

<sup>375</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.9.23

<sup>376</sup> ACPOS Presidential Review Group - CMRT scrutiny report, para 13.9.24

580. HMIC found that there were still differences in the way that force bureaux record information to the extent that comparison between forces is not always possible.<sup>377</sup>

581. HMIC was of the opinion that, regardless of the future structure of the fingerprint service in Scotland, it was, “essential that agreed, common statistical performance information should be collected by bureaux so that valid comparisons can be made.”<sup>378</sup>

582. In addition, HMIC saw benefit in consulting fingerprint bureaux outside Scotland on this matter, in order that the most suitable benchmarking partners may be identified. This would allow both SCRO and force fingerprint bureaux to assess their performance on a larger scale, in a more meaningful way and with more accuracy. To this end, HMIC suggested that the ACPOS Presidential Review Team give this issue early attention.<sup>379</sup>

583. The CMRT reported that there had been agreement by the 8FSG at the end of 1999 that there was a need to rationalise statistical gathering, but this had not yet occurred.<sup>380</sup>

584. As a basis for benchmarking, the CMRT had obtained details of the comprehensive range of performance indicators collected quarterly in England and Wales. The CMRT recommended that the 8FSG should continue work on the development of statistical information and performance indicators to allow ACPOS Crime Standing Committee to determine an appropriate approach enabling collection of this information from April 2001.<sup>381</sup>

#### SUBSEQUENT HMIC INSPECTIONS OF SCRO

585. The Committee now turns its attention to the reports of subsequent formal HMIC inspections of SCRO which reviewed progress within the fingerprint bureau as part of more wide ranging inspections of SCRO as a whole. The Committee considers that these independent inspections act as an important barometer of change within SCRO.

#### **HMIC Primary Inspection of the Scottish Criminal Record Office 2000**

586. HMIC returned to SCRO in December 2000 in order to carry out an inspection of the organisation as a whole, including the Fingerprint Bureau. In carrying out this inspection, HMIC had access to the report prepared by the CMRT.

587. This was a far wider inspection, taking in not only the Fingerprint Bureau but also the Information Technology Bureau, User Support Bureau and other project teams.

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<sup>377</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 6.7.4

<sup>378</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 6.7.5

<sup>379</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 6.7.5 and Suggestion 15

<sup>380</sup> ACPOS Presidential Review Group - CMRT scrutiny report, paras 13.10.24

<sup>381</sup> ACPOS Presidential Review Group - CMRT scrutiny report, paras 13.10.25 – 13.10.26

588. Seven months on from the inspection of the Fingerprint Bureau, HMIC found that the confidence and morale of SCRO staff had been adversely affected by the criticism of the Bureau in its earlier report. In particular, the view of HMIC that the organisation was not "fully efficient and effective" had been difficult for staff to accept. HMIC considered that, in part, this was due to the belief that many of the issues identified by HMIC were outside the direct control of SCRO staff and a result of insufficient resources.<sup>382</sup>

589. HMIC acknowledged the 90-day scrutiny carried out by the CMRT and reproduced the recommendations and suggestions made by the CMRT in an Annex. HMIC stated that it was satisfied that "a structured programme is in place to address the recommendations and suggestions, that the task is being approached enthusiastically and vigorously and that much has been done to make progress." HMIC also reported that on 7 December 2000 the Bureau had been accredited with the 'ISO 9002' standard, confirming that the SCRO was complying to its own documented standards of quality assurance.<sup>383</sup>

590. HMIC reported that the action taken since the inspection of the fingerprint bureau had been positive and wide ranging. A number of points were highlighted which in HMIC's view demonstrated improvement—

- The move to the new premises had provided a more obvious independence and a better working environment where procedures and processes could be more readily operated and monitored.
- The production and publication of the report by the ACPOS Review Group (CMRT) and the creation of a dedicated project group to take issues forward.
- The allocation of responsibilities and the creation of time scales to produce specific work to secure improvements.
- The independent checking of the fingerprint product (required by the Lord Advocate and announced in Parliament on 22 June 2000) had confirmed the quality and accuracy of the work of SCRO. Over 1,400 cases had been examined containing over 4,300 marks with in excess of 6,600 impressions, all of which had been verified. In view of the results of this verification process HMIC queried whether this was still appropriate and an effective use of resources.
- The strengthening of the SCRO management team by the introduction of key posts.
- The effort to recruit additional staff.
- The agreement of the SCRO Executive Committee to adopt a system of central management for the fingerprint service in Scotland.
- The appointment of a Head of the Scottish Fingerprint Service to develop and lead the system of centralised management.

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<sup>382</sup> HMIC SCRO Primary Inspection 2000, Executive Summary

<sup>383</sup> HMIC SCRO Primary Inspection 2000, para 6.1

591. HMIC was satisfied that the responses so far had been speedy and robust. HMIC considered that there was a clear need for this process to be pursued “with vigour and regular oversight to avoid any slide backward to the pre-inspection position.”<sup>384</sup>

592. Positively, following this inspection HMIC considered that significant progress had been made and that “provided the momentum for securing the necessary improvements is maintained then the outlook is positive.”<sup>385</sup>

593. HMIC stated that it would re-visit the issues identified by the Inspection of the Fingerprint Bureau and this Inspection of the remainder of SCRO at the Review Inspection in December 2001.<sup>386</sup>

**594. The Committee notes the initial response made by SCRO to address the recommendations of HMIC in the six month period between inspection visits. The Committee also notes the comment from HMIC that there needed to be regular oversight of the reform process to to avoid any slide backward to the pre-inspection position.**

#### **HMIC Second Year Review of SCRO Primary Inspection of 2000**

595. By the time of the review inspection in December 2001<sup>387</sup>, William Taylor had been succeeded as HM Chief Inspector of Constabulary by Sir Roy Cameron.

