

**REPORT OF THE SCRUTINY OF  
SCRO FINGERPRINT BUREAU  
AND STRUCTURE OF  
THE SCOTTISH FINGERPRINT SERVICE**

**ACPOS Presidential Review Group  
Change Management Review Team  
October 2000**

Selected Extracts:

An overview of information and of important issues arising from the  
HMCI's Report

## **1 EXECUTIVE SUMMARY**

1.1 As a result of public debate, both within the media and the world of fingerprint experts, following the trial of HMA v McKie and the subsequent acquittal of Shirley McKie on a charge of perjury, Her Majesty's Chief Inspector of Constabulary (HMCIC) was invited by the Scottish Criminal Record Office (SCRO) Executive Committee to re-visit the disputed fingerprint evidence provided by the SCRO Fingerprint Bureau in that case. In accepting this invitation, Her Majesty's Inspectorate of Constabulary (HMIC) brought forward its planned inspection of SCRO to the spring of 2000.

1.2 Following an announcement of HMIC's emerging findings in June 2000, the Association of Chief Police Officers in Scotland (ACPOS) established a Presidential Review Group (APRG) to co-ordinate the Scottish Police Service's response. HMCIC had concluded that the disputed fingerprint was not made by Shirley McKie and that the SCRO Fingerprint Bureau was not fully efficient and effective.

1.3 Part of ACPOS's response was the creation of a Change Management Review Team (CMRT) to undertake a 90-day scrutiny of the SCRO Fingerprint Bureau. It is acknowledged by the CMRT that a short review cannot hope to address all aspects of the working of the fingerprint service in Scotland or the SCRO Fingerprint Bureau. However, its report seeks to provide clarity in assisting the SCRO Executive Committee to determine the way forward in the light of HMIC's Inspection Report.

1.4 The report builds on earlier research conducted by ACPOS, and with a clear acknowledgement of the circumstances surrounding the fingerprint evidence in the Shirley McKie case, responds to the recommendations and suggestions made by HMIC.

1.5 Many of the issues raised by HMIC relate to matters which were already being considered by SCRO and the wider fingerprint service in Scotland, and the CMRT is able to respond positively to each of the recommendations and suggestions. The response included in this report is based on wide consultation within SCRO and beyond and on discussion among the 8 Force Standard Working Group (8FSG), a forum involving senior representatives of each fingerprint bureau in Scotland, which has been reconstituted by the CMRT to enable swift progress in responding to those recommendations which have a wider application than the SCRO Fingerprint Bureau.

1.6 However, many of HMIC's recommendations and suggestions refer to key strategic issues which can only be addressed outwith SCRO and its management team. These relate to oversight arrangements, restructuring of Common Police Services, increased resourcing and the introduction of a non-numeric standard of fingerprint evidence.

1.7 Consideration of the application of a non-numeric standard has been developed within Scotland, but without the wide-ranging and inclusive approach adopted in England and Wales. Even there, introduction has been postponed to 2001 and the CMRT proposes a strong project based approach to its introduction in Scotland, benefiting from the experience gained south of the border.

1.8 At the heart of this review, however, is the serious understaffing of the SCRO Fingerprint Bureau, a situation which was triggered, in recent years, as a result of the introduction of new technology (Livescan) which eased the process of capturing fingerprints of persons in custody, but which has generated significant extra work in providing a new service within the Bureau, for which it was ill-resourced. The presence of a competitive and somewhat distorted market for fingerprint experts has made recruitment and retention of the required staffing levels difficult to achieve and, sadly, at the time of this review the situation is critical. Irrespective of the SCRO Executive Committee's response to this report, the issue of recruitment of fingerprint experts to the SCRO Fingerprint Bureau must receive priority attention.

1.9 Options for the future structure of a Scottish fingerprint service were provided by consultants in 1999. While none of these have been progressed by the SCRO Executive Committee, HMIC returns to this issue, providing three generic options for consideration.

1.10 The CMRT has carried out a scoping study to estimate the resources required to provide a full fingerprint service in Scotland. It concludes that a centralised arrangement for a fingerprint service is needed and sees merit in committing to a single bureau at Pacific Quay, Glasgow, as the sole point of delivery for the fingerprint service in Scotland. It recognises, however, that this can only be achieved with the full commitment of the SCRO Executive Committee and significant resources and effort. The ability of such a structure to retain the fingerprint experts currently working in Scottish bureaux, in a competitive market, the ability of fingerprint bureaux to independently prioritise urgent work, the ability of fingerprint experts to attend court across Scotland from a central base and the administrative arrangements associated with centralisation are clearly matters which would have to receive close attention. In particular, the limited availability of fingerprint experts is a major consideration which could prove difficult to resolve.

1.11 However, the potential benefits of defined control, efficient management of resources and the effective application of fingerprint experts offer long-term advantages.

1.12 With the experience of an erroneous fingerprint identification in the Shirley McKie case, centralisation promises further scope to apply rigorous quality assurance standards and a unique opportunity to support the principle of independence within the identification and verification process, ensuring that integrity is at the forefront of any considerations applying to fingerprint evidence.

1.13 Against a backdrop of the unsatisfactory current arrangements for Common Police Services, it would not be possible to achieve this change. The convenient arrangement which sees the employment of SCRO staff by Strathclyde Joint Police Board impedes the ability of SCRO to manage its business effectively. This requires to be addressed by the Scottish Executive providing a proper legislative basis for Common Police Services. Recent comments by the Justice Minister are helpful in that respect. Only when that is achieved, however, can there be any real expectation of significant improvement based on structure. In the meantime it would be necessary to seek agreement with Strathclyde Joint Police Board as to the basis in which the current arrangement can be made to work effectively.

1.14 The CMRT provides an outline strategy for moving on a phased basis towards a centralised structure under proper Common Police Service arrangements and identifies the associated risks. Adoption of this costed model would carry with it a need for commitment, openness, consistency and firm management. If, on balance, the risks are deemed to be inappropriate by the SCRO Executive Committee, the CMRT provides an analysis of all options including a centralised management model with devolved service delivery.

1.15 While this latter approach is a compromise it provides a pragmatic approach to fingerprint expert recruitment, requiring as it does, less movement of existing fingerprint experts in Scotland to achieve it.

1.16 The CMRT believes that there is scope for a centralised management structure to develop in time to provide a wider identification service for Scotland, including the consideration of an all-inclusive service involving forensic science.

1.17 Such an approach would allow the Scottish Police Service to work towards the creation of an organisation founded on the maintenance of unimpeachable standards and the integrity of evidence at the centre of the criminal justice system in Scotland.

## **2 PRINCIPLES OF INDEPENDENCE AND INTEGRITY**

2.1 Fingerprint identification provides conclusive evidence connecting suspects to a scene of crime. The uniqueness of a fingerprint is supported by many millions of comparisons across the world each year. Although fingerprint evidence is often a key element in the prosecution of a case, not least those tried under solemn procedure, so compelling are the conclusions drawn from fingerprint examinations that they are seldom challenged.

2.2 The founding principle of fingerprint examination is not the identification of individuals, but the provision of reliable factual conclusions drawn from comparison of fingerprint impressions and marks. The core task of the fingerprint expert, then, is to translate raw fingerprint data into a factual context. Given the weight attached to fingerprint evidence and the gravity of cases to which it so often applies, it is essential that the work of the expert is free from bias or influence. If such a principle is accepted then a minimum requirement is to ensure that the ingredients of the process are known and controlled and that potential sources of influence are, as far as is possible, removed.

2.3 The combination of a scientific approach, detailed procedures and unimpeachable standards are, therefore, of paramount importance in protecting the integrity and independence of fingerprint evidence and in sustaining the vital role which it has to play in the criminal justice system.

2.4 These considerations have been used as guiding elements in the preparation of this report.

### **3. INTRODUCTION TO REPORT**

#### **3.1 BACKGROUND**

3.1.1 On 14 May 1999, the trial of HMA v Shirley McKie concluded with a finding of her being 'Not Guilty' of the charge of perjury. The case proceeded on the basis that Miss McKie had allegedly lied to the High Court of Justiciary in the earlier trial of David Asbury for the murder of Marion Ross to the effect that she had not entered the murder locus, which was the deceased's home.

3.1.2 The crucial element of evidence was a latent fingerprint impression, which was recovered from within the deceased's house. Examination of this print by experts of the Fingerprint Bureau of the Scottish Criminal Record Office (SCRO) concluded that it matched that of Shirley McKie, then a Detective Constable of Strathclyde Police involved in the investigation and who had been listed among those submitted for fingerprint elimination purposes to SCRO. Miss McKie consistently denied she had been in the house and therefore the fingerprint could not have been hers, and she articulated this stance in her testimony in the Asbury trial.

3.1.3 In the course of her own trial, her Counsel cited two independent fingerprint experts from America who gave evidence in opposition to the SCRO experts. They concluded that the fingerprint recovered from the house of Marion Ross was not that of Shirley McKie.

3.1.4 Since the verdict on 14 May 1999, there has been considerable debate, both in the fingerprint world and generally through the media, as to the reliability of the fingerprint identification emanating from SCRO. The issue has been raised in the Scottish Parliament and in correspondence to Crown Office, the Justice Division of the Scottish Executive and Her Majesty's Inspectorate of Constabulary (HMIC).

3.1.5 In particular, the BBC documentary programme, 'Frontline Scotland', broadcast on 18 January 2000, gave significant public profile to the alleged misidentification of Shirley McKie's fingerprint by SCRO

3.1.6 On 7 February 2000, the Association of Chief Police Officers in Scotland (ACPOS) made the decision that it was in the best interests of the criminal justice system and the professional standing of SCRO, that an independent assessment be made of the fingerprint evidence prepared by SCRO and presented by the Crown in the Shirley McKie case. Later that day, the Executive Committee of SCRO agreed to approach Her Majesty's Chief Inspector of Constabulary (HMCIC) to commission this work.

3.1.7 On 23 February 2000, Mr William Taylor, HMCIC, confirmed that HMIC would bring forward from its planned date of December 2000, the formal inspection of SCRO in respect of the Fingerprint Bureau. The inspection commenced in early March and was completed in May.

## **3.2 HMIC'S EMERGING FINDINGS**

3.2.1 On 21 June 2000, Mr Taylor held a briefing meeting with Office Bearers from ACPOS where he outlined his emerging findings. In particular, he advised that the disputed fingerprint had been examined, at his request, by two independent European experts who had also concluded that the mark was definitely not made by Shirley McKie. Due to the significant public interest in this finding, Mr Taylor intimated that it was his intention to make this information public, together with his finding that he would be unable to endorse the SCRO Fingerprint Bureau as being efficient and effective.

## **3.3 THE PRESIDENTIAL REVIEW GROUP**

3.3.1 In light of this information ACPOS established a Presidential Review Group (APRG, however referred to by HMIC as APRT) to co-ordinate the Scottish Police Service's response to HMIC's findings. In turn, two teams were formed to give a detailed examination of the issues emerging from HMIC's advance statement. Mr Kenny McInnes, Deputy Chief Constable, Fife Constabulary, was appointed to lead a Change Management Review Team (CMRT) in undertaking a 90 day scrutiny of the SCRO Fingerprint Bureau and this is the report compiled by that team. A brief resume of the work being carried out by the other team, led by Mr Jim Mackay, Deputy Chief Constable, Tayside Police, is provided at Chapter 11.6.

## **4 BACKGROUND TO FINGERPRINT SERVICES IN SCOTLAND**

4.5 Today, SCRO continues to act as a central repository for fingerprints in Scotland, maintaining a national fingerprint collection of some 350,000 records. It provides a 24 hour Livescan Tenprints service to all forces; undertakes all casework for Strathclyde Police and Dumfries and Galloway Constabulary and provides a full backup service to the sole fingerprint expert at Northern Constabulary.

4.6 The remaining forces – Central Scotland Police, Fife Constabulary, Tayside Police, Grampian Police and Lothian and Borders Police – have each retained their own fingerprint bureau and are self sufficient, in terms of casework, including the application of AFR through the distributed facilities.

