# Scientific Support Services in the Police Service of Northern Ireland

Third follow-up review of the inspection recommendations

October 2009







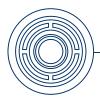
# Scientific Support Services in the Police Service of Northern Ireland

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### List of abbreviations

**ACC** Assistant Chief Constable

CID Criminal Investigations Department

CJ Criminal Justice

CJI Criminal Justice Inspection Northern Ireland

CSI Crime Scene Investigator

**DCU** District Command Unit (in PSNI)

**DFM** District Forensic Manager

**DNA** Deoxyribonucleic acid

**FSNI** Forensic Science Northern Ireland

**FSS** Forensic Science Service (in England)

**GMP** Greater Manchester Police

**HMIC** Her Majesty's Inspectorate of Constabulary

Investigating Officer

IT Information Technology

MoU Memorandum of Understanding

MSF Most Similar Force

**RMS** Records Management System

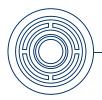
**NFRC** National Footwear Reference Collection

**NPIA** National Police Improvement Agency

**PSNI** Police Service of Northern Ireland

**SICAR** Shoeprint Image Capture and Retrieval

SSM Scientific Support Manager



### **Foreword**

Criminal Justice Inspection Northern Ireland (CJI) and Her Majesty's Inspectorate of Constabulary (HMIC) published A Review of Scientific Support Services in the Police Service of Northern Ireland in 2005. The report called for changes and improvements in some critical areas including the need for a more corporate approach to the management of forensic exhibits. Improving the business relationship with Forensic Science Northern Ireland (FSNI), as its main provider of specialist forensic services, was pivotal to overall service improvement. Inspectors found that morale amongst Scientific Support staff was low and recommended changes in terms of grading, training, internal management/communications and standards of accommodation.

A total of 25 recommendations were made in the report of which 19 have been deemed as achieved in the three follow-up reviews.<sup>1</sup> A further two recommendations have been transferred for monitoring as part of the follow-up reviews of other inspections.

Inspectors have seen significant progress in relation to the tracking and storage of forensic exhibits, including the development of a corporate property management model and the deployment of district property officers. Significant changes have taken place within the Scientific Support Services unit with new management arrangements and a clearer promotion and career pathway for staff.

There are four recommendations which remain outstanding and require additional actions before they can be classified as achieved. These relate to improving the quality control of exhibits and continuing to work with Scientific Support staff to improve communication and their working environment. Inspectors are confident that these issues are receiving the priority and attention of the Police Service of Northern Ireland (PSNI) and therefore do not propose to undertake any further follow-up reviews.

The Chief Constable should continue to receive regular internal progress reports until all the recommendations have been implemented.

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Chief Inspector of Criminal Justice in Northern Ireland

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October 2009

Criminal Justice Inspection
Northern Ireland
a better justice system for all

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<sup>1</sup> The initial inspection report from CJI and HMIC was published in 2005 with subsequent follow-up reports published in 2007 and 2008. This report is the third of the three reviews



### **CHAPTER 1:**



### Introduction

This report sets out the findings of the Inspectors' third review since implementation of the recommendations commenced in 2005. It classifies each of the remaining recommendations as achieved, partly achieved or not achieved.

The use of scientific evidence to support crime investigation and detection can be broken down fairly simplistically into a three-stage process:

- Stage I evidence recovery from the crime scene;
- Stage II development and turn round using specialist processes, e.g. fingerprint and DNA identification of suspects; and
- Stage III conversion of suspect identification into detected or cleared crime.

The first two stages of this process are the direct responsibility of the Scientific Support branch working either independently or with 'key' partners such as Forensic Science Northern Ireland (FSNI). Inspectors wish to acknowledge the progress that has been made by these 'key' players, in particular the Scientific Support branch of the PSNI, in terms of improving performance since the original inspection activity was undertaken.

