Best Value Review Of Scientific Support

Prepared by:	C/Insp Richard Rowland			
Assured by:	Insp Adrian Griffiths			
	Mr Jerry Howson			
	D/C/Supt Gary Chatfield			
	Ms Angela Scofield (Police Authority)			
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Best Value Fundamental Service Review Scientific Support

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1 Introduction

- 1.1 The review of Scientific Support was conducted over the period of March until October 2001. However, the production of this final report has been delayed due to prioritised work in relation to 'Managing Demand' taking precedence towards the end of 2001 and into early 2002.
- 1.2 The report has been constructed using the format approved by Force Forum and the Best Value Panel during March 2002, although the review work itself followed the method as explained within Appendix A.
- 1.3 The 'Service Profile' describes the service that is provided by Scientific Support, including its purpose, structure, performance, cost and recent or impending developments. This is followed by the 'Terms of Reference', which sets out the scope of the review undertaken.
- 1.4 The main body of the report, the 'Findings' section, describes each of the major issues outlined within the scope of the review, together with the findings of the review team. Options for improvement, if identified, are included together with approximate costs where possible. These options are then reproduced within the Service Improvement Plan and will be developed once decisions have been made by Force Forum and the Best Value Panel.
- 1.5 More detailed reports and information in relation to each of the issues reviewed are available from the Best Value Unit.
- 1.6 The review team for Scientific Support consisted of:

Roger Warner Angela Scofield Adrian Griffiths

John Parr Karen Boyer

Frances Threadingham

Fred Walmsley Matthew Slee Dawn Young

Jerry Howson Mike Matthews Best Value Manager (Ch Inspector) Police Authority Liaison Officer Review Manager (Inspector)

Quality Officer

Benchmarking & Research Officer

Consultation Assistant

Management Services Officer Management Services Assistant

Accountant

Business Benefits Evaluator Scientific Support Manager

2 Service Profile - Scientific Support

Purpose

- 2.1 The force strategic aim to reduce and detect crime requires the ability to collect and present the highest possible quality of evidence to the courts in order to secure convictions and deter future offending. In the collection of such evidence, a vital contribution will always be required from forensic science.
- 2.2 This is especially true now, as the unsupported testimony of the police and of witnesses can no longer be relied upon to secure convictions at court. For this reason recent advances in forensic techniques, particularly DNA and fingerprint recognition systems, are opening new areas for scientific support that will become ever more important.
- 2.3 In support of this aim, the service that is provided by the Wiltshire Constabulary Scientific Support Unit (SSU) is to:
 - Examine and manage crime scenes in order to preserve, locate, retrieve, package and submit forensic exhibits for further examination
 - Enhance and identify recovered fingerprint marks from which evidence can be given at court
 - Process, analyse and record visual evidence and images, using video, digital and traditional techniques
 - Administer DNA, fingerprints, and other samples taken from offenders, victims and other persons
 - To maintain a technical support workshop providing a range of technical equipment that can be used in the pro-active collection of evidence and intelligence
- 2.4 The Forensic Science Service (FSS) provides for the specialist analysis of evidence, except for drugs and substance analysis, which is provided by the Laboratory of Government Chemists (LGC).

Structure

- 2.5 The Scientific Support Unit is part of HQ CID and is based at police headquarters with a team of scenes of crime officers working from each of the three divisions.
- 2.6 In charge of the unit is a civilian Scientific Support Manager (SSM) who is responsible for a mixed establishment of both police officers and civilian support staff.
- 2.7 The department consists of the following sections:

Fingerprint Bureau Administration

Video and Photographic Imaging Scenes of Crime Officers
Chemical Treatment Laboratory Technical Support Workshop

The structure of the department is further detailed within the organisational chart on page 6.

Performance

2.8 There are no BVPIs in relation to Scientific Support although there are local indicators relating to crime scenes attended, and DNA and fingerprints recovered. Figures given are for the period April 2001 to January 2002 inclusive.

Percentage DNA recovered against scenes attended	18.8%
Percentage DNA identifications against scenes attended	27.5%
3. Percentage Fingerprints recovered against scenes attended	26.8%
4. Percentage Fingerprint identifications against scenes attended	9.4%

2.9 In comparison to a selection of neighbouring and similar police forces the performance of the Wiltshire Constabulary is good:

Force	Total Force Strength	No. SOCOs	Crime Scene Exam per	Persons Charged per	Total DNA Hits	DNA Hits as % of total
A	1110	50	SOCO	SOCO	004	samples
Avon & Somerset	4412	52	646	302	881	11.37%
Cambridgeshire	1910	24	474	529	318	9.00%
Derbyshire	2698	39	422	439	425	6.54%
Devon & Cornwall	4387	32	330	450	291	2.8%
Dorset	2036	20	441	483	206	3.5%
Essex	4334	42	507	583	529	5.2%
Gloucestershire	1679	21	390	490	133	2.28%
Lancashire	4624	47	491	709	507	4.52%
Norfolk	2114	27	553	534	279	5.6%
Northamptonshire	1851	25	419	291	540	11.14%
Suffolk	1754	17	475	479	166	4.03%
West Mercia	3046	40	348	363	328	4.63%
Wiltshire	1742	18	487	498	253	5.57%

These figures are for the year 2000/1 and are compiled and analysed by the Home Office

- 2.10 In addition to these performance indicators, the SSU has also set service level agreements relating to DNA and fingerprint submissions/identifications. It also has informal targets for the turn around times of video and photographic processing.
- 2.11 In November 2000 the Fingerprint Bureau was subject to a District Audit Inspection and in May 2001 it was subject to an external quality audit carried out by ISOQAR consultants on behalf of the ACPO National Fingerprint Evidence Standards Project. Both audits resulted in favourable outcomes.
- 2.12 Stakeholders perceive that the service provided by the department is good, and that they are particularly courteous, skilled, professional and accessible.