596. The review inspection focused on the action taken by the SCRO in response to the HMIC Primary Inspection of the SCRO in December 2000. The format of the review process was to list the recommendations and suggestions of HMIC, followed by the SCRO position and comments by HMIC.

597. The review did not consider the response made to the Primary Inspection of the Fingerprint Bureau and there are only limited references to the Bureau in the report.

**598. The Committee is alarmed that HMIC did not re-visit the issues identified in the inspection of the Fingerprint Bureau in 2000 as part of its review inspection in 2001 despite the clear commitment to do so in December 2000.**

#### **HMIC Third Year Review of SCRO 2003**

599. The Third Year Review Inspection by HMIC focused on the actions taken by the SCRO in response to the HMIC Primary Inspection conducted in May 2000 of the Fingerprint Bureau and the Primary Inspection of SCRO as a whole conducted in December 2000.

600. The inspection included scrutiny of written updates and examination of supporting material provided by SCRO and the recently established Scottish

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<sup>384</sup> HMIC SCRO Primary Inspection 2000, para 6.4

<sup>385</sup> HMIC SCRO Primary Inspection 2000, Executive Summary

<sup>386</sup> HMIC SCRO Primary Inspection 2000, para 6.4

<sup>387</sup> HMIC Second Year Review of SCRO Primary Inspection of 2000, published 13 December 2001



Fingerprint Service. HMIC Staff Officers then visited SCRO to interview a range of staff from SCRO and the Scottish Fingerprint Service and conducted a benchmarking visit to the Fingerprint Unit of Greater Manchester Police for comparative purposes. The inspection concluded with a visit by Her Majesty's Chief Inspector Of Constabulary, which included a discussion with senior staff on progress in several strategic business areas.<sup>388</sup>

601. HMIC welcomed the progress that had been made to establish the Scottish Fingerprint Service from the separate bureaux that existed at the time of the last Primary Inspection. HMIC considered that this development had "provided a vehicle to develop and share good practice amongst the professionals working in this arena." In order to gauge the impact of progress, HMIC recommended that appropriate internal and external surveying be carried out.<sup>389</sup>

*Discharge of recommendations and suggestions*

602. The report noted that of the 25 recommendations and 20 suggestions contained within the May 2000 Primary Inspection report, HMIC was able to discharge 17 of the recommendations and 15 of the suggestions. HMIC was clear that "much effort has been put into and progress made addressing these."<sup>390</sup>

603. Annex A to the HMIC 3rd year review report discussed in some detail the status of each recommendation and suggestion.

604. Recommendations discharged included those related to organisational restructuring of fingerprint services (into a four bureaux Scottish Fingerprint Service), introduction of a new Office Management System, and competency testing for experts.

*Procedures*

605. In relation to recommendations relating to a review of procedures, HMIC also found that significant progress had been achieved. In particular, a National Procedures Manual on fingerprint standards and procedures had been produced by the 8 Force Standard Group and launched in June 2001.

606. HMIC considered the manual to be an impressive document. Acknowledging that the manual and the procedures it contained were subject to review as part of the ISO process, HMIC recommended that an expert from another Bureau examine the manual by way of independent validation. The Head of the Scottish Fingerprint Service agreed to have this undertaken at the earliest opportunity. In light of this, HMIC discharged this recommendation.

607. HMIC had recommended that practices within the SCRO Fingerprint Bureau be reviewed with a view to introducing a system, which increased the independence within the identification/verification process.<sup>391</sup>

608. At the time of the third year review, SCRO informed HMIC that the practical difficulties of separating these processes within bureaux had been recognised by

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<sup>388</sup> HMIC Third Year Review of SCRO 2000, para 2.6

<sup>389</sup> HMIC Third Year Review of SCRO 2000, para 1.9

<sup>390</sup> HMIC Third Year Review of SCRO 2000, para 1.5

<sup>391</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, para 8.15.2 - Recommendation 23

the 8 Force Standard Group. SCRO reported that, in practice, fingerprint officers undertook initial identifications with a Principal or Senior Fingerprint Officer making the final verification.

609. In addition to this, in order to enhance the credibility of the process, SCRO reported that the following had been introduced—

- ISO 9001:2000 accreditation had been awarded to the Glasgow Bureau. it was hoped that this would act as a platform for attainment within Aberdeen, Dundee and Edinburgh.<sup>392</sup>
- A Scottish Fingerprint Service National Operating Procedures Manual had been developed which identified standardised processes to be adopted.
- Registration of fingerprint experts with the Council for Registration of Forensic Practitioners.
- Annual competency testing across the Scottish Fingerprint Service.
- Completion of a diary page by each expert for each case.

610. SCRO also acknowledged the CMRT proposal for the separation of identification and verification processes. SCRO reported that to date this structural separation had not been totally implemented by the SFS given the size of the bureaux at Dundee, Aberdeen, Edinburgh and the type of crime team structure employed in Glasgow Bureau. However, the following processes were in place in the Glasgow Bureau—

- At each stage in the identification and verification process the fingerprint officer completed his/her own evaluation of the characteristic set for the mark to achieve identification. This characteristic set was not recorded anywhere, hence verifiers did not know the characteristic set used for the identification, they had to find and complete their own characteristic set.
- Each fingerprint officer in the process stated what mark they had individualised and signed for it. By signing the officer was committing to go to court for his statement of identification.
- In each step of the process the officer knew that an identification had occurred but did not know specifically who had made this.
- All final verifications were carried out by a Principal or Senior Fingerprint Officer.
- An administrative system was in place whereby each fingerprint officer was given only photographs and tenprints of the case. Only after reaching a conclusion on the mark would the fingerprint officer be given the case envelope and diary pages to enter results. At this point the officer would be exposed to the previous findings.<sup>393</sup>

611. SCRO submitted that the situation regarding the structural separation of verification/identification was under continual discussion and organisational

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<sup>392</sup> ISO 9001:2000 is an update and amalgamation of the previous ISO 9001, 9002 and 9003 standards

<sup>393</sup> HMIC Third Year Review of SCRO 2000, Annex A, commentary on Recommendation 23

structure of bureaux in England and Wales would be reviewed as part of a benchmarking exercise.