A 'snapshot' of performance covering the 12-month period ending March 2009 shows how the performance of the PSNI against its Most Similar Force (MSF) group compares (see Appendix 1 for list of group members). The returns reveal that in terms of both the percentage of fingerprints and DNA taken at the scene, the Police Service of Northern Ireland (PSNI) is first out of six, which is consistent with performance at the last revisit (Appendix 1). Performance at the identification stage has improved in terms of fingerprints, being second out of six, and is above the MSF average. However, identifications from DNA taken at scenes remain below the MSF average and continue to be a cause for concern.

The 'snapshot' considers the PSNI's performance against MSFs for the conversion of suspect identification into detected crime. The PSNI is ranked sixth out of six for fingerprints and DNA. There is however two different types of detections - one where the detection is made on the basis of evidence recovered at a crime scene (primary) and one where an offence was detected other than that where the fingerprint or DNA was recovered (secondary). A comparison with MSFs for primary detections – which is directly related to the work of scientific support services – shows that whilst the PSNI is still ranked sixth out of six, performance is very close to three other forces for fingerprints and four other forces for DNA. The big discrepancy relates to secondary detections (see Appendix 1).

### **CHAPTER 2:**



# **Progress on recommendations**

### **Recommendation 3**

PSNI should set up a properly resourced unit for fatal and serious vehicle crashes and collisions, to reflect the service that currently exists in Great Britain, i.e. a dedicated crash and collision investigation unit ....a sufficient number of roads policing staff should be adequately trained in collision investigation, commensurate with training provided in England and Wales and which follows the Association of Chief Police Officers (ACPO) manual of road death investigation.

This issue was addressed in detail by a joint inspection of Roads Policing undertaken by HMIC and CJI and published in June 2008. The PSNI Action Plan agreed to have a PSNI Collision Investigation Unit fully operational by April 2010. Progress on this recommendation will be assessed as part of the proposed follow-up review of Roads Policing in early 2010.

Status: Transfer to CJI/HMIC Inspection of Roads Policing.

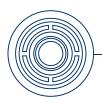
### **Recommendation 5**

PSNI, in co-operation with FSNI, should develop and deliver a bespoke forensic science training package.

Comprehensive training for all operational staff should be improved as a matter of priority.

Since the last revisit, Inspectors are pleased to report that there has been considerable investment in the provision of forensic science training with the introduction of a range of training activities aimed particularly at operational staff. Forensic trainers are now performing a key role in both the delivery and quality assurance of forensic science training.

A supervisors' course has been developed targeted at operational PSNI Sergeants and Inspectors to raise knowledge and understanding of both forensic science issues and crime scene management. Starting in April 2009, two courses are running each week for eight staff comprising both classroom and practical scenario-based elements. The PSNI intends to train in excess of 450 staff and the programme is due for completion in the summer of 2010.



The Service has invested in the provision of e-learning in volume crime investigation that includes burglary, vehicle crime and criminal damage. In addition, student officers continue to benefit from a week of their initial training being dedicated to the role of forensic science in the investigation process. This week includes input by FSNI staff, who are committed to retaining this arrangement and are open to further involvement as appropriate.

The Crime Training Department has developed a corporate package for delivery by district trainers and includes the use of the 'Think Forensic' DVD, produced by the Forensic Science Service (FSS). Forensic science trainers provide a key role in the quality assurance of the delivery of this package.

Inspectors acknowledge that some of these activities are recent and most are ongoing. However, the investment made by the PSNI demonstrates both drive and commitment to ensure the needs of the recommendation are achieved. Inspectors are satisfied that the recommendation can be signed off as achieved.

Status: Achieved.

### Recommendation 9

Scientific Support staff should be actively involved in raising the standard of accommodation to ensure that their needs are met in the long term.

The standard of accommodation has been improved across most Districts since the last revisit. For example, the Crime Scene Investigators' (CSI) office in Dungannon has been refurbished and new accommodation has been provided in Newtownards.

The relocation of the Photography Unit to Mahon Road, Portadown, has been completed. However, financial constraints have prevented the relocation of the Fingerprint Bureau to Knocknagoney in Belfast. This should remain a priority for the Police Service.

Status: Achieved.