Cost

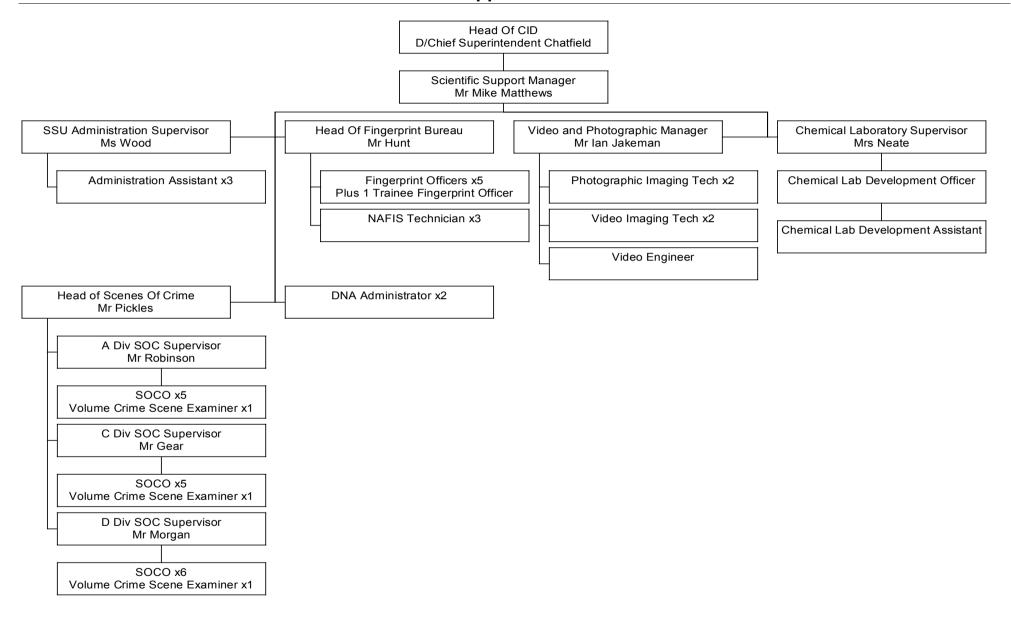
2.13 The overall cost of providing this service during the year 2000/1 was approximately £2.2m, the most significant being staff costs of just over £1m. Other significant costs were £170k for the NAFIS and Livescan fingerprint projects, £30k for the police surgeon/pathologist contract and approximately £912k for the analysis of forensic evidence, primarily by the Forensic Science Service, and Laboratory of Government Chemists. An income of £180k was received from the Home Office to fund the DNA expansion programme into volume crime.

Recent and Future Developments

- 2.14 The department has experienced a significant period of change over the past 2 or 3 years and these changes have had, and continue to have, a considerable impact on day to day operations, most notably:
 - National DNA Database (NDNAD) has necessitated a significant DNA expansion programme
 - Photographic and video imaging sections have both had major equipment upgrades
 - The National Fingerprint Identification system (NAFIS) has superseded the Automatic Fingerprint Recognition (AFR) system

- The Livescan fingerprint system has been successfully piloted and rolled out to all custody suites
- The Scientific Support Unit has taken responsibility for divisional scenes of crime units
- There has been a significant investment in technical support equipment with a view to forming a Technical Support Unit (TSU)
- The Fingerprint Bureau has implemented robust quality systems in order to comply with the requirements of the National Fingerprint Evidence Standards project.
- 2.15 The department makes good use of modern technology systems and in many areas it is at the leading edge of both forensic and video enhancement and imaging techniques.
- 2.16 Home Office funding has been used to facilitate the DNA expansion programme by upgrading the DNA IT system, employing a DNA administrator, three volume crime scene examiners and one DNA Analyst /Intelligence Officer.
- 2.17 In 1996 a joint project between ACPO and the FSS produced a guidance document entitled 'Using Forensic Science Effectively' (UFSE). This became the formative document for all Scientific Support Units and has been supplemented by several other guidance documents, most notably the European Crime Scene Management Good Practice Manual.
- 2.18 In July 2000, the HMIC produced a thematic inspection report upon Scientific and Technical Support, which was entitled 'Under the Microscope'. This report makes many recommendations, which the department has, or is in the process of, acting upon. An updated action plan is included as Appendix C.

Scientific Support Unit - Structure



3 Terms of Reference

Review of - Scientific Support

Scope

To examine the functions carried out in Scientific Support with a view to determining options for improvements in standards of service delivery and/or efficiency, and value for money. Following an initial assessment by the Force Quality Officer areas for review should include:

- Facilities, including best use of current facilities and possible alternative facilities. The review should take account of the progress of SPIG on this issue (1)
- Examination of the way in which SOC reports are linked to crime reports on the Crime Recording System, with a view to speeding up this process (2)
- Examination of the provision of SOC officers, including numbers, experience, costs (training/recruitment), expertise and role in the investigative process (3)
- Technical Support, including the optimum level of self sufficiency for the Force, opportunities for partnership working, awareness and demand for resources (4)
- Arrangements for storage of videos, DNA (including future needs) and other exhibits including exhibits from old cases (5)
- Provision and replacement of equipment (6)
- Identification of opportunities for income generation (7)
- Identification of opportunities for partnership arrangements (8)
- Arrangements for administration of budgets (9)
- Training and awareness (10)
- Ensure HMIC thematic 'under the microscope' action plan is re-visited (11)

Stakeholders

The following stakeholders have been identified:

ACC Complaints & Discipline- Supt Howlett Divisional Crime Managers Operational Officers Forensic Science Service Home Office (re NAFIS, DNA) Divisional and Departmental Commanders Negotiators - Supt Howlett Senior Investigating Officers – Traffic & Crime Victims of Crime Force PR Manager Laboratory of Government Chemists

Critical success factors

Delivering the service to clear standards by the most economic, efficient and effective means. Impact on detection rates

Methodology:

The review will use the agreed six-stage fundamental service review process. Following agreement of terms of reference, the Best Value Review Team (including the service liaison manager, and the PALO) will progress work on consultation, process mapping, benchmarking, and initial high level challenge to the service. Meetings of the review team will take place as necessary, to assess progress and to agree issues for further work. When the individual specialists have completed their work a further meeting will be held to discuss the main options for inclusion in the final report. The results of the review will be passed to the business benefits evaluator and accountant to produce costed options for change. The final report will be presented to Force Forum from where recommendations will be passed to Best Value Panel.