612. HMIC acknowledged the progress that had been made in this respect. It also acknowledged the difficulties of addressing the question of anonymity in the identification and verification process at the smaller bureaux where the number of fingerprint officers was fewer. HMIC was pleased to note that progress was being made to ensure that the satellite bureaux successfully attained ISO 9001 status within the next few months.

613. HMIC examined the identification and verification process as it operated within the Glasgow Bureau. Examples of diary pages were examined on which fingerprint officers recorded their comments. After each stage the diary page would be returned to a team leader to be passed onto the next fingerprint officer to ensure anonymity. However, HMIC found that even in a large bureau such as Glasgow, it was difficult to maintain complete anonymity as handwriting may be recognised, for example.

614. HMIC also examined the identification and verification process as it operated within the fingerprint section of Greater Manchester Police, a unit of similar size to the Glasgow Bureau. Manchester operated a process involving a separate 'checking' team for verification. The team consisted of two fingerprint officers and a supervisor and was changed on a weekly basis. HMIC considered that there may be merit in this approach and was of the opinion that the Scottish Fingerprint Service should consider this as part of the move to the non-numeric standard. The Head of the Scottish Fingerprint Service had undertaken to examine this and other similar processes as part of a benchmarking process.

615. HMIC acknowledged the progress made and the suggestion that further consideration should be given to the identification and verification process and confirmed that it would revisit this recommendation at the next primary inspection.

*Non-numeric standard*

616. During 2001 England and Wales moved to a non-numeric fingerprint standard. SCRO had reported to HMIC that the plan to implement a non-numeric standard for fingerprint identification in Scotland remained ongoing. A project management team chaired by ACC John McLean of Strathclyde Police had been established to address the issue.

617. HMIC commented that it was anticipated that the move to the non-numeric standard would be achieved during 2004. HMIC confirmed that it would revisit this important area during the next primary inspection.

*Outstanding recommendations and suggestions*

618. The eight recommendations and five suggestions outstanding, were focussed around three issues—

- Resourcing
- Benchmarking
- Openness

619. In relation to resourcing, HMIC expressed disappointment that the lack of skilled fingerprint experts in the employment market, time required to train new experts and delay in funding provision had “conspired to prevent prompt implementation of optimum staffing levels as recommended by the CMRT scoping study.”<sup>394</sup>

620. HMIC recommended that benchmarking with other similar sized bureaux in other parts of the United Kingdom should take place and noted that the Head of Scottish Fingerprint Service would pursue this to allow not only performance to be compared but also processes. HMIC suggested that benchmarking with another bureau would also contribute to a more open and transparent culture within the organisation.<sup>395</sup>

621. HMIC concluded that it was “satisfied that all the outstanding recommendations are being addressed and that considerable progress has been made. However HMIC would wish to see the impact of ongoing developments before finally discharging. They will be revisited at the next Primary inspection in 2004.”<sup>396</sup>

#### **HMIC Primary Inspection report 2004**

622. The most recent primary inspection of SCRO took place during October and November 2004.<sup>397</sup> It was conducted by Kenny McInnes QPM, Assistant Inspector of Constabulary (and former lead officer for the ACPOS Change Management Review Team) and Peter Daniels OBE, Her Majesty’s Lay Inspector of Constabulary.

623. The inspection was SCRO-wide although it focused scrutiny on particular themes and elements of the organisation. One element considered as part of the inspection was the integration of the Scottish Fingerprint Service.

#### *Scottish Fingerprint Service integration*

624. The report acknowledged that the fingerprinting service in Scotland had “undergone radical development” following HMIC’s Primary Inspection Report of the SCRO Fingerprint Bureau in 2000.<sup>398</sup>

625. Acknowledging the creation of the Scottish Fingerprint Service as a single organisation, HMIC highlighted that “in reality it exists at present only as a collaborative arrangement between SCRO and forces and agreed by chief constables.”<sup>399</sup>

626. The principal barrier to further integration identified by HMIC was finance-related. It had been envisaged that the costs of maintaining the fingerprint

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<sup>394</sup> HMIC Third Year Review of SCRO 2000, para 1.7

<sup>395</sup> HMIC Third Year Review of SCRO 2000, para 1.9

<sup>396</sup> HMIC Third Year Review of SCRO 2000, para 1.10

<sup>397</sup> A review inspection to consider progress since the 2004 Primary inspection took place in 2006. The report of this review inspection was published by HMIC in December 2006.

<sup>398</sup> HMIC SCRO Primary Inspection 2004, para 5.5

<sup>399</sup> HMIC SCRO Primary Inspection 2004, para 5.6

bureaux in Aberdeen, Dundee and Edinburgh could be readily taken from the relevant force budget and allocated to SCRO to fund the SFS as a whole.

627. HMIC expressed disappointment that this had not yet been achieved for 2004-05. Although agreed in principle by ACPOS, it had been decided to operate a shadow budget for 2005-06 in order to better inform a transfer of funds in the following year.<sup>400</sup>

628. HMIC also identified other issues which had “stifled integration”. Importantly, HMIC found little evidence of SCRO or SFS management, above bureau head, routinely engaging with operational staff particularly with respect to staff outwith Glasgow.