Matters concerning Scientific Support staff need to be acknowledged and resolved as a matter of priority either directly with the Scientific Support Manger (SSM), through a CSI working group, or alternatively via the Serious and Volume Crime User Groups.

Since the last revisit in 2008, Inspectors are pleased to note that progress has been made in the provision of clear opportunities for development and promotion for Scientific Support staff. There is now a clear pathway for staff from trainee CSI to higher CSI and through to managerial and specialist positions. This is a very positive step. At the time of the revisit, the process for selection of District Forensic Managers (DFMs) was almost complete with successful candidates awaiting notification.

Despite the introduction of the Head of CSI and structures in place to promote consultation through all levels within Scientific Support Services, discussions with focus groups continue to give rise to concern over the effectiveness of these structures. For example, a perceived reliance of managers to communicate through email rather than face to face. Concerns were also expressed around the emphasis on some performance indicators and the potential to skew activity away from the intended outcome thereby 'hitting the target but missing the point'. For example, the number of fingerprints recovered from scenes does not necessarily identify the effectiveness of a CSI. However, that is how performance of a CSI is measured and it could drive CSIs to retrieve any fingerprint in order to achieve their target.

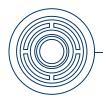
This is a genuine concern for CSIs and one which does not appear to have been effectively resolved. It indicates that effective processes to address matters concerning CSIs are yet to be fully established. Whilst not a focus of the re-visit inspection, Inspectors advise that managers should review the range of performance measures for CSIs to ensure that they drive activity towards improving actual service delivery.

Concerns were raised with Inspectors in a number of interviews around the provision of refresher training for CSIs. Continued professional development, particularly in the fast moving world of forensic science is an important issue. Inspectors urge the PSNI to ensure that satisfactory arrangements are in place to ensure that CSIs remain up-to-date and appropriately accredited.

Whilst management training was not a focus of this inspection, significant investment has been made by the PSNI in developing the CSI career pathway. Inspectors suggest that the Police Service ensures appropriate training and other development opportunities are put in place for managers in order to maximise the full potential of this new approach.

The conclusion of the Inspectors is that whilst progress has been made, this recommendation remains 'live' and cannot be signed off.

Status: Partly Achieved.



PSNI should work with key stakeholders, particularly FSNI, to determine what databases are required, where they should be located and how access can be managed.

The report of the previous revisit focused on the integration of the PSNI fingerprint database with those held on *Ident1*, the system used in the rest of the United Kingdom. Inspectors can report a Memorandum of Understanding (MoU) has been agreed between the PSNI and the National Police Improvement Agency (NPIA) in relation to this integration which is subject to the availability of funding in order to progress to completion.

Discussions have recently taken place between PSNI and FSNI in relation to information gathered on footwear. The Shoeprint Image Capture and Retrieval (SICAR) system operated by the PSNI Footwear Unit holds intelligence information for Northern Ireland. If a shoe mark cannot be identified, the PSNI can also access the National Footwear Reference Collection (NFRC). FSNI maintain a footwear reference collection in its laboratory known as SoleMate.

The issue of note for Inspectors relates to those footwear marks which are either collected by FSNI scientists at crime scenes (approximately 30 per year) or sent directly to FSNI by PSNI staff without going through the PSNI Footwear Unit. Any omission or undue delay in updating the PSNI footwear database is a potential problem in this regard. CJI has recently made a corresponding recommendation to FSNI that all crime databases held by FSNI, which are compatible with those held by the PSNI, should be subject to a shared service

plan. The linking of the footwear databases in both organisations should be a priority.

Inspectors have received assurance that the PSNI is working with FSNI to resolve the risks around this issue. It is therefore proposed that future monitoring of progress on this issue can be undertaken as part of the follow-up review of the CJI inspection of FSNI. It is accepted by both organisations that this is an issue which requires joint action.

### Status:

Transfer to CJI Inspection on FSNI.

Improved communication should be established between the Scientific Support Manger (SSM) and Scientific Support staff including more effective line management arrangements.