## **5 SCRO FINGERPRINT BUREAU**

### **5.1 STATUS OF SCRO AS AN ORGANISATION**

5.1.1 SCRO is a Common Police Service in terms of The Common Police Services (Scotland) Order 1997. Such services are funded and managed jointly by the eight Scottish police forces and the Scottish Executive. In the case of SCRO, the Executive Committee, which comprises the eight Chief Constables, a senior representative of the Scottish Executive Justice Division and a representative of the Convention of Scottish Local Authorities (COSLA), fulfil this function. A representative of HMIC also attends in the role of assessor.

## **5.2 SPAN OF MANAGEMENT CONTROL WITHIN SCRO**

5.2.1 The management team of SCRO is led by the Director, currently a police officer of chief superintendent rank and the Deputy Director who is of superintendent rank. The current post holders are both on secondment from Strathclyde Police. The Fingerprint Bureau is led by a police officer of chief inspector rank, currently seconded from Lothian & Borders Police. The organisation as a whole comprises 18 police officers and 98 support staff. Of that total the Fingerprint Bureau accounts for 60% of the support staff and 22% of the police staff.

5.2.2 The Head of the Fingerprint Bureau is assisted by a Deputy, Quality Assurance Officer, Acting Training Officer and Principal Fingerprint Officer in managing this major unit of SCRO.

## **5.7 RELATIONSHIP WITH STRATHCLYDE POLICE**

5.7.1 The relationship with Strathclyde Police is historically a close one, and has its origins in the establishment of SCRO in the City of Glasgow Police Headquarters in 1960. Throughout periods of structural change, SCRO has remained housed within the headquarters of the City of Glasgow Police, and its successor, Strathclyde Police. The accommodation currently occupied by SCRO is leased from Strathclyde Joint Police Board.

5.7.2 Despite having its own budget and accountability mechanisms, SCRO does not have the legal capacity to be an employer. Consequently, the solution of convenience is for Strathclyde Joint Police Board to be the employer of the SCRO support staff with a charge of 4.4.% of the pay-bill being levied on SCRO as an administration charge for the use of Strathclyde Police's personnel and training services.

5.7.3 This relationship, while convenient, is not without its tensions, not least of these being the process which requires to be undertaken to recruit additional staff. SCRO may have made a case for and obtained approval for additional or changed posts from the Executive Committee responsible for the governance of SCRO. While it has secured funding from its own budget, recruitment, which is undertaken by Strathclyde Police, cannot commence until a suitable report on the application is submitted by Strathclyde Police for approval to the Joint Police Board. While it is clearly recognised that the processes demanded by The Board are for its own determination, the time taken for this additional layer of scrutiny can be frustrating to an organisation trying to respond to business pressures in an extremely competitive employment market and impedes the effective and efficient management of the organisation.

5.7.6 Another factor which generates a perception of closeness with Strathclyde Police is the appointment of the Director (previously termed Head of SCRO) and his deputy, posts which have historically always been filled by Strathclyde Police officers. In addition, until recently the Director made regular reports to the Assistant Chief Constable responsible for crime within Strathclyde Police. This was an historical link, which had its basis in the management oversight arrangements of SCRO. Its basis is questioned in HMIC's report and the matter has already been addressed by the Director, who advises the CMRT that this arrangement has been discontinued.

5.7.7 The historical links with Strathclyde Police are natural, as are the convenient arrangements put in place to accommodate SCRO. However, the perception this creates can be harmful to the professional integrity, standing and development of an organisation, particularly one which is trying to move forward from a difficult period in its history. As such, the CMRT believes there is a clear need to put in place a different structure that is more visible, independent and self-supporting.

## **5.8 PACIFIC QUAY**

5.8.3 New premises have now been leased in a major development site at Pacific Quay, Glasgow, which have been developed to suit the organisation's needs. The building, which will be ready for occupation in early October, will give SCRO staff a significantly improved working environment and will be a major step in demonstrating independence.

## **5.9 CURRENT ISSUES IN THE BUREAU**

**5.9.1 Staffing** - In the year 1995/6 a full compliment of 36 fingerprint experts was achieved, however, this has not been sustained, gradually falling from 34 in 1996/7 to the present level of 30.5 posts. Whilst the figure of 36 allowed for a normal level of abstractions, the lower number of 30.5 seriously impacted upon the resilience of the Bureau. Internal appointments and abstractions resulted in an effective operating level of 24.5 experts.

5.9.2 On 3 August 2000, the 4 SCRO fingerprint experts involved in the Shirley McKie case were precautionarily suspended by the Director following written direction from the President of ACPOS. This reduced the current working establishment to 20.5: some 43% below the level required to provide a full service. The suspended personnel were dedicated to mark examination work. Since then a fingerprint expert has been recruited by the Bureau raising the working level to 21.5

5.9.3 This combination of factors has seriously impacted upon the service delivery of SCRO, leading to a rising backlog which at 1 October stood at some 3600 cases, 500 from 1998, the remainder dating back to February 2000, the bulk of which relate to Strathclyde Police.

**5.9.4 Verification** - On 22 June 2000, following the announcement of HMIC's emerging findings, the Lord Advocate instructed that for all current and future cases where fingerprint evidence provided by SCRO is submitted to the Procurator 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 or, for those cases in the system, prior to trial.

5.9.5 In light of the Lord Advocate's instruction, a business continuity protocol was developed by the Director of SCRO in consultation with the Crown Office and the President of ACPOS.

5.9.6 As a short-term arrangement, fingerprint identifications made at SCRO were verified by independent experts from Central Scotland Police and Fife Constabulary. From 30 July 2000, this independent verification role has been carried out by two fingerprint experts from the Royal Ulster Constabulary and this will continue until Christmas 2000.

5.9.7 As of 1 October, 678 cases involving 2350 marks containing 3574 impressions have been independently verified. These include cases which were due to be heard at Court and also new identifications.

5.9.8 Other than in the related case of David Asbury, it is understood that no appeal challenging fingerprint evidence has been lodged with the Crown Office since the decision in the Shirley McKie case. Since 23 June 2000 no challenges have been made to SCRO fingerprint experts giving evidence in Court.

**5.9.9 Morale** - Staff morale has clearly been affected by these events and publication of HMIC's report. Ongoing developments will continue to attract media attention and public interest. However, staff gave a commitment to co-operate fully with the work of the APRG and the criminal investigation being undertaken by Mr Mackay. The consistent independent verification of fingerprint evidence to date, the imminent relocation of SCRO to Pacific Quay and the potential for a clear strategic direction for SCRO Fingerprint Bureau emerging from the current Review are all positive factors in maintaining motivation to continue to provide a professional service.

## **6 CURRENT FUNDING ARRANGEMENTS FOR FINGERPRINT SERVICES IN SCOTLAND**

6.1 Fingerprint services are funded in two distinct ways in Scotland. Those forces which operate their own force fingerprint bureau fund that service entirely from within their budgets. SCRO is a common police service and as such is funded by the Scottish Executive. However, like all Common Police Services, 50% of the budget is recovered from all Scottish police forces. The percentage paid by each force is calculated by a formula related to crime rate on the basis that the forces with the most crime will make most use of the services. The current proportion paid by each force is shown below.

## **7 REVIEWS OF SCRO**

### **7.1 INTRODUCTION**

7.1.1 Since 1996, and excluding the work of the CMRT, there have been four strategic and managerial reviews of SCRO. Whilst each, in turn, has had a particular focus, collectively they signify a long standing and well recognised drive towards fundamental reorganisation.

These earlier reviews have provided a valuable basis for the work of the CMRT and many facets of this report will, not unnaturally, reflect upon the findings there. This section aims to provide a brief overview of each of the earlier reviews as they impact upon this report.

7.2.1 In a paper presented to the (then) SCRO Development Standing Committee in 1996, the Head of SCRO raised concern over ‘impending difficulties’ within the Fingerprint Bureau at SCRO which ‘required urgent resolution to prevent a serious reduction to the quality of service provided by SCRO’. In response, the SFSWG was established under the lead of Mr Hamilton, Chief Constable, Fife Constabulary, to: ‘examine, among other things, the potential impact of AFR, Livescan and other technical developments on fingerprint services in Scotland and to make appropriate recommendations for the future’.

7.2.2 In an interim report, the SFSWG identified that the problems raised by SCRO were significant to the overall structure and management of fingerprint services in Scotland and suggested that minor adjustments to the existing system would be insufficient. The SFSWG then pursued a more strategic analysis considering the merits and demerits of four options; no change, growth at the centre, central control and devolved control.

7.2.3 In concluding, the SFSWG determined a proposal to implement a model of devolved control for the fingerprint service in Scotland. In addition, it recommended:

- development of a system of management information
- a move towards parity in terms of pay and conditions across Scotland
- 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.

### **7.3 LEISHMAN MANAGEMENT CONSULTING – STAGE 1 REVIEW**

7.3.1 In consequence of the SFSWG’s recommendations, an Implementation Group was established under the chair of Mr Hamilton and Leishman Management Consulting were engaged to assist in the development of an implementation strategy.

7.3.2 The principal objective agreed with the consultants was: ‘a defined and structured approach to the process of change ...(which) will focus on a level of devolution of control appropriate to the efficient, effective and economic delivery of fingerprint services (in Scotland)’.

7.3.3 In recognising a ‘staffing crisis’ within the SCRO Fingerprint Bureau, attributed largely to the advent of Livescan (Section 5.5.1), it was deemed necessary to adopt a staged approach to the consultancy. Stage 1 would examine present structure, work practices, staffing levels and grades within SCRO, consider the ability of the Bureau to meet workload requirements and make appropriate recommendations. Stage 2 would consider the longer and more strategic outlook to progression of the SFSWG review, in the context of an implementation plan.

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## **7.4 LEISHMAN MANAGEMENT CONSULTING – STAGE 2 REVIEW**

7.4.1 The objective of this stage was to:-

'specify objectives that the chosen option (for the fingerprint service in Scotland) should be able to deliver and in so doing further define a recommended option for change'.

7.4.2 This would include the development of recommendations and action plans to introduce systems and processes and establish a timetable for implementation.

7.4.3 In concluding, the consultants' report advised that 'to achieve best value will require a move to central management and delivery of fingerprint services in Scotland'. It promoted a more modern structure of management to 'enable the SCRO fingerprint service to respond to the needs of those it services', suggesting that the best alternative option (at that time) was the incorporation of all fingerprint services in Scotland within SCRO under a new Common Police Service management arrangement.

7.4.4 It was also ventured that if such a move was seen as 'a step too far' then, 'as a minimum, central management should be introduced (with distributed delivery)'.

## **7.5 STRATEGIC REVIEW OF SCRO**

7.5.1 In 1999 a further strategic review of SCRO was commissioned by the (then) SCRO Controlling Committee. The primary aim was to; 'examine the strategic direction and executive control of SCRO with a view to the next five years and the implementation of the Police Act 1997 - Part V; the implementation of the Scottish Criminal Justice Information System; and economy, efficiency and effectiveness'.

7.5.2 Although not directly focussed on the Fingerprint Bureau within SCRO, a number of the recommendations made are pertinent to the work of the CMRT, viz.:

- that the executive structure should be amended to a management committee which
- will facilitate more effective and efficient decision making

- that greater autonomy in the sphere of strategy, decision making and implementation be devolved from Controlling and Standing Committee level to the management of SCRO
- that consideration be given to SCRO within an enhanced Common Police Service model
- review the organisational structure to reflect the changing nature of demands placed on SCRO
- consider civilianising the role of Deputy Director of SCRO
- create a data quality/security manager and unit with a remit to verify the accuracy and quality of data held at SCRO.

## **7.6 THE 8 FORCE STANDARD WORKING GROUP (8FSG)**

7.6.1 As a consequence of the Leishman Stage 2 report, the 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. Mr Hamilton agreed to consult Forces, progress policies towards standardisation of procedures and develop protocols to be referred to as the ‘Eight Force Fingerprint Standards’.