629. To some extent, HMIC explained the lack of corporate identity as a function of the fact that SFS staff outwith Glasgow were still employed by their local force. However, HMIC considered that there was a potential for confusion over issues such as funding, training, provision of equipment and corporate workwear. The lack of a single absence management policy was also identified as a potentially divisive issue.<sup>401</sup>

630. HMIC’s view was that, primarily due to historic staffing arrangements, the Aberdeen Bureau appeared to be out of step with efforts to create a national fingerprint service. Fingerprint experts in Aberdeen continued to operate a dual-role system where, once qualified, they were additionally trained and deployed as scenes of crime officers on a rotational basis. HMIC considered that the practice of undertaking training in two disciplines was difficult to support.<sup>402</sup>

631. HMIC also commented on procedures in the Aberdeen Bureau in relation to use of the new SFS Office Management System (OMS). Although staff in Aberdeen used the OMS, they also continued to key data, essentially the same information, into a separate spreadsheet used by it prior to the establishment of SFS. Staff argued that the other system was easier to search, but acknowledged that maintaining two applications was a duplication of effort. In the opinion of HMIC, the official case management application should incorporate all of the necessary functionality and any scope for potential improvements identified at any one site should be progressed for the benefit of SFS as a whole.<sup>403</sup>

#### *Authorised staffing levels*

632. In 2004, the SFS commissioned an internal report to establish the appropriate number of fingerprint experts required in each of the four bureaux.<sup>404</sup> This was followed by a further report which proposed the necessary resourcing plan for the SFS for the next five years.<sup>405</sup>

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<sup>400</sup> HMIC SCRO Primary Inspection 2004, para 5.9

<sup>401</sup> HMIC SCRO Primary Inspection 2004, paras 5.11-5.12

<sup>402</sup> HMIC SCRO Primary Inspection 2004, para 5.13

<sup>403</sup> HMIC SCRO Primary Inspection 2004, para 5.14

<sup>404</sup> SFS ‘Report to Establish an Appropriate Authorised Bureau Establishment of Fingerprint Experts’, September 2004

<sup>405</sup> SFS ‘5 Year Resourcing Plan based on Authorised Bureau Establishment of Fingerprint Experts’, December 2004

633. The first report set out the following proposed establishment levels for the four bureaux:

Proposed Bureau Structure			
	Aberdeen	Dundee	Edinburgh
Head of Bureau	1	1	1
Senior Fingerprint Officer	2	2	2
QA/Training Officer	1	1	1
Experts	9	9	9
<b>TOTAL</b>	<b>13</b>	<b>13</b>	<b>13</b>

Glasgow Proposed Bureau Structure – Excluding the Quality Team and Special Cases Unit.	
Head of Bureau	1
Deputy Head of Bureau	1
Principal Fingerprint Officer	6
Senior Fingerprint Officer	6
Training Manager	1
Quality Assurance Officer	1
Training Officer	1
Experts	27
	44

634. HMIC commented that the research appeared to be founded on sound principles and the document provided a realistic assessment of the personnel required within SFS over the medium term.<sup>406</sup>

*Verification process*

635. In this inspection, HMIC reviewed the progress made in relation to processes for the identification of marks and the preparation of evidence for court highlighted in its Primary Inspection of the Fingerprint Bureau in 2000.

636. HMIC noted that the Glasgow Bureau had adopted a process where anonymity of expert opinion and verification were central factors. HMIC commented that the process was resource intensive, involving three fingerprint officers being deployed in a Verification Unit and another three within a Quality Support Unit. Consequently, these individuals were not available for front-line comparison work. However, HMIC noted that the process had been benchmarked against those in other major bureaux across the UK and HMIC considered it to be effective because it ensured that there were three independent comparisons of

<sup>406</sup> HMIC SCRO Primary Inspection 2004, para 5.7

marks and detailed procedures were in place to resolve any disputes which arose.<sup>407</sup>

637. With regard to the bureaux outwith Glasgow, HMIC noted that due to their smaller scale they were unable to adopt the anonymous verification system used in Glasgow because of the limited number of experts available. HMIC noted that in these bureaux, identifications were all verified by independent expert opinion, but this could not be done anonymously where there are only two or three fingerprint officers within the bureau.<sup>408</sup>

638. HMIC also noted that SCRO had benchmarked its processes in the smaller bureaux against those in similar bureaux across the UK and was considering arrangements to increase the independence between identification and verification of fingerprint marks at the Aberdeen, Dundee and Edinburgh Bureaux. HMIC stated that it would examine progress made in this regard at the review inspection.<sup>409</sup>

*Quality assurance accreditation*

639. HMIC noted that all four SFS bureaux had achieved accreditation under the International Organisation for Standardisation (ISO) ISO9001. HMIC acknowledged the positive approach taken by the SFS in undergoing this regular scrutiny and achieving the required quality level associated with the award.<sup>410</sup>

640. One associated development highlighted in the report was the creation of comprehensive operating processes for the service within the SFS National Procedures Manual.<sup>411</sup>

641. HMIC also noted that the SFS had actively encouraged its staff to seek registration with the Council for the Registration of Forensic Practitioners (CRFP), a professional regulatory body which maintained a register of currently competent forensic practitioners. The SFS provided support to staff in terms of membership fees and management of workload to allow time for preparation. Registration was voluntary but there had been a positive uptake, with some 86% of SFS fingerprint officers accredited or in the process of application. This compared favourably at a UK level, ranking SFS at the upper range of registration rates. HMIC acknowledged the increased level of professionalism which widespread registration would bring to the SFS.<sup>412</sup>

*Discharge of outstanding recommendations and suggestions*

642. In welcoming the extent of progress which had been made since the Primary Inspection of the Fingerprint Bureau in 2000, HMIC considered that all of the recommendations and suggestions which remained outstanding from that inspection could be discharged. A statement in relation to each of these was set out in Appendices 'A' and 'B' of the 2004 report.