Inspectors are pleased to report that since the last revisit, the PSNI has responded positively to ensure that co-location of CSIs and Criminal Investigation Department (CID) officers is applied across the Service. Structures have been put in place which align CSIs more closely with Districts and should ensure more efficient and effective working. District Forensic Managers (DFMs) are available in each District with responsibility for delivery of performance and service of CSIs allocated to those Districts. Reporting to the District Crime Manager, the DFM will still be managed on professional matters by the Head of CSI.

Inspectors consider that the key aspect of this recommendation has been achieved and that communication issues can be addressed within the scope of Recommendation 10.

Status: Achieved.

### **Recommendation 19**

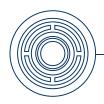
Senior branch managers should reassess the physical location of some CSI bases, in consultation with the relevant DCU Commanders, via the Volume Crime User Group, to deliver more effective and efficient CSI working across the Police Service as a whole.

The location of CSI bases has been assessed as part of the programme to align CSIs with districts and includes the redistribution of staff across districts. For example, CSIs in 'E' District operate from Mahon Road, Portadown and also from Newry. Staff were released from Ballynafeigh (South Belfast) to 'C' District where there had previously been no dedicated CSI function.

At the time of the revisit, the only District which did not have accommodation considered adequate was 'D' District in Carrickfergus and negotiations were taking place in order to remedy the situation. Since the revisit, Inspectors are now aware that the Carrickfergus CSI office is ready for operation.

Inspectors are satisfied that the benefits of co-location have been acknowledged by the Police Service and that action has been taken.

Status: Achieved.



Continued monitoring and action on quality control and continuity of evidence issues is necessary to ensure that trends and patterns within the Police Service are identified and actioned.

Processes are in place between the FSNI and the PSNI fingerprint bureau to continuously monitor the quality of submissions. Details of non-compliances are referred to Districts and Head of Serious Crime branch as appropriate and are monitored via the Chief Constable's Volume Crime Conference. Dedicated Disclosure Officers are appointed to quality assure forensic submissions in serious crime cases. District Property Managers have received training in the quality assurance of forensic submissions and forensic trainers are working with FSNI staff to improve documentation relating to packaging.

The PSNI is also developing a Generic Corporate Property Management model through the District Property Management and Storage Project. The project is wide ranging covering all aspects of the property management process. It includes for example, the introduction of an auditing and weeding process, a programmed retention, integrity, security and continuity inspection process as well as defined responsibilities for all those involved in the management of property. Inspectors acknowledge that the project has the potential to make a positive impact on both this recommendation and Recommendation 23.

Performance improvements have been registered across all areas of the PSNI and Inspectors are satisfied that the PSNI's internal performance monitoring regime and compliance targets set in this area will continue to drive improvements.

However, there are still improvements to be made. The recently published CJI inspection on Police Custody<sup>2</sup> identified that there were samples located in Custody Suite fridges and freezers that had been lodged for a number of months 'and it was unclear whether they were awaiting disposal, onward transit to Forensic Science Northern Ireland (FSNI) or whether they had been forgotten about by the Investigating Officer (IO)'.

Status: Partly Achieved.

### **Recommendation 23**

Exhibits and samples should be correctly packaged and labelled as any errors will result in delays.

A recent report from FSNI (Quarter 1 2009-10) shows that the number of non-compliances attributed to PSNI submissions has decreased and is part of a downward trend. The number of corrections required to be made by FSNI front counter staff working with the PSNI Submissions Unit and the submitting officers has also decreased. Inspectors would wish to see further evidence of a continuation of this positive trend before this recommendation can be signed off.

Status: Partly Achieved.

<sup>2</sup> Police Custody – The detention of persons in police custody in Northern Ireland, Criminal Justice Inspection Northern Ireland, June 2009 – www.cjini.org

A common numbering and identification system, in barcode format and easily scanned, should be agreed and introduced by both PSNI and FSNI.