7.6.2 The first meeting of the 8FSG was hosted by Mr Hamilton in November 1999. At that meeting it was agreed that a strategy, under which the concept of the ‘Eight Force Fingerprint Standards’ could be progressed, would be developed. Whilst such a strategy document was drafted, events surrounding the McKie case (Section 8) overtook progression of the draft document and the planned reconvention of the 8FSG.

7.6.3 Notwithstanding, following publication of the HMIC’s Primary Inspection Report on the SCRO Fingerprint Bureau in September 2000, the 8FSG was reconvened under the chair of Mr McInnes (Deputy Chief Constable, Fife and CMRT leader) on 26 September with a view to permanent re-establishment and a renewed drive towards the development of common and agreed standards across fingerprint bureaux in Scotland.

7.6.4 The focus of that meeting was the HMIC’s recommendations and suggestions (Chapters 13 and Appendix ‘A’), as they could be applied to all fingerprint bureaux in Scotland, and the development of ideas on how best those issues could be taken forward under the 8FSG.

## **7.7 IMPACT OF THE REVIEWS**

7.7.1 Clearly, even in the short summaries above, there were significant elements of commonality evident in the findings of each group. All have been conducted under the collective charge of Chief Officers, yet it is apparent that there has been only limited action resulting from each review.

## **8 THE ASBURY AND MCKIE CASES**

8.1 On 8 January, 1997, Marion Ross was found murdered within her home at 43 Irvine Road, Kilmarnock. A police enquiry commenced and included Shirley McKie, then a Detective Constable in Strathclyde Police, as part of the enquiry team. During the course of the investigation, fingerprint evidence was secured and submitted the SCRO Fingerprint Bureau for examination.

8.2 Amongst the conclusions made by the SCRO fingerprint experts, from the evidence submitted, were:

- an identification of Shirley McKie, from a mark found within the house of Mrs Ross
- an identification of David Asbury, from a mark found within the house of Mrs Ross
- an identification of Marion Ross, from a mark found on a tin within the house of David Asbury.

8.3 As a consequence of the police investigation, David Asbury was arrested for the murder of Marion Ross. He was subsequently convicted on 12 May 1997 and sentenced to life imprisonment.

8.4 During the trial of David Asbury, the issue of the SCRO fingerprint experts' identification of Shirley McKie was raised. In her testimony to the court, Shirley McKie maintained her consistently held stance that she had not entered the house of Marion Ross.

As a consequence, Shirley McKie was later charged with perjury and tried at the High Court in Glasgow. Clearly the crucial element of evidence in this case was the latent fingerprint impression which had been recovered from within the deceased's house and identified by the SCRO fingerprint experts as being that of Shirley McKie.

8.5 In the course of the trial, Shirley McKie's Counsel cited two independent fingerprint experts from America who gave evidence which opposed the conclusions made by the SCRO fingerprint experts. The American experts concluded that the fingerprint recovered from the house of Marion Ross was not that of Shirley McKie.

8.6 On 14 May 1999 the case of HMA v Shirley McKie concluded with Shirley McKie being found 'Not Guilty' to the charge of perjury.

8.7 On 22 June, following an independent assessment (Chapter 10) HMIC publicly confirmed that the mark found within the house of Marion Ross and identified by the fingerprint experts from SCRO as being that of Shirley McKie was not that of Shirley McKie.

8.8 On 22 August 2000 David Asbury was granted interim liberation by the Court of Criminal Appeal pending a full appeal hearing in respect of his conviction of the murder of Marion Ross. Included in the grounds of appeal is a contention of fingerprint evidence.

8.9 Other than in this related case of David Asbury, it is understood that no appeal challenging fingerprint evidence has been lodged with the Crown Office since the decision in the Shirley McKie case.

## **9 COMMENCEMENT OF HMIC PRIMARY INSPECTION OF SCRO FINGERPRINT BUREAU 2000**

9.1 On 7 February 2000, ACPOS Council made the decision that it was in the best interests of the criminal justice system, and the professional standing of SCRO, that an independent assessment be made of the fingerprint evidence prepared by SCRO and presented by the Crown in the Shirley McKie case. Later that day, the Executive Committee of SCRO agreed to approach HMCIC to commission this work.

9.2 On 23 February 2000, Mr William Taylor, HMCIC, in a letter to Mr Robertson, Chief Constable of Northern Constabulary and then Chairman SCRO Executive Committee, confirmed that HMIC would bring forward from its planned date of December 2000, the formal inspection of SCRO in respect of those aspects specifically raised by the Shirley McKie case.

9.3 The issues, which were to be reviewed, included the training, skills and quality assurance process of the Fingerprint Bureau, together with a close examination of the Shirley McKie case as an example of the processes as a whole. As with all formal HMIC reports, the results were to be published to demonstrate the public accountability of the inspection processes.

9.4 The inspection commenced in early March and was completed in May.

## **10 HMIC PRIMARY INSPECTION - EMERGING FINDINGS**

10.1 On 21 June 2000, Mr Taylor, HMCIC, held a briefing meeting with Office Bearers from ACPOS where he 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 two independent fingerprint experts, from The Netherlands and Norway. These experts had concluded that the mark found within the house of Marion Ross and earlier identified by SCRO fingerprint experts as being that of Shirley McKie had definitely not been made by Shirley McKie. In essence, the findings of these experts concurred with those of the American fingerprint experts who had acted on behalf of the defence during the trial of Shirley McKie for perjury. In addition, HMCIC said that his concerns regarding the functioning of the SCRO Fingerprint Bureau were such that he would be unable to endorse the organisation as being efficient and effective.

10.2 Accordingly, due to the significant public interest, Mr Taylor publicly announced his emerging findings, on 22 June, in advance of his formal report.

## **11 ACPOS PRESIDENTIAL REVIEW GROUP (APRG)**

### **11.1 REMIT**

11.1.1 In light of the HMCIC's 'emerging findings', ACPOS immediately established a Presidential Review Group to co-ordinate the Scottish Police Service's response to HMIC's findings. The Group comprises:

- Mr William Rae, Chief Constable, Dumfries & Galloway Constabulary and President of ACPOS
- Mr William Robertson, Chief Constable, Northern Constabulary and immediate past President of ACPOS
- Sir Roy Cameron, Chief Constable, Lothian & Borders Police and Honorary Secretary of ACPOS
- Mr John Hamilton, Chief Constable, Fife Constabulary.11.1.2

The agreed remit of the Review Group is:

1. To review:
  - personnel, training and competency
  - structure
  - resources
  - procedures, processes
  - quality control
2. to accelerate the ongoing and future development of SCRO, in the light of HMCIC's Primary Inspection, the Leishman Reports, the SCRO Strategic Review and any recommendations arising from the Policing Review.
3. To assess the findings of fingerprint experts engaged by HMCIC in his primary inspection in the light of their conclusion that the latent mark was not made by Shirley McKie.
4. To report to the SCRO Executive Committee on an implementation and action plan in relation to item 1 above and any management, staffing, resources, performance and quality control issues arising from item 2 above including any issues regarding standards of performance.

5. To liaise with the Crown Office, Scottish Executive, HMCIC, recognised experts and relevant consultants in taking forward substantive issues in which there is a shared interest.
6. To make available to HMCIC for public and ministerial information, through the SCRO Executive Committee the result and prepared response to HMCIC's final report, recommendations and suggestions.

11.1.3 Two teams were formed to give a detailed examination of the issues emerging from HMCIC's advance statement.

11.1.4 Mr Jim Mackay, Deputy Chief Constable of Tayside Police, was appointed to lead the investigation of the circumstances surrounding the fingerprint identification, while Mr Kenny McInnes, Deputy Chief Constable, Fife Constabulary, was appointed to lead the CMRT in undertaking a 90-day scrutiny of SCRO.

11.1.5 ACPOS Council and the Executive Committee of SCRO ratified the establishment of the APRG and the teams at meetings held on 3 July 2000. The obligation placed on each team, to prepare initial reports to allow the APRG to produce an interim report to coincide with the publication of the full inspection report of HMCIC, was met on 14 September 2000.

## **11.2 THE MACKAY INQUIRY REMIT**

11.2.1 The remit given to Mr Mackay's team is:-

'To conduct an investigation into all of the circumstances which resulted in the identifications by the Fingerprint Bureau of SCRO in the murder of Marion Ross in Kilmarnock in January 1997. In particular, the difference in opinions of SCRO fingerprint experts and the experts recently consulted by Mr William Taylor, HMCIC for Scotland.'

11.2.2 A full enquiry process, incorporating HOLMES 2 (Home Office Large Major Enquiry System) computer, was established on Monday, 3 July 2000 at Auchterarder Police Station and follows a three phase plan:

1. collation of all relevant documentation, productions and statements;
2. analysis of all available material and information and
3. production of a full report.

11.2.3 On 6 July 2000, The Lord Advocate instructed Mr William Gilchrist, Regional Procurator Fiscal for North Strathclyde, to enquire into allegations of criminal conduct made by Shirley McKie's father to the Minister for Justice. Mr Gilchrist is being assisted in this enquiry by Mr Mackay.

11.2.4 The early part of this enquiry centred on the fingerprint evidence associated with the McKie case. However, in mid September, and following an independent assessment of other fingerprint evidence associated with the Asbury case, the Crown re-emphasised the importance of considering all fingerprint evidence associated with both cases.

11.2.5 As this is an active criminal enquiry, it would be inappropriate to offer further detail at this stage. It is anticipated, however, that a full report will be submitted to Mr Gilchrist during October, 2000.

### **11.3 THE CHANGE MANAGEMENT REVIEW TEAM REMIT (CMRT)**

11.3.1 The original remit given to the team led by Mr McInnes is:

‘To undertake a 90 day scrutiny of the SCRO Fingerprint Bureau which will inform the ACPOS Presidential Review Group established to undertake a wide ranging review of SCRO.’

11.3.2 This broad remit was subsequently developed in detail in consultation with Mr Rae and covers all elements of the APRG remit not covered by Mr Mackay’s remit. It takes forward, following liaison with Mr Mackay’s inquiry, Crown Office, the Scottish Executive, recognised experts and relevant consultants, the findings of the SFSWG, Leishman Management Consulting, the SCRO Strategic Review Team (all Chapter 7) and the Steering Group set up to review the Police and Fire Service structure.

11.3.3 The CMRT aimed to provide 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 and include references to management, staffing, resources, standards of performance and quality control issues.

11.3.4 In particular, the CMRT undertook to liaise with HMCIC to familiarise itself with the emerging findings from HMIC’s Inspection of the SCRO Fingerprint Bureau and provide an interim report to the APRG coinciding with the publication of HMIC’s final report. The CMRT’s final report was to include a detailed response to HMIC’s recommendations and suggestions.

11.3.5 The Interim Report of the APRG, published on 14 September, outlines the initial phase of the CMRT’s work. The remainder of this report, however, concentrates on the fuller research and findings of the CMRT, giving consideration to HMIC’s recommendations and suggestions and drawing together the detail necessary to consider the future options for fingerprint services in Scotland.

11.3.6 Membership of the CMRT included:

- Detective Superintendent Richard Munro, Fife Constabulary
- Chief Inspector Andrew Laing, Lothian & Borders Police and
- Chief Inspector Alistair Finlay, Strathclyde Police.

11.3.7 In recognition of the need to maintain momentum, and in view of the limited resources available to the SCRO Fingerprint Bureau at this time, agreement has been reached on the establishment of a Project Management Team. That Team will assist in taking forward the necessary actions identified in this report under the direction of a Project Board.

## **12 CHANGE MANAGEMENT REVIEW TEAM APPROACH**

12.1 At an early stage the CMRT liaised with HMIC and quickly developed a clear understanding of the emerging findings. This information was used to prioritise the time available and ensure that the CMRT could provide appropriate guidance to the APRG in responding fully and positively to HMIC's recommendations and suggestions.

12.2 HMIC's findings provided a very clear focus for the CMRT and it was through this early liaison that it was able to establish a basis, and a framework, for subsequent research. In broad terms, the issues highlighted by HMIC could be sub-divided as relating to internal management matters, often with a wider application to all fingerprint bureaux, and strategic management considerations looking at the long-term implications for the fingerprint service in Scotland.