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<sup>407</sup> HMIC SCRO Primary Inspection 2004, para 5.23

<sup>408</sup> HMIC SCRO Primary Inspection 2004, para 5.24

<sup>409</sup> Ibid

<sup>410</sup> HMIC SCRO Primary Inspection 2004, para 5.28

<sup>411</sup> HMIC SCRO Primary Inspection 2004, para 5.6

<sup>412</sup> HMIC SCRO Primary Inspection 2004, para 5.30

*Conclusions*

643. HMIC acknowledged that there was an appetite among SFS staff for future re-structuring within a national forensic science service and that this was being actively progressed for the medium term. However, HMIC considered it was essential that SCRO handed over a national service which was actually operating as such and, in the interim, recommended that SCRO actively pursued further integration of the SFS, taking account of the specific issues raised in the HMIC Report.<sup>413</sup>

644. Overall, HMIC considered that the Scottish Criminal Record Office was efficient and effective.<sup>414</sup>

645. The Committee notes the findings of the HMIC Primary Inspection 2004, and in particular the discharge of the remaining recommendations and suggestions from the Primary Inspection of the Fingerprint Bureau in 2000. The Committee comments further on this below.

COMMITTEE CONCLUSIONS ON REVIEWS OF THE SCRO FINGERPRINT BUREAU

646. Fingerprint services in Scotland have undergone unprecedented change over the last decade. In 1996, fingerprint services were delivered by SCRO and six smaller bureaux attached to individual Police forces across the country. The introduction of the Livescan system that year was expected to enhance the service provided to the Police through the electronic capture of fingerprints from accused persons. However, the need to service the Livescan system on a 24/7 basis without sufficient additional resources placed significant pressure on staff in the SCRO Bureau leading to what management deemed a 'crisis'. Many of the resource problems that have beset fingerprint services in Scotland can, therefore, be traced back to that event.

647. The Marion Ross murder case in 1997 and the disputed identification of Shirley McKie's thumbprint sparked a deeper crisis in SCRO, the effects of which have spread across Scotland and around the world.

648. In 2000, the HMIC inspection of the SCRO Fingerprint Bureau found that it was not "efficient and effective". The extent of the difficulties and deficiencies identified by Her Majesty's Inspectorate of Constabulary were considerable. HMIC considered that fundamental reform and reorganisation of fingerprint services was required if the situation was to show rapid improvement.

649. Following the HMIC inspection and further work by the Eight Force Standard Group, a significant reorganisation took place, culminating in the creation of the national Scottish Fingerprint Service, centrally managed but delivered from four bureaux in Aberdeen, Dundee, Edinburgh and Glasgow. The HMIC was content that national standards and procedures were agreed and introduced, a quality assurance system was implemented and accredited to ISO 9001 standard, competency testing for experts was introduced and training was overhauled.

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<sup>413</sup> HMIC SCRO Primary Inspection 2004, para 5.15 and Recommendation 4

<sup>414</sup> HMIC SCRO Primary Inspection 2004, Executive Summary, para 7



650. Considering the conclusions of the HMIC Primary Inspection of SCRO in 2004, which discharged the remaining recommendations and suggestions made in 2000, it would appear that there had been a remarkable turnaround in all aspects of the operation of the SCRO Fingerprint Bureau. The Committee considers that this degree of organisational change coupled with formal independent scrutiny by HMIC should have, by itself, been sufficient to restore fingerprint services in Scotland to a state of efficiency and effectiveness.

651. However, from the evidence presented during the course of the inquiry, it is evident to the Committee that there remains a continuing sense of crisis within the Scottish Fingerprint Service. Although this appears to be principally generated by the continuing dispute around the McKie case, the Committee considers that its root causes still lie in weaknesses in management, processes and human resources.

652. The future of the Scottish Fingerprint Service and public confidence in its work will only be restored if people believe that meaningful change has been effected and the Service can be considered to be operating to the highest of international standards. It is against this background that recent developments must be measured.

653. In the next section of this report, the Committee considers the future of the Scottish Fingerprint Service including recent developments such as the preparation of a detailed 'Action Plan for Excellence' which proposes a further extensive programme of review and reform.

## **SECTION 4: THE FUTURE OF THE SCOTTISH FINGERPRINT SERVICE**

### **Introduction**

654. Having considered the implications of the McKie case and the unparalleled degree of change to fingerprint services in Scotland since 2000, the Committee now considers the future of the Scottish Fingerprint Service.

655. As discussed in section three of this report, HMIC, in its report of the Primary Inspection of SCRO in 2004, welcomed the extent of progress since the Primary Inspection of the SCRO Fingerprint Bureau in 2000 and discharged all the outstanding recommendations and suggestions from the original Inspection. Although HMIC noted that further work was needed to achieve total integration of the SFS, it concluded that, overall, SCRO was efficient and effective.

656. The Committee has acknowledged that an extensive programme of reform to fingerprint services in Scotland had been carried out under the auspices of the newly created Scottish Fingerprint Service. This included—

- external annual competency testing of all fingerprint officers;
- external training and assessment of fingerprint officers by Centrex National Training Centre for Scientific Support (NTC), based at Durham;
- the creation of national guidance on fingerprint standards and procedures in Scotland; and
- bureaux accreditation to ISO9001:2000 quality standard.

657. Despite this record of reform, and its endorsement by HMIC, the Committee's inquiry has revealed that there remain weaknesses in several aspects of the operation of the Scottish Fingerprint Service.