The review team:

Overall responsibility - Chief Inspector Warner (Best Value Manager)
Review co-ordinator – Inspector Griffiths (Best Value Review Manager)
Service liaison manager - Mr Matthews
PALO – Miss Scofield
Best Value Team members

Time-scales:

A report on this review, with options for change, will be prepared by 31st October 2001

4 Findings

Challenge Of The Service As A Whole

- 4.1 An overall challenge of the service was conducted using an approach based on CIPFA guidance that sets a number of key questions:
- 4.2 What is the purpose of this service? What is its current cost?

 Forensic science and the use of technical aids make a major contribution to the investigation and detection of crime. The cost of providing this service is in excess of £2.2m.
- 4.3 Should the service be provided at its present level, or at a higher or lower level, or at all, and why?

Forensic science is vital to the modern police service in that it provides a substantial volume of evidence upon which many convictions are based. Evidence described within the HMIC thematic report 'Under the Microscope', suggests that increasing the volume of crime scenes attended also increases the number of positive identifications pro rata. The level of service should continue at least at its present level.

- 4.4 *Is there a legislative requirement to provide the service?* This is a core investigative function.
- 4.5 Does the legislation require the police service to provide all or some of it? No legislation specifically requires this function.
- 4.6 What would be the impact if the service was not provided and why?

 There would be a significant fall in the detection of offences and the quality of evidence presented to the courts.
- 4.7 How else could the service be provided within the Constabulary?

 Minor crime scenes could be examined by police officers although this would involve significant additional training if it were to be effective. This would be very unlikely to be cost effective.
- 4.8 Does the service need to be delivered on a local basis?

 A local service needs to be available to examine crime scenes throughout the force area and provide support to investigating officers until each case is complete.
- 4.9 Could an outside provider deliver the service? If so, why?

 The Forensic Science Service and London Government Chemist, already provide the facility to analyse many evidential samples and exhibits on our behalf. Photographic processing could be delivered by an outside provider, although the force has recently purchased sophisticated developing equipment that allows very cost effective processing in a variety of formats. The security of evidence, the speed of turnaround, and an immediate availability to the force are important considerations in this regard.

Findings In Relation To Each Element Of The Review

- 4.10 Each element within the scope of the terms of reference will now be dealt with in turn. They will include, where relevant, the views of stakeholders, how other forces and organisations provide this or similar services and costed options for improvement.
- 4.11 A number of management issues have been uncovered during the review, some of which have been included within the main body of this report. Management issues that fell outside the scope of the review are included within Appendix B for the information of managers. Further information on every issue and the review in general, is available from the Best Value Unit.

Scope - Issue 1

Facilities, including best use of current facilities and possible alternative facilities. The review should take account of the progress of SPIG on this issue.

- 4.12 Apart from the newly refurbished fingerprint suite and photographic laboratory, the current Scientific Support Unit accommodation is poor. It largely consists of modified offices and is spread over two floors, making effective administration and supervision difficult. New scientific developments, such as the DNA expansion programme and NAFIS (National Automated Fingerprint Identification System), have all placed increasing pressure upon accommodation that was already at a premium. This has resulted in cramped, inappropriate working conditions with inadequate storage facilities and no flexibility to meet future demands.
- 4.13 Most other forces contacted during the review are in a similar position to our own with regard to outdated accommodation. Two examples of forces with better facilities are Essex and Devon and Cornwall.
- 4.14 Essex Police have good accommodation with a chemical laboratory, fingerprint bureau, photographic department and forensic intelligence unit all located at police headquarters. Long term storage is provided within a central store.
- 4.15 Devon & Cornwall Constabulary have a purpose built facility located within the headquarters site containing a chemical laboratory, fingerprint bureau and DNA management. A technical support unit (TSU) and a photographic unit are located elsewhere. Long term storage is provided at a purpose built store in Plymouth.

Option One

To provide alternative or enhanced accommodation for the scientific support unit.

- 4.16 Various possibilities are available within this option:
 - (i) a purpose built unit at headquarters or elsewhere
 - (ii) relocation to existing police or other premises
 - (iii) expansion within the headquarters site by relocating other functions
- 4.17 None of these alternatives have been thoroughly costed at this stage, although a new, purpose built construction would clearly be the most expensive with an estimated cost of £2.5m. The Strategic Property Improvement Group (SPIG) is currently considering options.

Scope - Issue 2

Examination of the way in which scenes of crime reports are linked to crime reports on the crime recording system, with a view to speeding up this process.

4.18 After a crime scene has been attended by a police officer, it can take several days for a record to be entered upon the force crime recording system (CRS). This is often frustrating to victims who require a crime reference number for insurance claims and other reference purposes. It is also a frustration to scenes of crime officers who need to complete their examination report as a page to the crime record on the system. Another disadvantage is that the crime record is not available for immediate analysis.

4.19 Management Issue (1)

A way should be found to create a crime record, and therefore a reference number, at the time of reporting a crime, or very soon after.

Scope - Issue 3

Examination of the provision of scenes of crime officers, including numbers, experience, cost (training/recruitment), expertise and role in the investigative process.