12.3 Regarding 'Internal Management', liaison with HMIC led the CMRT to consider the following issues which appear as focus areas within HMIC's Inspection Report:  
structure within the bureau

- corporate identity and independence
- procedural guidelines
- administrative support
- supervision
- training
- competency testing
- quality assurance
- standards
- audit
- openness and accountability
- conflict resolution.

12.4 At the 'Strategic Management' level, the issues of oversight arrangements, restructuring of Common Police Services, increased resourcing and the introduction of the nonnumeric standard are cited by HMIC as matters where change is required but which are beyond the direct responsibility of SCRO Fingerprint Bureau management.

12.5 The detail of each of these topics, as they relate to HMIC's published Primary Inspection Report on the SCRO Fingerprint Bureau, are explored fully in Chapters 13 and 14 of this report.

12.6 To supplement the work of HMIC, the CMRT made full use of the abundance of research material available to it. This included earlier reports by the Scottish Fingerprint Service Working Group (1998), Leishman Management Consulting (1998 and 1999), the SCRO Strategic Review Team (1999) (all Chapter 7) and the submission by ACPOS to the review of the Police and Fire Service structure (2000) referred to in the CMRT's remit.

12.7 Visits to the National Training Centre for Scientific Support to Crime Investigation (NTC) at Durham and the Greater Manchester Police Fingerprint Bureau allowed the CMRT to consult with experts and extend their knowledge and understanding of current issues within the 'fingerprint world'.

12.8 Members of the CMRT carried out extensive consultation within the SCRO Fingerprint Bureau, including discussions with the Director and Deputy Director of SCRO and the Head of the Fingerprint Bureau there. The CMRT consulted with staff from all other fingerprint bureaux in Scotland and the Identification Bureaux of Strathclyde Police and Dumfries and Galloway Constabulary. The consultation process included meetings with Chief Constables and senior representatives of the Justice Department of the Scottish Executive and extended to include fingerprint experts from other countries and liaison with Crown Office representatives on matters of evidence, including those referred to in HMIC's Inspection Report.

### **13. HMIC REPORT - INTERNAL MANAGEMENT ISSUES**

13.3.2 Before moving to a consideration of the wider strategic issues, it is worth developing here the links between SCRO and Strathclyde Police. This is referred to at Section 5.5 and HMIC uses the example of the job description of the Director of SCRO (Suggestion 2) to highlight the need for a clear separation between the work of SCRO as a common police service, funded by all forces, and the management direction of Strathclyde Police. The links are understandably strong with physical co-location, the predominance of Strathclyde Police case work within the Fingerprint Bureau, the arrangements for the employment of SCRO support staff by Strathclyde Joint Police Board and the history of appointment of Strathclyde Police officers to head posts within SCRO.

13.3.5 The move to Pacific Quay in October 2000 will provide physical separation and presents an opportunity for SCRO to be re-marketed as the independent organisation it must be.

**13.4.7 The Identification Process** - The prime objective of a fingerprint bureau is to identify individuals through their fingerprints. Given that a misidentification was the catalyst to this Review, and HMIC's recommendation that **practices be reviewed with a view to introducing a system which increases the independence within the identification/verification process** (Recommendation 23), considerable time has been spent examining the current process, those processes used elsewhere both in the UK and Europe, and setting those in the context of independence and integrity outlined in Chapter 2. What follows in this section is an analysis of that research and recommendations for revising this central and crucial process. At Section 13.12 the CMRT examine the separate process of conflict resolution when experts do not agree on findings.

13.4.8 The procedures currently adopted by the SCRO Fingerprint Bureau in the identification of marks are similar to that of other UK bureaux. The fingerprint officer who is to conduct the examination of a mark receives a case envelope, which contains a photograph of the mark or marks to be examined, and details of any suspects or persons to be eliminated. A form (Form 13B), submitted by the scenes of crime officer (SOCO) who collected the marks, is attached to the front of the envelope giving details of the scene examination and any suspects or elimination prints. An initial assessment is made of the marks to establish if they are of sufficient quality to individualise. If they are not, this is recorded and no further action is taken with them.

13.4.9 If a mark has been identified, the fingerprint expert initials the back of the photograph of the mark and indicates to which finger the mark relates. After examination of all case material, the case envelope is endorsed with details of the marks identified against each suspect, details of which other marks contain insufficient detail for identification, marks eliminated, and those still outstanding. If there is anything extraordinary about the marks, or if they were viewed on the comparator (a projection device to view marks enlarged), this can be noted in a diary page. Within SCRO Fingerprint Bureau, historically the Special Cases Section (dedicated to serious crime) have made greatest use of a diary page and also made brief notes on a Major Incident Worksheet. SCRO management advises that this practice has recently been extended to other sections in SCRO Fingerprint Bureau. Elsewhere, however, very few fingerprint officers in Scotland make notes during the identification process other than the minimum required to record identification.

13.4.10 The case envelope containing the photograph of the mark, the Form 13B, the tenprints of any identified persons and the diary page, if one has been used, are then forwarded for verification of the identification. The Special Cases Section passes it to the Section Supervisor to allocate for verification but the other sections have a more ad-hoc arrangement, either passing it to someone sitting nearby, or to the Section Supervisor for allocation depending on individual preferences. In the case of a non-expert (trainee) making the initial identification, three fingerprint experts are required to undertake the identification process.

13.4.11 The fingerprint expert who conducts the first verification does so knowing who carried out the initial identification, the individual who has been identified and the finger or fingers the identification relates to. They will also see the diary page, if one has been

initiated. If verified, the fingerprint expert will endorse the back of the photographed mark. The same process is repeated when the first verifier forwards the envelope and contents to a second fingerprint expert for verification. If verified the second expert endorses the photographed mark and case envelope accordingly. The Special Cases Section usually use the Section Supervisor as the second verifier but this practice is not adopted rigorously in the other sections. Marks identified as relating to elimination prints are not subject to verification apart from in the Special Cases Section. At the end of this process the original identifying officer completes all documentation and passes it to the verifying experts for endorsement.

13.4.12 In order to ensure that fingerprint experts approach the identification process in as independent a manner as possible, the CMRT believes the integrity of the process must be maintained with those undertaking the verification role not knowing the identity of who carried out either the initial identification or any previous verification. It is recognised that members of a team working in close proximity may find it difficult to achieve complete anonymity, but the necessity for experts to come to their own conclusions without any influence, conscious or unconscious, is of paramount importance to the transparency of the process.

13.4.13 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 making notes on separate diary pages which could be held at a central point after each stage until the end of the identification process. Although it is recommended that notes be made in respect of every identification, these would be more comprehensive where the quality of the marks under examination was poor.

13.4.14 While it is possible to ensure that those undertaking the verification role are unaware of the identity of the person who conducted the identification, it is not 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 can be extremely lengthy, adding considerable time and effort to the procedure. It is essential however that those verifying make their own determinations and view the process as one of independent scrutiny and not merely confirmation. In structural terms, this process lends itself to a larger bureau where there is the greatest opportunity to pass cases among a pool of experts.

## **13.5 ADMINISTRATIVE SUPPORT**

13.5.1 This section of the report examines the administrative support functions of SCRO and complements Section 13.4 (national guidance manual) in as much as detailed working practices in an accessible format are essential. Given the number and variation of administrative processes that are undertaken in the SCRO Fingerprint Bureau, it is surprising that a comprehensive process manual does not yet exist. This has been fully recognised by the staff at SCRO but it appears there has not been sufficient capacity of resource to allow time for its compilation. It is understood that the ISO Procedures Manual now nearing completion will fill this void, at least to some degree. The challenge, however, will be to devise and record administrative processes which can be applied across Scotland. Again this is a matter which is best accomplished by the 8FSG.

**13.5.2 The Office Management System** - The Leishman Management Consulting Report of June 1999 recommended the introduction of an office management information system (OMS) incorporating automated case tracking. This lack of management information to allow work scheduling, resource management and statistical data compilation had been recognised by SCRO and was re-emphasised by HMIC (Recommendation 11).

13.5.3 It is understood that the necessary funding to start to move the project forward has only recently been identified. Currently the SCRO Fingerprint Bureau is using a very limited personal computer based OMS which gives no opportunity for case tracking and it clearly does not service the needs of the Bureau.

13.5.6 While it is not intended to give a detailed account of what it is considered the OMS will perform, suffice to say, it is considered that it will compliment the identification process outlined at Section 13.4. In particular, it is envisaged that there would be a central administrative point which will manage workloads and direct the path of individual cases. Consideration should be given to the use of bar code technology as a means of tracking files. The system should also be able to generate necessary statistical information easily. There may be added value aspects to this project, for example, it may be that the system could provide a platform for the reference/procedures manuals referred to in Section 13.4 which could be updated on the network server to ensure the information was universally up to date.

## **13.6 SUPERVISION**

13.6.1 While there are no specific recommendations made by HMIC under this heading, the theme cuts across many of the areas the CMRT has examined. In particular the structural modelling exercise (Appendix 'E') has tried to create suitable spans of control, for example, suggesting an increase in the supervisory level of administrative support services.

13.6.4 With regard to stress related illness, this is an increasingly significant issue for bureaux and one which the CMRT is fully aware of. While SOCOs may suffer from stress related illnesses due to the sometimes traumatic circumstances in which they may have to work, fingerprint experts can suffer similarly but through the intensity of the concentration required, coupled to the gravity of the consequences of making an error.

There is the clear potential for an innocent person to lose his/her liberty and suffer greatly as a consequence of an erroneous identification of a fingerprint. There are, however, other factors which appear to contribute to this type of illness and a major issue must be pressure of work. SCRO has been under strain in terms of human resources for some time. This sustained pressure to deliver a service comes about by having a professional and proud workforce who care about the service they deliver, their key role in detecting crime and their contribution to making communities safer. Limited resources and the intensity of the work can contribute to this condition. It is an issue which SCRO management is acutely sensitive to, particularly as every abstraction increases the workload on the remaining staff.

13.6.5 Attending court to give evidence also generates significant pressure. This factor is recognised nationally and a significant amount of training is given to fingerprint experts in the presentation of evidence at court, however, it is something of a rarity for an expert actually to be called to give evidence. This infrequency of having to give evidence together with the knowledge of the criticality of that evidence and the professional standards required, contribute to it being a significant stress factor. This is an issue which is further discussed in the next section in relation to training. (13.7.36)

13.6.6 Working environment is also considered to have an effect on stress related illnesses, particularly in a detailed concentrated task such as fingerprint examination. In this regard HMIC commented that the current working conditions were less than ideal (paragraph 4.5.1). However, the move to new premises at Pacific Quay, Glasgow which will have taken place prior to the completion of this report, will create a much more suitable environment particularly in terms of light, noise, space and rest areas.

13.6.7 In the overall management of SCRO, close contact is maintained with the welfare officers of Strathclyde Police Occupational Health and Welfare Unit and full use made of their expertise and facilities. This includes information in respect of self-referral services and liaison in managing individual 'back to work' strategies for personnel. The whole issue is one which spans all fingerprint bureaux and the CMRT's impression is that it is one of which management is acutely aware. Given the many factors which can contribute to stress in this particular workplace it is considered that the sharing of good practice in this regard will be a natural spin-off from the deliberations of the 8FSG.

## **13.7 TRAINING**

13.7.1 HMIC makes a number of recommendations and suggestions about training and related matters which are considered in this section.

**13.7.2 Authorisation as Expert** - A key issue is the matter of authorisation as a fingerprint expert to which HMIC refers to in the following recommendations:

- Recommendation 5 - **a move towards a competency-based standard**
- Recommendation 6 - **consideration of the concept of authorisation**
- Recommendation 21 - **a review of the current authorisation process**

The Criminal Justice (Scotland) Act 1980, at Section 26(2) provided for the creation of a Register of Expert Forensic Scientists.

The criteria for inclusion on the register are non-statutory and were originally drawn up by a Working Group comprising ACPOS, Crown Office, The Scottish Office and police forensic scientists.