658. The purpose of this section of the report is as follows:

- to set out the evidence received by the Committee which explores existing weaknesses in the operation of the Scottish Fingerprint Service;
- to set out how the Action Plan for Excellence proposes these weaknesses should be addressed, together with the Committee's recommendations on how this document should be strengthened further; and to highlight possible pitfalls to successful implementation of the Action Plan for Excellence and to provide some suggestions as to how these pitfalls may be avoided.

## EXISTING WEAKNESSES

### Action Plan for Excellence

659. Media and public reaction following the settlement in February 2006 of the civil action brought by Shirley McKie against Scottish Ministers prompted the Minister for Justice, Cathy Jamieson MSP, to announce further reform to the SFS. On 22 February 2006, in a statement to the Parliament, the Minister announced that she had instructed the then interim chief executive of the Scottish Police Services Authority, Deputy Chief Constable David Mulhern, to bring forward by the end of March 2006 an action plan to develop the Scottish Fingerprint Service as an integrated part of the new Scottish Forensic Science Service (SFSS) from April 2007.

660. As part of her statement, the Minister set the following objective for the Scottish Fingerprint Service—

“I am determined that Scotland's fingerprint service should be acknowledged as being world class. I believe that we have an historic opportunity to realise that ambition by demonstrating independent oversight, scientific excellence and transparent adherence to standards.”<sup>415</sup>

661. The Action Plan for Excellence (“the Action Plan”) was published on 21 April 2006. It contains 25 action points designed “to embed and build on the positive measures that have been implemented since 2000.”<sup>416</sup>

662. The introduction to the Action Plan acknowledges that much good work has already been done to take the SFS forward. The Action Plan was intended to take stock of the SFS as it was and to develop the organisation for the future. The objective of the Plan is stated as being “to ensure that the Scottish Fingerprint Service adheres to the best possible international standards and is a recognised centre of excellence in its field.”<sup>417</sup>

663. Given the fact that the programme of reforms prompted by the HMIC inspection of the SCRO Fingerprint Bureau in 2000 had been so recently implemented, the Committee was surprised at the extent of further reform proposed in the Action Plan. As part of its scrutiny of the actions proposed in the Action Plan, the Committee sought evidence on the current status and performance of the Glasgow Fingerprint Bureau and the wider SFS in order to ascertain whether there were outstanding issues which required to be addressed.

664. The Committee considered the following documentary evidence in order to inform its scrutiny—

- Baseline assessment of the Scottish Fingerprint Service - The O’Dowd Report (March 2006);

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<sup>415</sup> *Official Report*, 22 February 2006, c 23346

<sup>416</sup> SFS Action Plan for Excellence Progress Report 1 (July 2006) introduction, page 1

<sup>417</sup> SFS Action Plan for Excellence, para 1.2

- Scottish Fingerprint Service Employee Consultation Report – The ICAS Report (June 2006);
- Action Plan for Excellence – first progress report (July 2006);
- Review of Scottish Criminal Record Office Primary Inspection of 2004 – HMIC (December 2006);
- Action Plan for Excellence – second progress report (January 2007).

#### THE O'DOWD REPORT

665. The starting point for the Action Plan was to revisit the recommendations and suggestions made by HMIC in its 2000 report.

666. In order to give an informed and impartial assessment of the discharge of the various recommendations and suggestions made by HMIC in its inspection of the SCRO Fingerprint Bureau in 2000, Sir David O'Dowd, former HM Chief Inspector of Constabulary for England and Wales, was asked to re-visit HMIC's 25 recommendations and 20 suggestions and to provide a current assessment of the position, given the passage of time and the opportunity that the publication of the Action Plan for Excellence presented to evaluate the changes already introduced in the Scottish Fingerprint Service.<sup>418</sup> The stated intention was that this would inform a baseline assessment of the SFS, including an examination of current practice.<sup>419</sup>

667. On 6 September 2006, during his second appearance before the Committee, David Mulhern stated that Sir David had completed his report. The Committee requested a copy of the report in order to inform its scrutiny of the Action Plan. David Mulhern provided the report to the Committee under cover of a letter which sought to set the findings in context.<sup>420</sup>

668. Sir David prepared his report largely by means of a paper review of the HMIC reports, considering progress against the recommendations and suggestions contained in the Primary Inspection of the SCRO Fingerprint Bureau in 2000. Sir David also visited HMIC and SCRO on 20 March 2006, prior to publication of the Action Plan, and held discussions with Ewan Innes, Head of the SFS, and Ian Todd, Deputy Director of SCRO, in order to better inform his review.<sup>421</sup>

669. Sir David considered each of the 25 recommendations and 20 suggestions made by HMIC in its report in 2000 in order to validate their subsequent discharge. Given the limited time available to complete the report, the terms of reference agreed between David Mulhern and Sir David involved consideration of the evidence presented by SCRO to HMIC at each review inspection but did not extend to validating actual implementation.<sup>422</sup>

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<sup>418</sup> SFS Action Plan for Excellence, Action Point 1

<sup>419</sup> SFS Action Plan for Excellence, Action Point 2

<sup>420</sup> Correspondence from David Mulhern, 26 October 2006

<sup>421</sup> Report by Sir David O'Dowd, March 2006, page 2

<sup>422</sup> Report by Sir David O'Dowd, March 2006, page 7

670. Sir David noted in his report that following his analysis, a “second stage review team” would consider specific issues in greater detail. In his covering letter to the Committee, David Mulhern explained that Sir David’s conclusions were feeding into a baseline assessment of the fingerprint service. He expressed confidence that the issues raised were either being specifically addressed in the Action Plan or were being considered more widely by SFS management.<sup>423</sup>

671. Sir David highlighted a range of weaknesses in a number of areas. The Committee has chosen to highlight those which it considers to be the most significant:

- Structure, leadership and management of fingerprint services in Scotland
- Human resources
- Procedures
- Quality Assurance

### **Structure, leadership and management of fingerprint services in Scotland**

672. Sir David considered the structure and leadership of the SFS in connection with the HMIC recommendation that a centralised model for a national fingerprint service be considered.<sup>424</sup> He noted that HMIC had discharged the recommendation following the third year review inspection in 2003. However, Sir David also noted the findings of the HMIC primary inspection in 2004 which had clearly highlighted problems of integration.<sup>425</sup> He stated—

“It was clear to me during this review that corporate identity and integration was far from satisfactory. There was not always clear evidence of commonality of purpose within and between bureaux and there is currently the potential for it to become dysfunctional.”