- 4.20 The scenes of crime examination service is provided from three divisional sites, each with a supervisor, and led overall by the head of scenes of crime based at headquarters. Each division currently has five scenes of crime officers (six in D division), and a volume crime scene examiner. Three of these sixteen members of staff are police officers.
- 4.21 Between April 2000 and the end of March 2001 the average number of jobs attended by each scenes of crime officer from each division was:

Division	Jobs per officer per annum
Α	554
С	469
D	846

Best practice, as identified by the Touché Ross report is a guideline figure of 720 jobs per annum. However, this figure relates to urban areas where travelling was not an issue. The above figures therefore translate well to Wiltshire geography.

- 4.22 From appointment it can take up to five years to become a fully qualified officer. Once qualified, they have an expert knowledge of each forensic technique at their disposal. They are then required to present such expert opinion at court, often during very serious cases.
- 4.23 It is the unanimous view of these officers, and many of their managers, that their salary is poor when compared with other forces and the level of training required of them. As a result this has become a significant issue, with staff feeling undervalued and demoralised. The failure of two appeals to increase their rate of pay has aggravated this situation considerably and it is the opinion of the review team that this matter should be addressed in order to maintain performance.
- 4.24 The following table illustrates the comparison of pay levels with other forces:

Force	Pay level				
Wiltshire	Single grade (W7) with range £17529 - £18297 plus 14% unsociable				
	hours and 5% standby allowance (total £21,773 at top of range).				
	Supervisor (W8) £19503 - £20523 plus allowances (total £24,422 at				
	top of range).				
Northants	Scale range 4-6 £15,328 to £19,043 plus 22.5% weekend/shift				
	allowance (total £23,327 at Scale 6)				
Essex	All police officers				
Derbyshire	APT&C grades 5 and 6 with a bar to achieve SO1 grade after 7 years				
	if qualified to national diploma level or 10 years if not academically				
	qualified.				
Devon and	Commence on their Scale 5 £16,341 to £17,847 will then progress to				
Cornwall	SO1 with experience and qualifications £20,439 to £21,765.				
	Supervisors are graded SO2. No unsociable hours allowance.				
Dorset	Scale Range £16,341 to £22,419 dependent upon experience and				
	qualifications plus shift allowance of 7.5% (total £ 24100 on top scale)				
	Plus Standby allowance of £24 per night on call.				
Cambridge	Career progression arrangement dependent upon experience and				
	qualifications: Scales 3 to 6 £13116 to £19710 plus 14% shift				
	allowances and on-call allowance (total £25615 on top scale).				

	Senior SOCOs manage the unit- Scale SO2 £23070-£26337 plus an allowance for being on call. * NB the Force is considering a completely separate pay scale for this specialism (as they have already done with IT) due to difficulty in recruiting.
Norfolk	Scale Range 4 to 6 dependent upon experience and qualifications: £14,307 to £19,710 plus shift allowance of 16.5% and enhanced pay of £2497 for callout (total £25,461 on top scale)

- 4.25 A total of ten scenes of crime officers have left the service over the last four years. Of these, four were police officers retiring and six civilian support staff.
- 4.26 An examination of exit interview records of scenes of crime officers leaving the constabulary revealed the following:
 - 1 Mr D. stated he was very contented with role and would come back. Has found alternative work at higher salary. Reason for leaving given as poor salary and poor career and promotional prospects.
 - Ms S. stated she felt undervalued within Wiltshire. Had compared salary with others attending national course in Durham. Most others had significantly higher salary when allowances included. Left for higher pay and to move to area with lower cost of living.
- 4.27 Exit interviews are not available for the following, but managers have given their reasons for leaving as follows:
 - Mr G. left once to become a SOCO on higher pay with Thames Valley. Returned after five years onto reduced salary. Resigned again to take up better paid employment with Honda.
 - 4 Mr C. trainee SOCO transferred to Lancashire for increased salary and cheaper housing.
 - 5 Mr M. left for other employment, no reason available.
 - 6 Mr A. left for other employment and felt undervalued.
- 4.28 There are currently no arrangements for career progression to reward experience and the gaining of qualifications, although there is now a separate role of volume crime scene examiner at W5 grade. Scenes of crime officers simply start and continue at the grade of W7. This compares unfavourably with the role of fingerprint expert within the same unit, which has a career progression arrangement ending with a grade of W9 once fully qualified.
- 4.29 In future it is probable that scenes of crime officers will be required to become members of the Register of Forensic Practitioners as a prerequisite to giving evidence at court. This membership includes a pass/fail competence test by an outside assessor with reassessment every three years.
- 4.30 At present they are not trained to the level of crime scene manager for major incidents, this function being fulfilled solely by scenes of crime supervisors. This additional role could be considered as part of a career progression programme.
- 4.31 It is recommended that consideration is given to developing a career progression which could start at the level of Volume Crime Scene Examiner and rise, with experience and qualification, to the level of fully qualified Scenes of Crime Officer. This could be expected to occur over a period of five to six years. Consideration could also be given to adding the responsibility of Crime Scene Manager for which an additional qualification would be required.

Option Two

Develop a career progression arrangement for scenes of crimes officers

Cost

- 4.32 The cost of this option would be dependent upon whether or not the additional qualifications suggested are considered desirable and whether or not this would increase the range of pay higher than W7.
- 4.33 The following is an illustration of the possible costs should the top range pay level increase to W8. It assumes that supervisors also rise from W8 to W9 and a one third/two thirds split between officers graded W7 and W8. In time there would also be a number of trainees at grade W6, should this become part of the career progression.

	Current Number		Total Staff Cost	Current Total Cost	Projected Number	Projected Total Cost
Head of Scenes of Crime	1	W10 £26,892	£32,786	£32,786	1	£32,786
SOC Supervisor W8	3	W8 £23,811*	£28,744*	£86,232	0	
SOC Supervisor W9	0	W9 £26,168*	£31,790*		3	£95,372
W7 SOCO	16	W7 £21,234*	£25,582*	£409,312	5	£127,910
W8 SOCO	0	W8 £23,811*	£28,744*		11	£316,184
SOC Assistant	3	W5 £14,982	£17,604	£52,812	3	£52,812
Total				£581,142		£625,064
					Additional	£ 43,922

^{*}Includes 14% shift and 5% stand-by allowances plus employer costs.