13.7.5 In respect of fingerprint experts the criteria were:

- 7 years continuous experience in a recognised Fingerprint Bureau (later reduced to five years).
- successful completion of the Advanced Fingerprint Course at the NTC Durham.
- completion of as many courses at NTC Durham as are appropriate.

13.7.6 A review of training by SCRO management in 1992 concluded that the Advanced NTC Durham Course was inappropriate for SCRO officers as it focused on the Criminal Justice processes in England and Wales. Consequently, 'in-house', 'Advanced' and 'Expert' courses were created by SCRO. The then Scottish Office agreed to accept them as fulfilling the training criteria for registration as an expert. A difficulty in establishing basic criteria for fingerprint officers, unlike most forensic science disciplines, is that their profession is not underpinned by a specific scientific tertiary educational qualification.

13.7.7 It has to be remembered that the purpose of registration as an 'expert' is purely an authority to submit written reports in lieu of oral evidence. Consequently, the criteria must satisfy the Court as to the competence of individuals being classed as 'expert' and thus needs to be accepted by the wider criminal justice community to be effective in operating the evidence by report provisions.

13.7.8 While this narrow interpretation of 'an expert' may be legally correct, it is reasonable to suggest that inclusion on the Register may be seen externally as an acknowledgement of that individual's professional status outwith the specific provisions of the legislation. While it may be inappropriate for an individual to claim 'expert' status by virtue of inclusion on the Register, the reality is that this will occur. For the Register to ensure its credibility it must ensure the professional standards of those listed therein.

13.7.9 It is suggested that ACPOS Crime Standing Committee may wish to approach Crown Office and the Scottish Executive with a view to reviewing the criteria for inclusion on the Register as an 'expert' on a regular basis to ensure they remain valid and credible.

13.7.10 In this regard there are, and have been for some time, concerns about the criterion regarding length of experience. In order for there to be confidence in the professionalism of the writers of these reports, it is considered that there should be a move towards a transparent, competency based process of registration, which is consistent across the United Kingdom.

13.7.12 Following a review of authorisation in England and Wales in the mid 1990's, the time-based criterion was withdrawn. It was considered that competency based criteria were the only means of ensuring fairness and consistency both to trainees seeking to obtain expert status and also to the Courts. The situation in England and Wales provides further impetus for change in Scotland.

13.7.14 Accordingly, it is suggested that ACPOS Crime Standing Committee offer competency based criteria to the Scottish Executive in respect of the requirements for registration as an 'Expert' in terms of Section 280(5) of the Criminal Procedure (Scotland) Act and seek consultation with the wider criminal justice community in respect of their acceptance and validity. It is further suggested that application for inclusion on the Register be formalised and require evidence of competency, not merely a letter from a Chief Constable or similar organisational head indicating the suitability of the fingerprint officer.

13.7.17 It is suggested that registration with the Council for the Registration of Forensic Practitioners becomes a prerequisite of listing on the Scottish Executive Register of Expert Witnesses in respect of fingerprint examiners and is worthy of strong consideration for other forensic disciplines.

**13.7.18 National Training** - It is a condition of achieving expert status in England and Wales, that a satisfactory report is received from the NTC at Durham, that the nominee has satisfactorily completed all the appropriate training and is competent to be classed as an 'expert'. It is suggested that a similar condition should apply universally in Scotland, and that derogations from the agreed national training should only be considered upon validation of an alternative programme by NTC, or similar suitable external training organisation.

13.7.22 The now standard UK training in respect of fingerprint officers is delivered by the NTC at Durham. There are four courses completed over about four years, although the timescale can be less if the trainee shows particular aptitude. These comprise Initial, Intermediate, Advanced and Expert level fingerprint officer. All force bureaux in Scotland follow this programme as do bureaux in the rest of the UK with some of the larger bureaux supplementing this training with their own courses. As such, these bureaux tend to use the Advanced and Expert courses as a means of validating their own training. Until very recently, SCRO stood apart in the respect that it conducted its own in-house training, particularly at Advanced and Expert level. The reason behind this was that SCRO considered the courses supplied at Durham gave too much emphasis to English legislation, English court procedure and to mark development work which is not undertaken by SCRO.

13.7.23 The CMRT had the opportunity to visit the facility at Durham, where staff were keen to show a willingness to tailor their programme to suit a more Scottish approach if that was appropriate. They did, however, point out that delegates from outwith the UK also attend their courses and their goal was to teach skills which were not jurisdiction specific. Their view was that the skills required for court presentation should translate to any court where an expert is required to give evidence, and this appears to be a valid argument.

13.7.24 Clearly, the course appears to satisfy the needs of all other bureaux and as the course and teaching at SCRO has not been subject to external validation and scrutiny, this approach is no longer viewed as tenable. Accordingly, such training has now been suspended and SCRO trainees will follow the Durham training centre programme.

**13.7.32 Continuing Professional Development** - The CMRT places great store in the professional competency of the expertise found in the SCRO Fingerprint Bureau. However, it believes that there is a professional development responsibility placed on the organisation in respect of its staff and considers that it should be addressed by the introduction of regular refresher training for fingerprint experts. This would reflect the view of HMIC that **regular refresher training should be incorporated into a national training standard for fingerprint experts to ensure that expertise is maintained at the highest level taking account of developments in theory and technology.** (Recommendation 17)

13.7.33 There is a view among fingerprint experts that, once trained, no further ongoing training is necessary and professional skills are extended on the job by examining progressively more complex marks. This is not a view which the CMRT could support. This attitude is perhaps due to a narrow interpretation of refresher training which the CMRT sees as more appropriately termed 'continuous professional development (CPD).

**13.7.36 Court Presentation Skills** - A major component of the current training for fingerprint experts relates to court presentation skills and has figured successfully in recent CPD at SCRO. It is an area of training that **HMIC recommended be given a new impetus** (Recommendation 16) following consideration of the presentation skills used by SCRO experts and the defence experts during the Shirley McKie trial.

13.7.37 This observation arose following the evidence at that trial of an American fingerprint expert, who is also a regular public speaker. His skills in delivering his evidence were clearly more developed than the witnesses from SCRO. It is, however, worth of note that no criticism has been levelled at the standard or style of presentation of the SCRO experts' evidence. The further work commissioned by HMIC suggests that it was the actual evidence itself, not merely its presentation, which was the significant factor in this case. Notwithstanding that position, the CMRT explored this issue in some detail and found varying practices across bureaux.

13.7.40 It emerged that there is a practice allowing fingerprint experts who make an initial identification and verification not to be the witnesses who give evidence in court. In SCRO this occurs in the situation where two experts cannot attend court on medical grounds, and also on other occasions as a matter of convenience. In these cases other experts who had not previously been involved in the case would be asked to examine the marks, confirm they agreed with the identification, prepare the necessary statements and attend court when required. The CMRT does 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.

13.7.41 In relation to visual aids used in court, the CMRT was made aware of the practice of cropping photographic enlargements so that only the relevant part of a mark and fingerprint were shown. While this may reveal the necessary level of detail, to do so without showing the whole image is contrary to principles of disclosure and transparency and may lead to criticism. This practice has now been discontinued by SCRO, a move which the CMRT supports.

13.7.42 When considering this issue, Crown Office was consulted by the CMRT as to its view on the best presentation of evidence, however, it considered this was a matter for the individuals giving their testimony and the relevant Procurator Fiscal. There does, however, appear to be merit in the development of an awareness strategy for solicitors, procurators fiscal and advocates to increase their understanding of fingerprint evidence and how it can be presented. There is a view that only by appropriate questioning in the court can the best evidence be elucidated.

13.7.43 The importance of this aspect of the fingerprint expert's work, and the stress and anxiety it can cause, is recognised by the profession. 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. Recently, this was built upon by SCRO who purchased additional training for their Bureau from a firm of experts in this field. This initiative was very well received by all the staff who rated it as an extremely valuable exercise.

13.8.4 The fundamental principle which applies wholly to the work of the fingerprint expert is one of integrity and independence (Chapter 2). Whilst that principle is enduring, its importance has taken on a new dimension as a consequence of the issues raised in the cases associated with the murder of Marion Ross (Chapter 8). HMIC emphasises the need for openness and accountability (Section 8.14). In the context of proficiency and competency testing, this must include the provision, at the very least, of external validation of an experts ongoing ability to meet the demands of the role. This is reflected by HMIC who recommends that **the external provision of competency testing for experts is an aspect that the APRT needs to pursue with vigour to seek an early, sustainable and defensible programme.** (Recommendation 14).

13.8.5 In 1996 SCRO designed and implemented annual proficiency testing for its fingerprint experts. It is understood that this was a ground breaking exercise in respect of fingerprint bureaux in the UK. The tests aim to:  
provide a quality assurance measure

- test the proficiency of experts in fingerprint comparison
- identify weaknesses and training issues.

13.8.6 The test was administered and checked internally, by the most senior fingerprint personnel in the bureau. This was a commendable initiative.

13.8.7 Following recent evaluation, the test was redesigned, taking into account the views of those who had participated in the exercise. In recognising the need for, and value in, external validation, the redesigned test was submitted for assessment to both the Federal Bureau of Investigation (FBI) in the USA and to the NTC at Durham. Whilst not critical of the aims of SCRO, the FBI suggested that the test was too stringent, in that it should aim to establish competency rather than the degree of expertise. The NTC at Durham, however, saw the test as ‘a fair test of identification skills’. It is of note that several force bureaux in Scotland have had access to the SCRO proficiency test. It was evident, anecdotally at least, from the interviews conducted with bureaux staff by the CMRT, that the test was challenging.

13.8.9 It is recognised that, with the exception of the SCRO test, no other validated proficiency or competency test exists within the fingerprint service in the UK.

13.8.11 In light of HMIC’s comments (paragraph 6.5.3), SCRO management have suspended the use of the internally based proficiency test. An application has been made to CTS to test all fingerprint experts at SCRO during the next administration of the test in January 2000, at a cost in the region of £5000. This is a positive step by the management of SCRO and directly addresses HMIC’s recommendation that **all fingerprint experts within SCRO Fingerprint Bureau should undergo competency testing provided and managed by an external provider as soon as possible** (Recommendation 19). The CMRT supports the concept of external provision of both proficiency and competency testing for fingerprint experts but recognises that such provision is significantly limited at present.

## 13.9 QUALITY ASSURANCE & AUDIT

13.9.1 As with the collation of all evidence, it is essential that procedures are in place to ensure the integrity of the chain of evidence and of the evidence itself. Given the specialism of individual forensic practices, there is a clear need to openly demonstrate integrity through the application of quality standards and rigorous compliance testing. Whilst historically based in industry, quality control processes have evolved to a stage where they are readily applicable to, and specifically designed for, ‘service’ settings.

**13.9.3 ISO 9002** - ISO 9002 is a worldwide quality assurance system, regulated by the International Standards Organisation and, more locally, by the United Kingdom Accreditation Services (UKAS). In terms of fingerprint bureaux, ISO 9002 is an appropriate quality assurance model to aspire to. The system requires an organisation to establish, maintain and conform to a quality policy statement and procedural and quality manuals. Compliance testing is undertaken initially by ‘independent’ internal auditors who, on a day-to-day basis, form part of the work force, and externally by accredited auditors appointed in the UK by UKAS.

13.9.4 Where the Council for the Registration of Forensic Practitioners (CRFP) offers the potential to control standards in terms of individual proficiency and competency, ISO 9002 does so at an organisational level.

13.9.5 HMIC recognises the potential benefits to be gained from commonly applied standards and suggests that **all bureaux agree common Quality Assurance processes using the co-ordinating influence of this (CRFP) body.** (Suggestion 13). The CMRT has had the opportunity of discussing this issue with the CRFP and understand that such a coordinating role is outwith their scope and not something they would wish to develop at this stage.

13.9.6 In recognising the benefits which a quality assurance system has to offer, SCRO enlisted the services of Bill Wood Associates, a quality assurance consultancy, to assist them in a move towards an accredited system under ISO 9002. As a first phase to introduction throughout SCRO, the Fingerprint Bureau was selected as the 'pathfinder' and progress has taken the Bureau to the point where it is anticipated that it will be externally assessed by early December 2000.