673. Sir David suggested that “strong and effective leadership was required to address the integration issues which presently exist within and between the four SFS bureaux.”<sup>426</sup> Although he considered that the new governance arrangements which will be introduced from 1 April 2007 would assist this process he did not believe that “this alone would satisfactorily resolve these matters”.<sup>427</sup> Sir David concluded—

“Due to the issues identified and having regard to HMIC’s report of 2004, I believe further attention should be given to the way the bureaux are managed at this present time.”<sup>428</sup>

674. Sir David also questioned the discharge of an associated recommendation relating to the creation of a corporate identity for the SCRO Fingerprint Bureau.<sup>429</sup>

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<sup>423</sup> Correspondence from David Mulhern, 26 October 2006

<sup>424</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, recommendation 3

<sup>425</sup> HMIC Primary Inspection of SCRO 2004, paras 5.10 – 5.15 and recommendation 4

<sup>426</sup> Report by Sir David O’Dowd, March 2006, page 4

<sup>427</sup> Ibid

<sup>428</sup> Ibid

He suggested that HMIC had “been somewhat premature” when discharging the recommendation in 2003.<sup>430</sup>

675. Looking forward, Sir David questioned whether the forensic science service was ready for the impending merger with the fingerprint service. He counselled that the change processes during the merger would need careful planning and handling.<sup>431</sup>

676. HMIC also commented on these issues in its most recent review inspection report of SCRO, published in December 2006.<sup>432</sup> The report noted that while effort had been made to establish the corporate identity of SFS, “variations in working patterns (e.g. shift and on call arrangements) and conditions of service (e.g. appraisal systems and sickness management policies) between the four fingerprint bureaux still exist.”<sup>433</sup>

677. HMIC also acknowledged in December 2006 that the progress made in implementing the Action Plan had contributed towards the corporate branding of the service in particular. However, HMIC concluded that “considerable work is still to be done in terms of conditions of service and working patterns, before a truly integrated Scottish Fingerprint Service can be considered a reality.”<sup>434</sup> HMIC confirmed that it would revisit this area at the next inspection.

**678. The Committee questions the discharge in 2003 of the HMIC recommendation that a centralised model for a national fingerprint service be considered. Although practical considerations had resulted in the establishment of the current four bureaux model, HMIC failed to carry out an assessment of whether this model would deliver an efficient and effective fingerprint service for Scotland. Only one year later, in 2004, HMIC (now led by a new HM Chief Inspector of Constabulary, Andrew Brown) found that there were significant integration issues in the SFS.**

**679. The Committee is most concerned at the extent of the integration difficulties identified by Sir David O’Dowd and in particular Sir David’s comment that there is the potential for the service to become “dysfunctional”. This appears to be damning criticism of how the SFS has been managed in the years in which it has been in existence.**

## **Human Resources**

680. In the HMIC report in 2000, it was recommended that data be secured to inform management of sickness absence levels, to monitor trends, set targets and manage sickness absence in the SCRO Fingerprint Bureau. HMIC also recommended that a strategy be introduced to offer support for the identification and prevention of stress-related illness among staff. The first recommendation was discharged by HMIC in 2003, while the second was discharged in 2004.

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<sup>429</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, recommendation 22

<sup>430</sup> Report by Sir David O’Dowd, March 2006, page 10

<sup>431</sup> Ibid

<sup>432</sup> HMIC Review of SCRO Primary Inspection 2004, December 2006

<sup>433</sup> HMIC Review of SCRO Primary Inspection 2004, December 2006, para 3.4.3

<sup>434</sup> Ibid

681. Sir David reviewed the current situation within SFS. He found that in the smaller bureaux in Aberdeen, Dundee and Edinburgh, there was no clear standardisation of data collection and analysis although he accepted that this was being addressed. Sir David also noted that at the time of his review, the sickness absence rate in Glasgow was a “worrying 12.24% with some 16 staff sick and seven of those being stress related.” He commented—

“There is no doubt that since HMIC’s last visit there has been a deterioration of sickness management.....In light of recent events I question how effectively these issues are being dealt with within the Glasgow office and suggest that there is a pressing need for management intervention to develop an effective action plan accordingly.

682. In relation to the strategy to offer support for the identification and prevention of stress-related illness, Sir David noted that, at the time of the HMIC review inspection in 2003, SCRO had adopted Strathclyde Police’s stress awareness policy and staff had access to the services of Strathclyde Police’s occupational health and welfare service. He noted that the HMIC report of 2004 praised the progress being made in working conditions throughout the SFS and stated that all staff in Glasgow had access to a free, independent employee assistance programme. Sickness levels at that time had been reduced and the recommendation from 2000 was discharged.

683. Sir David concluded that in light of recent findings further examination of these issues was necessary. The Committee notes Sir David’s findings. Issues affecting the morale, health and well-being of SFS staff are considered further at paragraph 704 to 719 below.