Measurement

- 4.34 For each member of staff staying beyond the five years required to fully train them, there would be a saving of up to £18,000 for each five-year period they remain with the service.
- 4.35 The increase in experience, and the continuous maintenance of professional standards required through the register of forensic practitioners, should result in an increasing level of positive identifications and a subsequent increase in detection rates.

Option Three

To civilianise the three remaining police Scenes of Crime Officers

4.36 Three police officer scenes of crime officers remain within the force, one post per division. All the remaining positions have been successfully transferred to support staff positions. There are now no compelling reasons for police officers to continue in this role, although in the short term there may be a requirement to maintain experience levels whilst many of the support staff members are relatively new.

4.37 Advantages

- Reduced cost
- Equality between scenes of crime staff (police officers paid more for the same job).

- Three experienced police officers can be returned to core duties
- An efficiency saving
- Reduce the loss of experience caused by scenes of crimes officers returning to core duties

4.38 Disadvantages

- Potential loss of experienced scenes of crimes officers
- Loss of 'police' expertise and knowledge
- More likely to leave the service than police officer SOCOs

Cost

4.39 The full staffing costs of a police officer is £32,399 per year. For three posts this amounts to £97,197. A civilian scenes of crime officer at the current grade of W7 costs £25,582 per year, a saving of £6817 per year, or £20,458 for three posts.

Measurement

4.40 This option should produce savings without compromising the level of service provided. The level of measurement would then relate to the number of identifications achieved. For divisions, the three extra experienced officers would be an outcome, although their impact upon core policing would be difficult to directly relate to overall performance.

Scope - Issue 4

Technical Support, including the optimum levels of self-sufficiency for the force, opportunities for partnership working, awareness and demand for resources.

- 4.41 ACPO and the Home Office have recommended that, by April 2003, all forces should have a technical support facility. This should be self-sufficient in staffing and equipment in order to respond to national and force initiatives such as the 'Reduction in Volume Crime'. This review has found that, whilst the constabulary has purchased a substantial amount of specialist equipment as it moves to achieving this objective, there are outstanding issues in relation to staffing and accommodation.
- 4.42 The review revealed that a lack of dedicated TSU staff is having an impact upon the effective deployment of technical support equipment. In March 2000, 8 officers around the force were given a level of training with regard to the deployment of this equipment. Since then a number of these officers have moved posts and are no longer available to support divisions. The result of this is has been that the vast majority of deployments have been made by the force video engineer or the video and photographic manager. This is in addition to their pre-existing full time role. The demands being placed upon them, (approximately 200 requests to install technical equipment each year), have effected their capability to complete their primary role.
- 4.43 The force video engineer operates the technical support workshop from a small inadequate office situated on the ground floor at headquarters. It is estimated that the workload for this engineer is split as 10% video engineering and 90% technical support work. The impact of this situation is that the regular servicing of machines has not been taking place as it should (e.g. vulnerable persons and custody area tape machines).
- 4.44 In general, stakeholders believed that the force should have a largely self-sufficient TSU and they were not in favour of using police officers assigned from other tasks to undertake this function. Stakeholders were also concerned that there are currently no on-call arrangements for out of hours technical support, which is especially important in an emergency.

- 4.45 An advantage of having a dedicated TSU would also be that they could attend tasking and co-ordinating meetings under the NIM (National Intelligence Model), potentially saving many hours of surveillance effort by suggesting alternative means of evidence and intelligence gathering options.
- 4.46 Two alternatives available to improve the service are to train more police officers in the skills required, or to employ a small, dedicated team of full time technicians.
- 4.47 At the time of writing this report, a plan to develop an effective TSU was being prepared. This is likely to include the proposal to employ up to four new members of staff to create a largely self-sufficient unit.

Option Four

To develop an effective Technical Support Unit

a) Provide a regular training process for police officers to ensure skills remain available to the force

4.48 Advantages

- Will provide improved integration of TSU into the investigative process
- Enhances the existing skills of police officers
- Enables divisions to manage their own resources
- Police officers being better able and better trained to deal with the deployment of equipment in dangerous situations (armed sieges, covert operations against dangerous subject's etc).
- No increase in staff requirements

4.49 **Disadvantages**

- Training and re-training costs
- Gives police officers additional tasking, taking them away from their primary role
- Finding officers with the necessary health & safety and electrical skills
- Constant staff changes in this specialist area

b) Create a largely self-sufficient TSU in line with the increasing demand

4.50 Employ four new members of staff to create a fully functioning TSU.

4.51 Advantages

- Will establish an effective TSU in line with 'Under the Microscope'
- The specialist skills regarding deployment, health & safety, electrical work practise etc. can be dealt within one specialist department
- Will permit the staff to gain a wide range of skills in deployment and evaluation of new devices for the benefit of the force
- Provides linkage in option 5 if this is proceeded with
- Provides a level of resilience to match demand and resources
- Will make it easier to utilise specialist staff across divisional boundaries
- Will allow the force Video Engineer to concentrate on his primary functions as per the business case, which initiated the original employment

4.52 **Disadvantages**

Cost of staff

Cost

- 4.53 Basic TSU training would be undertaken by NPT at an approximate cost of £1,500 per week but would need to include abstraction costs. The training of eight further police officers would therefore cost £12,000 with further cost each year thereafter to maintain resilience. The cost of training fewer specialists would be less expensive without the same problem with resilience. Considerable expertise would also be built over time. The cost of training four members of staff would be £6,000.
- 4.54 The posts likely to be contained within the proposed plan to form a dedicated TSU would cost as follows (grades are dependent upon evaluation):

Post	Grade	Total Staff Cost
Technical Resource Supervisor	W9	£26,715
Technical Resource Engineer	W8	£24,274
Technical Resource Engineer	W8	£24,274
Technical Resource Administrator	W5	£18,074
Total		£93,337

Measurement

4.55 The changes in this option could be measured in terms of surveys and deployments with a record of results. If 4(b) is then taken forward then the time saving for more expensive costs of using a police officer as compared to a support staff member would give a level of measurement.