13.9.7 Although assisted by a Consultant, introduction of ISO 9002 within the Fingerprint Bureau was properly seen as a function of the Quality Assurance Officer. Developments within the Bureau, however, coupled with the ongoing training imposition placed on the Quality Assurance Officer (Section 13.7.20) have seen that function shift to a temporary Inspector, initially brought to assist the Head of Bureau with project work.

13.9.8 Once fully adopted as SCRO's quality assurance system, the role of the Quality Assurance Officer will extend to the co-ordination and administration of the ISO process, including internal audits, follow up procedures and maintenance of the manuals. As an estimate, the Consultant believes this will equate to the work of half a post for a fingerprint bureau with the current 'authorised establishment' of SCRO. In the view of the consultant, the intention to extend the ISO standard to all departments within SCRO creates potential for the ISO 9002 workload, alone, to absorb one whole post.

13.9.11 Whilst it is known that a number of bureaux south of the border have progressed ISO 9002 as a quality assurance system, no other bureau in Scotland has done so. During the CMRT's consultation phase, there was widespread recognition of the benefits of such a system. However, its appropriateness to small bureaux, given the 'independent' dimension of the internal audit and a small bureau's ability to cope with the added workload were seen as barriers to its introduction.

**13.9.12 The Role of the Quality Assurance Officer at SCRO** - The importance of quality assurance systems in ensuring that standards are set and maintained and, in so doing, that the integrity of evidence, staff and the Bureau are sustained, is clear. There must, however, be recognition that such systems generate a significant workload. Accordingly it is important to make provision to deal with that workload.

13.9.13 The combined post of Quality Assurance/Training Officer (Section 13.7.20) was created within the SCRO Fingerprint Bureau in 1996 and filled internally by a fingerprint expert. The core activities included:

- evaluation, implementation and validation of quality assurance within the fingerprint bureau

- assisting the Deputy Head of Bureau (then the Assistant Chief Fingerprint Officer) in undertaking special project work
- provision of fingerprint training in all aspects of fingerprint comparison and identification, up to and including expert status.

13.9.14 The quality assurance checks, which form a significant part of this post, include:

- scrutiny of the identification and verification process, completed case documentation, tenprint forms and submission of evidence
- competency testing
- case audits
- random audits
- test searching of marks and tenprints.

13.9.15 Given the size of the Bureau, this is not an insignificant task, even in terms of time alone. It is evident, however, that the demand for training quickly eroded the potential to fulfil the quality assurance aspects of the role, to the extent that there has been no scope in the last 2 years to address the final three checks listed above. This is recognised by HMIC who **suggests that the APRT give the audit issue early attention** (HMIC Report paragraph 8.6.3).

13.9.16 Both Leishman Managing Consulting in 1999 and HMIC have recommended **that the role of Quality Assurance Officer and Training Officer be separated** (Recommendation 2). SCRO's 2000/2001 budget makes provision for the creation of these separate posts with the new Training Officer position recently being advertised in the Police Review. The CMRT welcomes this.

13.9.17 Recent developments at SCRO, however, which have impacted upon the availability of fingerprint experts, have caused the SCRO management to draw the Quality Assurance Officer away from his core functions. The transposition of project management responsibility for the introduction of ISO 9002 from the Quality Assurance Officer offered tangible confirmation of this. The CMRT have been advised by SCRO management that the Quality Assurance officer has recently resumed control of the process.

13.9.18 To provide a defensible and sustainable position, it is considered essential that the job description and person specification of the Quality Assurance post be reviewed as soon as possible, in order to define clearly the importance and priorities of that role. This should coincide with the introduction of the new Training Officer post. (Section 13.7.21).

13.9.19 Potential exists to introduce a single Quality Assurance post to service all of the departments within SCRO and this should not be discounted for the future. However, given the need to re-establish full 'quality control' checks, in line with the quality

assurance demands of the existing job description, and the impending implementation of ISO 9002 it is considered unwise to dilute the role or importance of the Quality Assurance post within the SCRO Fingerprint Bureau. It is understood that this is in keeping with the views of SCRO management at this point.

**13.9.21 Blind Trialing** - The concept of ‘blind trialing’ reflects the commercial practice of ‘mystery shopping’. The principle is that a transaction or series of transactions are generated from a controlled source (i.e. by or on behalf of the management) with a view to testing systems, procedures, compliance, standards and quality of delivery. HMIC suggests **that ‘blind trials’ are another tool worthy of consideration by fingerprint bureaux** (Suggestion 14)

13.9.22 Whilst the practice is 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 issue was consistently raised during the CMRT’s period of consultation but was met with general reserve. One force bureau had, however, experimented and saw a potential place for blind trialing within the fingerprint service, if managed carefully.

13.9.23 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 CHS, potentially PNC and local force computers and, consequently the proper management and control of that information were of concern to them.

13.9.24 Whilst the concept has merit, it must be more fully considered in terms of the renewed emphasis which is being placed on openness and accountability within SCRO; including the introduction of CTS proficiency testing (Section 13.8), the move towards CRFP registration of experts, implementation of the ISO 9002 Quality Assurance system and the proposed realignment of responsibilities to a full time Quality Assurance Officer (Section 13.10.1). Satisfactory development of these matters should be regarded as a high priority in assuring the highest standards within the Fingerprint Bureau. Further research is necessary to consider the fuller implications and scope the level of effort required to manage safely a programme of blind trialing and it would be appropriate for the 8FSG to consider the issue in due course, as part of its wider remit.

## **13.10 STANDARDS**

**13.10.1 The Council for the Registration of Forensic Practitioners (CRFP)** - The CRFP is an independent regulatory body whose objective is to promote public confidence in forensic practice in the UK, through the publication of a register of competent forensic practitioners. It was formed following a number of high profile miscarriages of justice in the 1970’s and reports in 1993 by the Royal Commission on Criminal Justice and the House of Lords Select Committee on Science and Technology. A system of registration for forensic practitioners was recommended and after consideration of the options, the Home Secretary in 1998 announced the inception of the CRFP.

13.10.2 Although membership will be voluntary (from the perspective of the CRFP), periodic re-registration and a process to address those who fail to meet the necessary standards will be incorporated into their practices. This will include a range of options, from the right to offer advice through to removal from the Register.

Details have not yet been concluded, however, it is hoped that the Register will open to fingerprint experts by the end of this year. It is proposed that registration will be based on an assessment of a submission from the applicant including:

- details of their qualifications and career to date
- a short portfolio of case work
- two work based references
- a declaration of conformance with the application process.

Subsequently, experts will be required to re-register every four years.

13.10.9 Bearing in mind the potential importance of CRFP registration for fingerprint experts, it is considered that CRFP registration should be pursued as a matter of urgency by SCRO management on behalf of their fingerprint experts. The Executive Committee of SCRO should consider making budgetary provision for the payment of CRFP registration fees, now and in the future, and in line with arrangements in England and Wales.

**13.10.11 Non-Numeric Standard** - HMIC recommends that managing the change to a non-numeric standard should be addressed at a very early point by the APRT – Recommendation 15.

13.10.14 Fingerprint experts state that in practice, in many instances, it is clear that at a stage before 16 points in agreement and sequence have been found, an identification can be made. In other cases, due to the poor quality of a mark under examination, fingerprint experts may be unable to find 16 points of similarity, but are able, in their opinion, to find a sufficient number to give a positive identification. It is for these reasons that there has been a move to a non-numeric standard where an expert can express an opinion based on suitable expertise and experience.

13.10.15 Champod and Evett, in a paper published in July 2000, on ‘A Probabilistic Approach to Fingerprint Evidence’ state, “All comparisons that fall between the extremes of definite inclusion and definite exclusion are classified as ‘inconclusive’. It is our view, that much evidence is denied to courts because of this policy.” It is the duty of the police service to provide the Crown with the best available evidence. An arbitrary 16 point standard excludes a significant number of cases from being considered as evidence due to them being classed as ‘inconclusive’ or ‘insufficient’.

### 13.11 OPENNESS, ACCOUNTABILITY and ETHICS

13.11.1 A main thread of HMIC's Primary Inspection Report is the need for SCRO Fingerprint Bureau to move away from a historically introspective culture. In doing so it must become more open and engender the principles of transparency and accountability. The wider process of development already underway within the SCRO Fingerprint Bureau and many of changes consequent to HMIC's Primary Inspection Report will set the foundation for long term sustainable change, not only within the bureau, but also throughout the fingerprint service in Scotland.

13.11.2 That renewed emphasis includes many of the aspects already discussed in this report, such as CTS proficiency testing (Section 13.8), CRFP registration of experts (Section 13.1.1), ISO 9002 Quality Assurance system (Section 13.9.3) and redefinition of quality assurance responsibilities (Section 13.9.12).

13.11.3 Those aspects must be complimented by ongoing membership of groups which influence and consider fingerprint examination, evidence and the role of the expert, in a wider forum, both nationally and internationally. The reconvention of the 8FSG, continued membership of the CRFP's fingerprint sub-group (Section 13.10.1) and of the IEEGFI are all essential to that process. This interaction realises the potential of these groups to positively influence the fingerprint service in Scotland.

13.11.4 At Suggestion 19 HMIC suggests **that the adoption of a code of ethics should be an integral part of the change proposed for SCRO**. Whilst the efforts towards a more robust quality assurance system and the application of proficiency and competency testing are clearly linked to openness and accountability, the introduction of a code of ethics would outwardly demonstrate a willingness and intention, on the part of SCRO Fingerprint Bureau, to aspire to the highest standards of integrity and independence required of a fingerprint bureau (Chapter 2).

13.11.5 At their 29th European Regional Conference in May 2000, the IEEGFI discussed the issue of ethics as an imperative to fingerprint services and fingerprint experts. In concluding, the Group acknowledged the work of the CRFP in this area. As a consequence of that work, the IEEGFI has developed a 'Code of Ethical Good Conduct Guidelines for Forensic Practitioners' which should be an important consideration for all fingerprint bureaux. A copy of the Code is included at Appendix 'C'.

13.11.6 The CMRT is fully supportive of HMIC's direction towards a more open and accountable service and believes that such direction applies beyond SCRO to the whole fingerprint service in Scotland. A positive first step would be the introduction of a code of ethics and the IEEGFI Code provides a sound foundation for consideration, particularly given the close links with the CRFP. Adoption or adaptation of that code is being fully explored by the 8FSG.

## 13.12 CONFLICT RESOLUTION

13.12.1 The fundamental importance of the principles of integrity and independence are highlighted throughout this report and HMIC's Primary Inspection Report. Recent events within the SCRO Fingerprint Bureau continue to emphasise the importance of these issues and the potential manifestations of shortcomings in procedures and an introspective environment. There is a need, therefore, to ensure that stringent safeguards are built into the process of fingerprint identification and verification and that measures are developed to openly address areas of conflict.

13.12.2 The mark identification process is described at Section 13.4.7. This section seeks to deal with potential conflicts of opinion in that process (disputed identifications), and when the identification is found to be plainly wrong (erroneous identifications).

**13.12.3 Disputed Identifications** - The term 'disputed identifications' relates to the situation where fingerprint officers disagree as to whether or not there are sufficient common points between a mark (latent fingerprint) and an individual's fingerprint in sequence and agreement to positively identify the mark.

13.12.4 Disputes arise when one expert can find sufficient points in sequence and agreement but the other expert, while perhaps agreeing that the mark does indeed relate to an individual, considers that there is insufficient detail to give a positive identification for Court purposes. A fingerprint officer examining a mark for verification purposes and considering there to be insufficient points of similarity to positively identify it, will enter into a discussion with the identifying officer. During the discussion both parties will explain the reason for their findings in the hope of finding common ground.

13.12.5 On occasions, the mark and fingerprint impression are viewed on the comparator and marked up to illustrate how the identification was made. The practice that is now adopted in SCRO Fingerprint Bureau is for the mark to be cleared from the screen to allow the verifying officer to examine it to establish if, after discussion, identification can be made. If the identification is confirmed, the mark is passed for second verification, or in the case of the dispute being by the second verifier, the process is complete. Practice varies as to what, if anything, is recorded on the diary sheets (Section 13.4.9). Most bureaux do not record anything in such an event.