## **Procedures**

684. In its report of the Primary Inspection of the SCRO Fingerprint Bureau in 2000, HMIC had recommended the production of a national guidance manual on fingerprint standards and procedures.<sup>435</sup> In its third year review report in 2003, HMIC had said that the National Procedures Manual, which had been produced by that time, should be independently validated. Sir David noted the production of the SFS National Procedures Manual, the separate Quality Assurance Manual and the achievement of ISO accreditation for the SFS as a whole. He reported that the National Procedures Manual had been independently validated by the UK National Fingerprint Board. Sir David considered that since this manual had now been validated and ISO accreditation had been achieved, this recommendation could be fully discharged.<sup>436</sup>

685. In 2000, HMIC had also recommended that the SCRO Fingerprint Bureau introduce systems to increase the independence of the identification/verification process. Sir David commented that this was one of the “most crucial issues” in the HMIC report for providing public reassurance in the process. Sir David noted that by the time of the HMIC Primary Inspection in 2004, an anonymous system of verification had been introduced in Glasgow with a separate checking team for

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<sup>435</sup> HMIC Primary Inspection 2000 – SCRO Fingerprint Bureau, recommendation 12

<sup>436</sup> Report by Sir David O’Dowd, March 2006, page 7

second verifications. This model had been inspired by a similar system operated by Greater Manchester Police. However, Sir David noted that in the smaller bureaux in Scotland (with fewer staff) it had not been possible to implement an anonymous system for verification. Nonetheless, HMIC had discharged the recommendation.<sup>437</sup>

686. Sir David commented—

“Whilst a great deal of work had been done to significantly improve the identification/verification systems there was still no common standard in operation yet the [HMIC] recommendation was fully discharged.”<sup>438</sup>

687. Sir David noted that in the Dundee and Edinburgh Bureaux the initial verification [a process referred to by Sir David as “second review”] is anonymous but Aberdeen had not so far accepted this change and continued to operate a non-anonymous process. Sir David believed that this situation could not be sustained from a public or professional perspective. He concluded that the original HMIC recommendation “could not be fully discharged at this time.”<sup>439</sup>

688. In his letter accompanying Sir David O’Dowd’s report, David Mulhern explained that an external fingerprint expert was now working on a review of processes and procedures, with particular regard to the verification processes applied by the SFS.

689. In the second progress report on the Action Plan, David Mulhern set out details of the action which had been taken in response to Sir David O’Dowd’s finding.

690. A forensic consultant had carried out scoping visits to all four fingerprint bureaux and produced a study highlighting areas for further investigation. Further work was then commissioned covering the verification process, second checking of ‘negative’ marks, standardised case documentation and work sharing between bureaux. A number of proposals for improvement were considered at a meeting involving some of the panel of experts on 11 and 12 December 2006. At this meeting it was agreed that a cross-bureaux group should be set up to bring forward proposals to standardise appropriate documentation and processes across the SFS by 31 January 2007.<sup>440</sup> The progress report stated—

“Despite the current so called ‘blind’ [anonymous] verification process arising from an original HMIC recommendation in 2000, the case to develop a more open and transparent verification process set out by the consultant was compelling. However, there is a need for further consideration of potential options and consultation with staff and other stakeholders before a new model can be fully assessed.”<sup>441</sup>

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<sup>437</sup> Report by Sir David O’Dowd, March 2006, page 11

<sup>438</sup> Ibid

<sup>439</sup> Ibid

<sup>440</sup> Action Plan for Excellence – Second progress report (January 2007)

<sup>441</sup> Ibid; Action Point 2



691. **The Committee shares Sir David O’Dowd’s concerns that there is still no common standard for fingerprint identification and verification in operation across the SFS. The Committee is particularly concerned that in 2003 HMIC considered that its recommendation to increase independence in the process could be discharged while simultaneously stating that the SFS was still working towards a solution.**

### **Quality assurance**

692. In relation to the performance of the quality assurance function within the SCRO Fingerprint Bureau, HMIC had recommended in 2000 that the joint quality assurance and training officer roles should be separated. Sir David noted in relation to the current structure of the SFS that the roles had only been separated in Glasgow where a quality assurance manager, training manager and training co-ordinator are based. However, in each of the three smaller bureaux, the training and quality assurance roles are still performed by one person. Sir David acknowledged that, in the Review Inspection in 2003, HMIC had accepted this position following the decision that had been taken to rationalise fingerprint services into a four bureaux model. HMIC had commented at the time that “given the staffing levels at the bureaux outwith Glasgow it is acknowledged that separating the role of Quality Assurance and Training is not practical.”<sup>442</sup> It was on this basis that HMIC discharged the recommendation.

693. Commenting on more recent developments, Sir David stated that the Head of SFS had expressed the intention to expand the Glasgow team to perform a generic quality assurance role for all four bureaux whereupon the three staff presently performing a dual role would become full time trainers in their respective bureaux. However, Sir David noted that this plan was presently aspirational and would require funding for establishment. Sir David concluded that once established, “this recommendation will be truly discharged.”<sup>443</sup>

694. In his letter to the Committee, David Mulhern confirmed that given Sir David’s comment, management was looking again at this issue “in the light of changes to the quality regimes that may be required when SFS merge with the Forensic Science Service.”<sup>444</sup>

695. **The Committee has serious concerns about the effectiveness of the quality assurance systems of the SFS, particularly given the fact that the training and quality assurance officer roles have yet to be separated in the three smaller bureaux. The Committee considers that SCRO and SFS management failed to treat this HMIC recommendation from 2000 with the degree of importance it clearly deserved.**

696. **The Committee is also very concerned that in 2003 HMIC saw fit to discharge this recommendation when this had not yet been achieved in all SFS bureaux. If there were practical difficulties in implementing the HMIC recommendation, the Committee considers that rather than simply**

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<sup>442</sup> HMIC Third Year Review of SCRO 2000 (2003)

<sup>443</sup> Report by Sir David O’Dowd, March 2006, page 3

<sup>444</sup> Correspondence from David Mulhern, 26 October 2006





























































































































































