Scope - Issue 5

Arrangements for storage of videos, DNA (including future needs) and other exhibits including exhibits from old cases

- 4.56 When interviewed, stakeholders gave almost unanimous support for the centralisation of the management and storage of exhibits and video/audio tapes. This is in line with option 1 of the best value review of divisional administration.
- 4.57 In the meantime the storage of forensic special property remains the responsibility of scenes of crime officers. Ideally this should become the responsibility of divisional special property clerks. They could then take control of these items and prepare them for storage and despatch whilst keeping interested parties informed of exhibit movements. This will leave the scenes of crime officers free to work on tasks that involve using their scenes of crime expertise.

4.58 Management Issue (2)

That the storage of forensic special property becomes the responsibility of divisional special property clerks.

Scope - Issue 6 Provision and replacement of equipment

4.59 Wiltshire Constabulary has invested in a considerable amount of technical support equipment. This is borne out by the fact that many forces in our region frequently use our facilities. It is recommended that the practicalities of using our force as a regional leader should be explored. Surrounding forces could continue to use the imaging technical expertise of Wiltshire Constabulary by each force sharing contributions on a subscription basis to the purchase of 'state of the art equipment.' This will reduce the capital

expenditure of other forces, whilst giving them access to modern equipment and leading technical proficiency. See Option Five.

Scope - Issue 7 Identification of opportunities for income generation

- 4.60 The SSU has developed several mutually beneficial partnership agreements with other regional forces and other agencies such as the fire service. It is generating steady income from Foster and Freeman for product development and training services provided by the chemical laboratory supervisor and from the fire service for the provision of photographic services.
- 4.61 It is possible that, given the right accommodation and sufficient staffing levels, the department could further exploit the expertise and leading edge technology at its disposal and generate more income from sub-contracting work from other forces and local authorities.
- 4.62 Comparison with other forces has not identified further opportunities for income generation except for Northamptonshire, who charge a small amount for the provision of photographs to the CPS and Norfolk who assist HM Customs and Excise in mobile telephone analysis.

Scope - Issue 8 Identification of opportunities for partnership arrangements

- 4.63 The SSU maintains a great deal of expensive equipment and now also has the benefit of some staff with very specialist skills. Most other forces are also developing similar expertise and as a result there may be opportunities to work in partnership with other forces and partners with regard to equipment, facilities and staff skills. However, there are currently no formal arrangements in place within our police region and these would need to be developed.
- 4.64 Forces in the Northwest of England have developed partnership arrangements but this remains the exception. For instance, Essex has previously considered working in partnership with other forces to purchase technical equipment. However, due to the fact that such equipment would often be required at short notice they have decided not to pursue such a route. Also, the vast majority of equipment is in almost constant use within Essex, which would potentially reduce the benefit of having a "regional" type store of equipment. The former regional TSU was used to provide the force with a TSU capability prior to the formation of the National TSU, and one reason for the change in this situation was because each force needed immediate access to their own equipment. They consider that there may be some scope for very expensive and unusual items being purchased regionally (e.g. unusual siege equipment, etc) as long as it could be called upon at very short notice.

Option Five

For the force to investigate the potential for partnership with other forces in relation to equipment, facilities and staff skills.

4.65 Advantages

- Potential to reduce costs
- Potential to generate income

• Potential to gain access to equipment and skills from other forces in line with best value principles and government policy

4.66 **Disadvantages**

- Initial cost
- Potential to not being able to gain access to shared equipment etc as a result of demand

Cost

4.67 At this stage it is not possible to give costs or savings that can be achieved until specific initiatives are proposed.

Measurement

- 4.68 For all partnership agreements any evaluation process will need to ensure that the outcomes produce the desired benefits of the partnerships. Again this evaluation cannot be developed until there are specific proposals.
- 4.69 If the facilities available to scientific support are improved, then the force will have a greater opportunity to expand partnership arrangements in the medium to long term. All forces face similar increases in demand and the potential for mutually beneficial projects must be considered.

Scope - Issue 9 Arrangements for administration of budgets

- 4.70 Funding for the SSU forms part of the HQ CID budget managed by the Head of CID. However, for practical purposes, the scientific support manager (SSM) has been devolved responsibility for the funds allocated for forensic services, SSU overtime, training, travel, subsistence and consumables.
- 4.71 The SSM maintains several locally produced spreadsheets to monitor expenditure against allocated budgets, and in exceptional circumstances he is able to vire funds from one cost centre to another.
- 4.72 The SSM has recently been given responsibility for SOCO overtime expenditure. However, as this was previously a divisional responsibility there is no historical data to base future requirements on and the SSM intends to monitor this years overtime budget of £5,000 for civilian staff and £4,000 for uniformed personnel using a locally produced spreadsheet.
- 4.73 The Head of CID has on occasion sought agreement from the Director of Finance to carry over any overtime budget overspends brought about by major enquiries or operations. In recognition of the growing importance and the value of having an effective forensic science facility, extra funding was allocated to scientific support for the financial year 2001/02.
- 4.74 By far the largest expenditure for scientific support is on forensic science services and in the past there has been a significant overspends against allocated budget, particularly when sole authority for expenditure rested with SIOs. Whilst it is difficult to accurately forecast the expected demand for scientific services, the SSM is putting in place more robust monitoring procedures and looking to eliminate any unnecessary expenditure.
- 4.75 Investment in items of equipment such as Quasar is helping to drive down the costs of using the forensic science services (FFS charge £82 per hour or £175 per item).

4.76 Other forces generally manage their budgets in a very similar way to Wiltshire. There are no suggestions for change.