13.12.6 If the dispute between the identifying officer and either of the verifiers is not resolved, the matter is referred to the Quality Assurance Officer and the Head of Bureau is informed. A resolution is then sought between all parties which may involve other experts examining the mark. No formal record is kept in respect of the dispute other than what may have been recorded on the diary page.

13.12.7 With regards to this process HMIC recommends **the establishment of a national policy which encapsulates an independent review process to deal with all erroneous and disputed fingerprint identifications.** (Recommendation 13)

13.12.8 An 'erroneous identification' is termed as one where the identifying fingerprint officer has clearly made an error and wrongly identified the mark under examination. This is obviously one of the most serious mistakes a fingerprint officer can make. The erroneous identification can come to light through either of the verifying officers, although it is most likely to be identified by the first verifier. Empirical evidence shows that erroneous identifications occur very rarely.

13.12.9 Within SCRO Fingerprint Bureau the current procedures are that a fingerprint officer who becomes aware of an erroneous identification should bring it to the attention of the Quality Assurance Officer who will in turn inform the Head of Bureau. The Head of Bureau will make the Deputy Director aware and a full review may be conducted by the Deputy Head of Bureau (the most senior fingerprint expert in the Bureau), who will attempt to establish how the identification was made and to determine if there is an underlying reason, such as a welfare problem or a training need. Details of any findings are entered in the individual's personal file and any necessary remedial action taken. Although not formalised, the Quality Assurance Officer retains all associated papers.

13.12.10 Future errors by the same individual may cause Strathclyde Police Support Staff Disciplinary Procedures to be invoked. No formal procedures exist in other Scottish bureaux to deal with erroneous identifications.

13.12.11 In support of the HMIC's conclusions, the CMRT, during the consultation phase, found significant variances in practice across bureaux in Scotland, some of which were predicated by the limitations of size in the smaller bureaux. Nonetheless, there is significant scope, now and in the future, to introduce processes and procedures which would strengthen the principles of integrity and independence in the identification and verification process.

13.12.12 It is recognised that disputes inevitably occur between experts from time to time. Disputes are as a result of fingerprint officers differing in their expert opinions, and can sometimes be resolved after discussion between the parties concerned. Such discussions can be interpreted as compromising the integrity of individual experts as they may be subjected to undue influence to make an identification or verification.

13.12.13 As these informal discussions are considered by fingerprint officers in bureaux throughout the United Kingdom as being a necessary part of the identification process, steps should be taken to ensure transparency. Such procedures will be part of the 8FSG's deliberations in respect of processes and the production of a guidance manual. However, given the criticality of this matter the CMRT outlines below a procedure for consideration of adoption.

13.12.14 If the identification process as outlined in Section 13.4.7 is adhered to, verifiers will not know the identity of the identifying officer until the end of the process. Notes made at the time should be kept on the diary pages (or on an enhanced Office Management System) and only viewed together when all are completed. Any dispute would then be discussed between the parties and fully recorded. If a resolution is achieved, this should be noted along with the full details of the reasons for the original dispute and how the resolution came about.

13.12.15 If no resolution is achieved, or if the original dispute was of considerable significance, the matter should be referred to the Quality Assurance Officer in the first place and thereafter to the Head of Bureau. It is recommended as good practice that the Quality Assurance Officer retain a log of such disputes to allow scrutiny of the cases by any auditors. The ISO 9002 process, which the SCRO Fingerprint Bureau is moving towards, has a procedure whereby such disputes are recorded as 'Non-Conformances' which would fulfil the criterion of maintaining a record of such events.

13.12.16 It is not considered acceptable practice for the opinion of an expert to be disregarded if in disagreement with others. The mark should not be shown around a bureau in order to achieve identification by three experts. If after a discussion, as outlined above, an expert does not make identification, it should not be taken any further.

13.12.17 In cases where a dispute is resolved, full details should be recorded and the Procurator Fiscal informed of the nature of the dispute and allowed access to the diary pages or any other relevant documentation if desired. This allows an additional independent element in the process and ensures integrity is maintained.

**13.12.18 Erroneous Identifications** - The essential element in dealing with erroneous identifications is transparency. When mistakes do occur, for whatever reason, it is imperative that they are dealt with in a rigorous fashion, which can withstand external scrutiny. If fingerprint officers conducting the verification fulfil their role in a methodical and independent manner, they should immediately establish that the initial identification was erroneous. This 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.

13.12.19 An internal review should follow to determine the cause of the erroneous identification. A full written record of the review should be maintained. In most cases the most senior fingerprint officer in the bureau, providing he or she has had no prior involvement in the case, would undertake the review. Consideration should be given, where the situation dictates, to the use of external fingerprint experts.

13.12.20 The person who made the erroneous identification should be suspended from making further identifications until the cause of the error is established, taking account of the circumstances of the case and the individual's personal record. If the matter is satisfactorily resolved through training, or otherwise by tackling the reason for the error, the fingerprint officer can be permitted to conduct identifications again under close monitoring for a period to be determined by management. Full details should be entered in the individual's personal file.

13.12.21 Details of the erroneous identification and subsequent review should be entered on a log that allows full scrutiny by external auditors. As indicated above, the ISO 9002 process would require a 'Non-Conformance' notice to be raised in addition to any other action that may be initiated.

13.12.22 With regard to this process, HMIC suggests that **the Council for the Registration of Forensic Practitioners may provide a suitable reference point for benchmarking the policy and the independent review process to deal with disputed and erroneous fingerprint identifications** (Suggestion 12). The CMRT has discussed this proposal with the CRFP who have indicated that this is not a role the Council considers appropriate at this time in its development. However, this may change as it evolves.

13.12.23 It has been suggested by the NTC, Durham, that HMIC in England and Wales should have an Inspector dedicated to Scientific Support. It is unlikely that there would be scope for such a role in Scotland, but HMIC may wish to include scrutiny of fingerprint procedures as part of its regular inspection programme.

13.12.24 Should an erroneous identification be notified to the Procurator Fiscal, the Procurator Fiscal concerned or Crown Office should be informed as soon as this comes to light. In these circumstances it is recommended that a senior officer, making use of fingerprint experts from outwith the bureau, conduct an external enquiry into the sequence of events leading to the erroneous identification. This situation is obviously more serious, impacting on the criminal justice process, as the mark has not only been wrongly identified but also erroneously verified by two other experts.

13.12.25 While the importance of independent scrutiny is recognised, it is essential that an open culture be encouraged where mistakes of whatever nature are immediately identified and highlighted. If a fear exists that a genuine mistake will result in serious consequences, the outcome may be that individuals are less willing to bring departures from recognised procedures or bad practice to the attention of supervisory staff.

## **15 STRUCTURAL OPTIONS**

### **15.1 INTRODUCTION**

15.1.1 This chapter attempts to clarify the pressures for change, identify options for the management and delivery of a fully effective and efficient fingerprint service in Scotland and address the key issues which must be considered in assessing their overall impact.

15.1.2 HMIC cites efficiency as the driver in seeking rationalisation of the current structure and refers to the Hamilton and Leishman reports (Chapter 7) in support of this argument. Bearing in mind the critical state of recruitment and retention of staff within the SCRO Fingerprint Bureau, a situation worsened by suspensions arising from Mr Mackay's enquiry, human resource levels must be a major focus of attention when considering efficiency.

15.1.3 However, in the light of HMIC's recommendations and suggestions relating to processes and following on from the McKie case, it is vital to consider the most appropriate structure within which suitable management arrangements can be applied to ensure that misidentifications do not occur in the future.

### **15.3 INTEGRITY**

15.3.1 As outlined at Chapter 2 of this report, the CMRT regards integrity as an imperative against which all other considerations about procedures or structure are predicated. It is vital to confidence in fingerprint identification in Scotland that the processes are highly visible and can withstand the closest scrutiny. In achieving that goal the CMRT has suggested developments to processes and procedures outlined elsewhere in this report. For such processes to be effective, particularly in respect of independence within the identification and verification process (Section 13.4.7), it is considered that there should be a minimum number of fingerprint experts to constitute a bureau.

### **15.5 CULTURE**

15.5.1 The culture of SCRO has been criticised as being introspective, internalised and elitist and although this may be more perception than fact, the assessment of how an organisation is regarded is critical to its progress and development, both for the people in the organisation and agencies interacting with it. However, during the consultation phase, the CMRT became aware that a perception of insularity is one which applied to many bureaux.

15.5.2 The goal must be to create an organisational culture that has integrity at its heart, is professional, transparent, open to innovation and able to adapt to change. It is important that any barriers which may have arisen within the fingerprint community are broken down and it must be hoped that the 8FSG will provide a suitable opportunity to start this process.

15.5.3 The agreement that SCRO will use the NTC at Durham for all of its courses is an indication of positive change. It must be hoped that there will be increased interest from experts wishing to transfer from other bureaux and in so doing transfer skills and experience which will add momentum to any cultural change.

15.5.4 It is important, however, to recognise that SCRO is a very busy and highly productive bureau, with management and staff who displayed complete professionalism in their dealings with the CMRT during the scrutiny period.

### **15.6 STRATEGIC CONTROL**

15.6.1 The current strategic control mechanisms were revised following a Strategic Review of SCRO in 1999 (Section 7.5) and comprise Executive and Management Committees. It is important to ensure that the strategic management structures of SCRO are sufficient for accountability purposes but responsive enough to allow the organisation to react efficiently and effectively to developments. The revised structure was developed to shorten the referral and decision making process and make the organisation more responsive.

## **15.7 STRATEGIC MANAGEMENT**

15.7.1 Traditionally, strategic management of SCRO has been delivered by senior police officers on central service secondment to the organisation. In terms of the Director and Deputy Director roles, they have in the past been filled by well qualified and thoroughly experienced officers nearing the end of their service. The current Director brings considerable skills and experience to the role. Recent incumbents have subsequently retired from post.

15.7.3 The skills and experience profiles deemed suitable for the posts of Director and Deputy Director of SCRO, in the future, require review. The CMRT believes that consideration could be given to opening up these posts to non-police officers, perhaps with an information management or forensic science management background. Similar considerations can be made in respect of the Head of the SCRO Fingerprint Bureau.

15.7.6 In addition, the injection of police officers into certain key posts creates a ceiling for the ambitions of SCRO support staff. The CMRT is aware that there are high calibre civilian managers in the fingerprint service throughout the UK who are actively involved in developing the service. It sees great advantage in the extension of this development to SCRO. As with the Director and Deputy Director posts, the skills and experience profile for the Head of Bureau should be reviewed.

## **16 STRUCTURAL OPTIONS – CONCLUSIONS**

### **16.1 THE PROBLEM**

16.1.1 The fact that the SCRO Fingerprint Bureau has been under intense pressure since 1997 is inescapable. There is a resourcing issue within the SCRO Fingerprint Bureau which will now require the recruitment of 10 fingerprint experts, 7 fingerprint trainees and 13 TIOs and bring it to a strength which is likely to enable it to carry out its current responsibilities. This is against a competing fingerprint expert market in Scotland which has, in the past, mitigated against SCRO, and a wider UK fingerprint expert market which currently appears to have limited recruitment potential.

16.1.2 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.

16.1.3 In advance of the Review Inspection to be carried out by HMIC in December, it will be necessary to have made significant steps towards resolving this problem, addressing backlogs according to a planned strategy involving clear targets.

16.2.2 Increased emphasis on a clear division between SCRO and Strathclyde Police, including more proportionate funding (Section 15.4), and changes to the Committee Structure (Section 15.6) would offer potential for more effective strategic control. The continued development of the 8FSG could improve procedural standards. However, the SCRO Fingerprint Bureau would remain, de facto, a Strathclyde Police Fingerprint Bureau, providing a continuing point of tension for SCRO management between force requirements and wider national considerations.