Scope - Issue 10 Training and awareness

- 4.77 Currently officers do not receive any formal forensic awareness training, although they do receive some information from divisional scenes of crime officers. It is, therefore, clear that police officers could have a greater awareness of scientific support, particularly the importance of DNA, crime scene preservation and footprint evidence.
- 4.78 In Devon and Cornwall, probationers receive scientific support awareness traning using an SSU folder, which has been produced to test their knowledge. This is "signed off" by a scenes of crime supervisor at end of stage 7. The folder requires them to research answers for themselves with directed classroom discussions taking place at stage 5. Further training is then provided through divisions.

4.79 Management Issue (3)

Further ways should be sought to increase the awareness of police officers in relation to scientific support. In particular in relation to DNA, crime scene preservation and footprint evidence. Considerations could include the use of a scientific support workbook for probationers as in Devon and Cornwall.

Scope - Issue 11 Ensure HMIC thematic 'Under the Microscope' action plan is re-visited

4.80 The force action plan in relation to 'Under the Microscope' has been re-visited and each area has been or is currently being addressed. An updated plan is included at Appendix C.

Service Improvement Plan Scientific Support

Part One - Action Plan

PALO: Ms Angela Scofield Key Service Manager: Detective Chief Superintendent Gary Chatfield

No	Option (To include, cost, predicted efficiency saving,	Actions (incl dependencies)	By Whom	Completion Date	Current and Target Performance
	linkage to plans, Forum and BV Panel decisions)				(numbered)
	To provide alternative or enhanced				
1	accommodation for the scientific				
	support unit.				
	Develop a career progression				
2	arrangement for scenes of crimes				
	officers				
3	To civilianise the three remaining				
3	police Scenes of Crime Officers				
4	To develop an effective Technical				
4	Support Unit				
	For the force to investigate the				
5	potential for partnership with other				
J	forces in relation to equipment,				
	facilities and staff skills				

Service Improvement Plan Scientific Support

Part Two - Progress/Evaluation

PALO: Ms Angela Scofield Key Service Manager: Detective Chief Superintendent Gary Chatfield

	Option	Progress Summary	Evaluation Of Outcomes
No	(To include, cost, predicted efficiency saving, linkage to plans, Forum and BV Panel decisions)	(include reference to relevant documents)	(include lessons learnt, best practice with reference to relevant documents)
	To provide alternative or enhanced		
1	accommodation for the scientific support unit.		
2	Develop a career progression arrangement for scenes of crimes officers		
3	To civilianise the three remaining police Scenes of Crime Officers		
4	To develop an effective Technical Support Unit		
	For the force to investigate the		
5	potential for partnership with other		
	forces in relation to equipment,		
	facilities and staff skills		

The Local Government Act 1999 requires best value authorities, including police authorities, to secure continuous improvement in the way in which they exercise their functions, having regard to a combination of economy, efficiency and effectiveness. In order to do this they must review their functions in order to identify areas for improvement.

The required content of a best value review is outlined by statutory instrument, and government guidance sets out the approach to reviews. This approach has become known as 'the fours Cs', namely to:

- Challenge whether each service is needed or could be better delivered in some other way;
- Compare performance and processes with those of other organisations to determine best practice;
- Consult with a range of interested parties/stakeholders on their experience and needs relating to the provision of the service; and
- Compete with other providers or potential providers of the service to test whether it could be delivered more effectively through another source.

In Wiltshire, a corporate review of the force was undertaken prior to implementation of the act and a five-year programme of service reviews developed. Structures and reporting arrangements were put in place and additional members of staff recruited to carry out the review work. It was agreed that reviews would be carried out in accordance with a six-stage methodology, although adherence to this model should not become rigid.

The nucleus of the review team for all best value reviews is the same, but for each individual review a Police Authority Liaison Officer (PALO) and at least one manager from the area under review is added to the team.

A quality baseline assessment of scientific support, based on the EFQM model, was undertaken as the first stage of the review. The assessment focussed on specialist work carried out both at headquarters and in divisions and involved interviews with 38 members of staff. The Quality Report provided an overview of the areas under review and served two purposes:

- i) to identify those issues which needed further investigation during the review
- ii) to provide a developmental tool for managers' future use.

The EFQM model is a self-assessment model and to that extent the Quality Officer's report relies on the views of the people interviewed by him, corroborated where possible by other sources.

The Quality Report revealed many issues that required further investigation and so defined the scope of the review. These were included within the terms of reference and approved by Force Forum and the Best Value Panel.

Each issue has been reviewed from the perspectives of a consultation with key stakeholders, benchmarking (comparison) with other forces and organisations, and a study of processes employed within the constabulary (contained within the Management Services report). The results of these review elements are summarised within the findings section of the report. Access to the full reports can be obtained from the Best Value Unit.

Best Value Review - Scientific Support Management Issues

Three management issues have been identified within the scope of the review:

Management Issue (1)

A way should be found to create a crime record, and therefore a reference number, at the time of reporting a crime, or very soon after.

Management Issue (2)

That the storage of forensic special property becomes the responsibility of divisional special property clerks.

Management Issue (3)

Further ways should be sought to increase the awareness of police officers in relation to scientific support. In particular in relation to DNA, crime scene preservation and footprint evidence. Considerations could include the use of a scientific support workbook for probationers as in Devon and Cornwall.

The following are further management issues identified during the review but fall outside its scope and are reproduced here for the information and action of managers as appropriate, (it is acknowledged that some have already been addressed):

Management Issue (4)

Where fingerprints are recovered from crime scenes, elimination prints are almost always required. However, it appears that scenes of crime officers are not always taking elimination prints, even if the occupants are present at the time. Fingerprint specialists therefore waste time having to request prints, re-check fingerprints when elimination prints arrive and continually check outstanding prints. A police officer has then to take these prints. It is recommended that SOCOs ensure they take elimination prints wherever possible as described in their work instructions.

Management Issue (5)

It was suggested that the roles and responsibilities of SIO, SOCOs and SOC Crime Scene Manager should be more clearly defined in order to avoid any unnecessary misunderstanding caused by differing approaches. For instance, some SOCOs feel that their professional judgement is being questioned or overlooked by some senior investigating officers (SIOs).

Management Issue (6)

The Fingerprint Bureau has recently implemented a robust quality system in order to meet the requirements of the ACPO National Fingerprint Evidence Standards Project. However, this quality system does not extend to other related sections such as the work of SOCOs, chemical lab and administration. Recent quality audits suggest that the fingerprint bureau could meet the ISO 9000 quality standard and attaining registration would certainly raise the profile of the department and add further credibility to any evidence presented at court. Consideration could be given to extending the quality system employed within the fingerprint bureau into the work of SOCOs, chemical lab and administration to achieve standardisation across all sections. Once this is complete ISO 9000 registration could be sought.

Management Issue (7)

TSU equipment is estimated to be worth £120,000 and is loaned out to various members of our organisation. There are no accurate records kept of these transactions other than retention in the memory of the force video engineer. A 'Hiretrack' database has been purchased and is awaiting data input and bar coding of all equipment. Once properly installed the unit will have an effective stock control and location system in place for TSU equipment.

Management Issue (8)

The force should consider Fire Investigation Training for SOCOs, all forces questioned for this review provide this. Most forces questioned also sponsor membership of the Council for Registration of Forensic Practitioners.

Management Issue (9)

That access to SOCIMS and Genie software is provided through the network. This will assist administrative staff and provide valuable information in relation to forensic science submissions to OICs.

HMIC Thematic – Under The Microscope Action Plan

Recommendation	Key Tasks Necessary to implement recommendation	Current status	Lead Department	Target Date	Lead Officer
1. ACPO and Chief Officers should ensure their strategies and supporting Policies on the use of Forensic Science to combat volume crime are up to date, known and understood by officers.	Forensic submissions policy document written.	To be entered on to force intranet together with general Scientific support overview.	Scientific Support	March 2002	Mr Matthews
2.Chief Officers should ensure scientific staff are subject to regular performance reviews.	PDR's completed for all staff and personal performance figures produced for Soco.	PDR's completed on annual basis.	Scientific Support/Personnel	N/a	Mr Matthews
3. Chief officers should urgently review their systems to ensure sampling policies are both clearly understood and implemented.	Force wide instructions and posters in custody units to ensure compliance. All arrests monitored and officers not complying advised via supervisor.	Process for monitoring in place	Scientific Support	Ongoing	Mr Matthews
4. Chief officers should ensure they have systems in place in order to comply with the requirements of H.O.Circular 16/95	Legislation introduced on 11th May 2001 removed the requirement to delete samples and fingerprints no longer required.	Database advised of acquittals and fingerprints retained in-house.	Scientific Support		Mr Matthews
5. Chief Officers should urgently review their SOCO attendance policy for volume crime and their DNA submission criteria.	Current policy reviewed in view of DNA expansion project.	Revised policy being written for publication on forces intranet.	Scientific Support		Mr Matthews Mr Pickles
6.Forces should establish properly constructed SLAs between fingerprint bureau and investigators.	Agreed turn round times for bureau are included in Scientific Support guide.				Mr Hunt
7.Chief officers should ensure they have processes in place for dealing with: - Timely submission of DNA samples and fingerprints - Recording details relating to identification of DNA/fingerprints. - Investigation of DNA and fingerprint	Submission of fingerprints and DNA monitored for all persons arrested. All DNA/Fingerprint identifications recorded in scientific support. Nominated officers in each division are responsible for ensuring action for DNA/Fingerprint hits.	Systems in place and operating.	Divisional Superintendents	Ongoing	

HMIC Thematic – Under The Microscope Action Plan

identifications.	As above but delays with analytical work by FSS cause up to 4 months delay.				
 Supervision of such investigations to ensure expediency. Where those processes exist, review and fully implement them. 	by 1 do dade up to 4 months delay.				
8.Chief officers should review current systems for managing footwear evidence.	New networked system being introduced force wide to provide database of scene and offenders footwear.	System due for implementation March 2002.	Scientific Support	March 2002	Mr Matthews Mrs Neate
9.Chief officers should ensure all intelligence opportunities afforded by scientific support are realised.	DNA analyst appointed to provide intelligence information.	In post but being trained.	FIB		D/Insp. Capstick
10. ACPO should review its committee structure to accommodate the strategic and policy issues arising from the use of covert methods against volume crime, and ACPO Crime Committee should address the issue of National Guidance for TSUs.	Dedicated officer appointed to record and monitor all surveillance operations.				D/Chief/Supt. Chatfield.
11. Chief Officers should have adequate monitoring systems in place to ensure compliance with Codes of Conduct and use of technical equipment.	Software purchased to monitor issue and use of all surveillance equipment.	Business case submitted for TSU staff yet to be agreed.	Scientific Support		D/Chief/Supt. Chatfield.
12 ACPO and PSDB should develop a list of approved technical equipment and procurement guidance.	No force action.				
13. All forces should implement and effective means of performance measurement for technical support at force and BCU level.	Paper system coupled with computerised database to monitor use to be introduced.	Computerised database and monitoring system now in place.	Scientific Support		Mr Jakeman
 14. Appropriate awareness training in relation to scientific and technical support should be given. at the time of joining. During initial training for the role. 			Training Department.		

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- During training for specialist roles.			
 During managerial an supervisory 			
training			
 as part of general refresher training. 			
15. ACPO should deliver an agreed	No action required by this force.		
national common minimum standard for			
all training in relation to scientific support			
and ensure it is effectively evaluated.			
16 The Home Office and ACPO should	No action required by this force.		
examine the provision of forensic and			
technical support training nationally.			