16.3.5 However, time has moved on from Leishman's report. The staffing problems at the SCRO Fingerprint Bureau are more acute and there is an increased awareness of the procedural issues which must be addressed to ensure that the integrity of fingerprint evidence is placed as the top priority. In the light of this realisation, in the wake of the McKie case, one of the positive benefits of this model, referred to by Leishman, becomes even more appealing,

i.e. the central control of policy, procedures, training and quality.

## **16.6 CONCLUSIONS**

16.6.1 The CMRT concludes that the clear separation of SCRO and Strathclyde Police and the rationalisation of funding would allow a structure within which the SCRO Fingerprint Bureau can develop. Indeed either of the two options at Sections 16.2 and

16.5 would allow most of HMIC's recommendations and suggestions to be addressed. This could be supported by the work of the 8FSG.

16.6.2 However, the retention of small bureaux does not substantially tackle the issue of independence in the identification and verification process and would deny the Scottish police service and the community at large any significant improvement. The CMRT considers that only a national fingerprint service, centrally managed, can achieve that.

16.6.3 The CMRT favours the Central Management/Central Delivery option but recognises the major challenges and potential risks that it involves.

16.6.6 .....At least in the early stages, movement to a centralised structure should be driven by a dedicated project management approach, building on arrangements already put in place to manage the action necessary to respond to HMIC's recommendations and suggestions (Section 17.12).

16.6.7 Bearing in mind the current staffing difficulties within the SCRO Fingerprint Bureau, SCRO's lack of distinctive corporate identity and its relationship with Strathclyde Police, there may be reservations about SCRO's ability to deliver this new structure. However, it is important to consider this structure within the necessary oversight arrangements for the SCRO Fingerprint Bureau which must be put in place as soon as possible.

16.6.8 A national fingerprint service can only be achieved when there is a proper legislative basis for the employment of its own staff. In this regard the comments of the Justice Minister, Mr Jim Wallace, on 14 September 2000, accepting the need for a

fundamental overhaul of SCRO and Common Police Services generally, are to be welcomed. The CMRT believes that the approach taken in England and Wales in creating National Police Services maintained by Service Authorities, e.g. the National Criminal Intelligence Service (NCIS), and the National Crime Squad (NCS), following the creation of a legislative framework provided by The Police Act 1997, is worthy of consideration. However, it is acknowledged that this matter would best be taken forward by ACPOS in consultation with the Scottish Executive and COSLA, with the support of specialist consultants, in order that the most appropriate manner of delivering the service is achieved and that the staged approach necessary to achieve it is identified. This should be progressed without delay.

16.6.9 The CMRT sees no value in separating the functions currently performed by SCRO. They each require complete integrity and a degree of independence from forces as they each serve the wider criminal justice system rather than just the police service. This has been made even clearer in recent years with the increasing influence that ISCJIS has on the role played by the CHS of SCRO and with the preparation for Part V of the Police Act 1997, a service which will be provided by the Passport Agency in England and Wales.

16.6.10 The fingerprint service continues to have the police as its major customer, albeit that some forces in England and Wales provide services for HM Customs and Excise, the Department of Social Security and the National Crime Squad. There is, however, little justification in senior posts within the SCRO Fingerprint Bureau, or indeed SCRO, remaining the preserve of police officers. Necessary day-to-day links with police forces could be adequately provided by key police liaison officers. Clearly it would be important to make these changes in a phased manner to allow for experience to be maintained and continuity to be preserved.

16.6.11 The CMRT is firmly of the view that the Scottish fingerprint service should be part of a new National Identification Service for Scotland, with three services; fingerprints, criminal history (records) and Part V (vetting). In time it could become linked with forensic science services to provide one organisation which delivers all physical evidence types as part of a Scottish forensic science strategy, building on an earlier review carried out by ACPOS. These are matters, which should be taken fully into account in considering a name change for SCRO.

16.6.13 It is against this backdrop of a separate National Identification Service for Scotland that the fully centralised option should be considered. The potential prize is a vastly improved fingerprint service, founded on the maintenance of unimpeachable standards and the integrity of evidence at the centre of the criminal justice system in Scotland; a service which could be the envy of other fingerprint bureaux in the UK and command a voice within the future development of fingerprint evidence in the UK and worldwide.

## **17 TOWARDS A CENTRALISED MODEL**

### **17.1 A PHASED APPROACH**

17.2.3 A fundamental element in providing a suitably resourced fingerprint service in Scotland is the reinstatement of the SCRO Fingerprint Bureau as effective and efficient in terms of HMIC's determination.

17.2.4 In the first instance, as a precursor to future development across Scotland, it is necessary to ensure the reinstatement and subsequent maintenance of that position. Secondly, there is the need to reconsider the funding arrangements for the fingerprint service in Scotland delivered centrally. Thirdly, there must be recognition of, and a commitment to, the cost of change; that is, the costs inherent with ongoing review and restructuring, some, but undoubtedly not all, of which are outlined in this chapter of the Report.

17.3.1 There is no question, in the minds of the CMRT, that the police service, as the major customer of a centralised bureau, should be strongly represented at strategic management level. However, the CMRT believes that the Head of the SCRO Fingerprint Bureau should be a civilian manager who has experience as a fingerprint expert or a forensic scientist.

17.3.2 Selection of an appropriate individual, who has the necessary understanding of fingerprint services, but whose strengths are strongly biased towards management, is crucial. Whilst it could be reasonably argued that the appropriate timing of such an appointment would be as an immediate precursor to the final transition to a centralised service, there is merit in considering a much earlier appointment. Indeed, the benefit of appointment in the immediate future would be the ability to understand and influence the ultimate shape and structure of the service and to build around him/her an organisation for which he/she would be accountable in the future; arguments which counter the criticisms of transitional management in the past. Such an argument can be extended to the post of Head of Scottish Fingerprint Service under a fully centralised model (Appendix 'E'). This would enable the proper project management approach necessary to develop the centralised fingerprint service. (Section 16.6.6)

## **19. RECOMMENDATIONS**

### **19.1 INTRODUCTION**

19.1.1 The CMRT's findings are shown in summary form at Appendix I with references to enable the reader to understand the context in which the CMRT reached its conclusions.

19.1.2 In this chapter, the CMRT lays out its strategic recommendations which in its view are fundamental to the approach taken by the SCRO Executive Committee in taking forward the development of fingerprint services in Scotland in the 21st century.

### **19.2 HMIC RECOMMENDATIONS AND SUGGESTIONS**

19.2.1 The CMRT recommends that the SCRO Executive Committee fully supports HMIC's recommendations and suggestions included in its Primary Inspection Report. (Chapters 13-16 and Appendix 'A')

### **19.3 NON-NUMERIC STANDARD OF FINGERPRINT EVIDENCE**

19.3.1 The CMRT recommends that the ACPOS Crime Standing Committee pursues the introduction of a non-numeric standard of fingerprint evidence in Scotland utilising a dedicated project management approach which takes into consideration the interests of all parts of the criminal justice system. (13.10.21)

### **19.4 COMMON POLICE SERVICES**

19.4.1 The CMRT recommends that ACPOS urgently addresses with the Scottish Executive an appropriate legislative basis for Common Police Services in Scotland.(16.6.8)

### **19.5 STRUCTURE**

19.5.1 The CMRT recommends that the necessary steps are taken to move on a phased basis towards a Central Management/Central Delivery model for the provision of fingerprint services in Scotland. This structure should be supported by new management oversight arrangements provided by legislation for Common Police Services. (Section 16.6.8)

19.5.2 The CMRT recommends that a dedicated project management approach is adopted in developing a Central Management/Central Delivery model for fingerprint services.

This should build on the project management arrangements already put in place to manage the action necessary to respond to HMIC's recommendations and suggestions. (16.6.6)

19.5.3 The CMRT recommends that the SCRO Fingerprint Bureau becomes part of a new National Identification Service for Scotland. (16.6.11)

### **19.6 TECHNOLOGY**

19.6.1 The CMRT recommends that early consideration be given by SPIS to the future technology needs of the fingerprint service in Scotland. This should take account of the NAFIS development in England and Wales. (18.10)

### **19.7 REGISTRATION**

19.7.1 The CMRT recommends that all fingerprint experts in Scotland should register with the Council for Registration of Forensic Practitioners at an early opportunity. (Section 13.10.1)

## **20. RESPONSIBILITIES**

### **20.1 INTRODUCTION**

20.1.1 The CMRT recognises that its findings cover a wide range of issues which are important to the development of fingerprint services in Scotland. The detailed responses to HMIC's recommendations and suggestions are covered in the text and at Appendix 'A', with an identification of groups and individuals who should be tasked with taking matters forward.

20.1.2 This chapter emphasises the main areas of responsibility identified by the CMRT.

## **20.2 SCRO EXECUTIVE COMMITTEE**

20.2.1 The SCRO Executive Committee is asked to accept the CMRT's recommendations, its outline strategy and action plan. The Executive Committee's role is crucial in ensuring that tasks are allocated to appropriate groups and individuals in order to make timely progress.

20.2.2 The role of the Executive Committee in negotiating interim arrangements with Strathclyde Joint Police Board in strengthening the support it provides for SCRO as employers is a vital one. (Section 17.10)

## **20.3 SCOTTISH EXECUTIVE**

20.3.1 The Scottish Executive's support for the CMRT's outline proposals is critical to successful development being made. This is not simply a matter of funding, although the proposals require significant levels of funding. (Section 17.2)

20.3.2 Commitment to an overhaul of Common Police Services by the Justice Minister is a very positive indication of a willingness to move quickly to introduce legislation enabling the SCRO Fingerprint Bureau to function as a separate organisation employing its own staff. Beyond that it is important that dialogue is continued between the Scottish Executive and ACPOS in identifying the most appropriate arrangement enabling the creation of a National Identification Service for Scotland. (Section 16.6.8)

20.3.3 An early review by the Scottish Executive is required in respect of the criteria for authorisation as a fingerprint expert. (Section 13.7.14)

## **20.4 ACPOS**

20.4.1 Many of the recommendations and suggestions made by HMIC are aimed at force bureaux and indeed the wider use of fingerprint evidence within forces. It is important that ACPOS is alerted to this and the CMRT has tried to identify these matters at Appendix 'A'.

## **20.5 ACPOS CRIME STANDING COMMITTEE**

20.5.1 As at 20.4.1 there are many issues which may lie outwith the scope of the SCRO Executive Committee and where the oversight of the ACPOS Crime Committee would be beneficial. These are identified at Appendix 'A' and in particular the CMRT sees the ACPOS Crime Standing Committee as the appropriate body to take forward the introduction of the non-numeric standard of fingerprint evidence in Scotland, (Section 13.10.11) the policy of registration of forensic practitioners with the CRFP (Section 13.10.1), negotiations with the Scottish Executive to review the criteria for authorisation as a fingerprint expert (Section 13.7.14) and the introduction of common statistical performance information on fingerprint services. (Section 13.10.24)

## **20.6 ACPOS PERSONNEL AND TRAINING STANDING COMMITTEE**

20.6.1 Much emphasis is placed within this report in addressing staffing within the SCRO Fingerprint Bureau. The ACPOS Personnel and Training Standing Committee's involvement in co-ordinating the necessary action required to achieve a satisfactory increase in resource levels would be an important asset (Section 17.8).

20.6.2 The matter of a training needs analysis for fingerprint officers will be taken forward by the 8FSG with the support of the ACPOS Personnel and Training Standing Committee. (Section 13.7)

## **20.7 SCRO**

20.7.1 Many of the recommendations and suggestions of HMIC are being addressed by SCRO directly. These are intimated at Appendix 'A'.

## **20.8 SPIS PROGRAMME BOARD**

20.8.1 Irrespective of change, there is a need for early consideration of the next generation technology requirements for fingerprint recognition equipment. This is a matter which should be referred through ACPOS TARC to the SPIS Programme Board. (Chapter 18)

## **20.9 8 FORCE STANDARD WORKING GROUP (8FSG)**

20.9.1 The 8FSG has a vital role to play in making early progress towards standardisation of procedures. This will be supported by the Project Management Team (below).

## **20.10 PROJECT MANAGEMENT TEAM**

20.10.1 The Project Management Team working to a Project Board will progress the bulk of HMIC's recommendations and suggestions.