Whilst not using a common barcode, the FSNI and PSNI have identified a solution to deliver a unique numbering and identification system through the barcode scanning process incorporated within the property management facility of the Niche RMS system. Niche Records Management System (RMS) was compatible with the FSNI case management system at the time of the revisit. The sharing of barcode information and subsequent use as a unique identification method was under test between both the PSNI and FSNI. The system was scheduled to go live by the end of May 2009 however, since the revisit Inspectors are aware of a delay until late 2009 (the new system will become operational with the launch of the next stage of the Causeway IT system).

Inspectors are disappointed that insufficient progress has been made to sign off this recommendation, but recognise that software compatibility issues can take time to resolve. Whilst still graded partly achieved, Inspectors are satisfied that this recommendation is close to achieving sign off.

Status: **Partly Achieved**.

### **CHAPTER 3:**



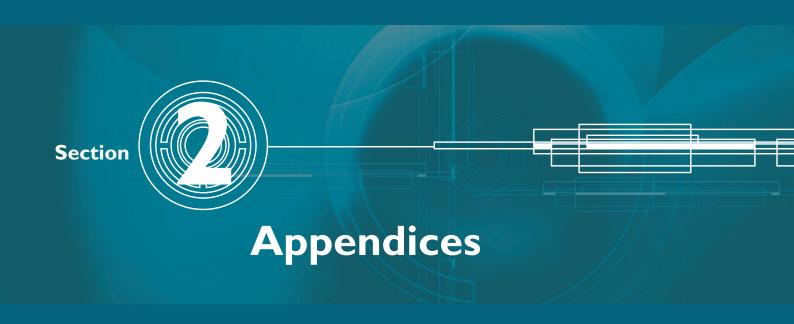
## Conclusion

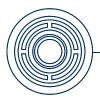
Inspectors are pleased to report that good progress has been made since the second review in 2008. Four additional recommendations have been achieved. Of the remaining six recommendations, one is near to completion and two interlinked recommendations on forensic exhibits continue to receive attention by the PSNI. Two recommendations dealing with roads policing and collaboration with FSNI on databases are being addressed through the follow-up review process of other inspections.

Inspectors are confident that the Police Service will continue to progress the outstanding recommendations and therefore do not proposed to conduct a further follow-up review. It is advised that the Chief Constable should monitor the outstanding recommendations until they are achieved.

The main areas for attention by the Police Service are:

- working with FSNI to deliver a more effective and efficient service to the criminal justice system (Recommendations 3, 12 & 24);
- continuing to develop a more corporate approach to Scientific Support Services particularly in relation to property management and quality control (Recommendations 20 & 23); and
- improving communication processes within the various Scientific Support units and addressing the root causes of staff concerns as expressed to Inspectors (Recommendation 10).





# **Appendix 1: Most Similar Force Group**

During 2006, the Police Standards Unit developed a most similar force group (MSF) to compare the operational performance of the PSNI against 'similar' police forces in England and Wales. The MSF group comprises:

- Nottinghamshire Police;
- West Yorkshire Police;
- Greater Manchester Police;
- Northumbria Police; and
- West Midlands Police.

### Comparison to MSF group - conversions to detections

			Fingerprints				DNA	
	% Fingerprint Taken at Scene	% Identifications	% Conversions To Detections (primary detection only)	% Conversions to Detections (total primary and secondary detections)	% DNA Taken at Scene	% Identifications	% Conversions To Detections (primary detection only)	% Conversion: to Detections (total primary and secondary detections)
Nottinghamshire	31	22	33	59	8	28	48	136
GMP	32	25	43	50	17	34	46	64
Northumbria	24	38	64	79	18	39	65	98
West Yorkshire	22	33	33	92	7	42	48	173
West Midlands	32	20	33	36	12	33	49	55
PSNI	39	35	31	35	19	24	45	50
Average	30	29	41	59	14	33	51	96



# **Appendix 2: Methodology**

The third revisit was conducted between 20-22 April 2009 by three members of staff representing the Chief Inspector of Criminal Justice Inspection for Northern Ireland (CJI) and Her Majesty's Inspectorate of Constabulary (HMIC). Verbal feedback on findings was subsequently provided to the PSNI's Assistant Chief Constable (ACC Crime Operations) and the Service's Scientific Support Manager.

The methodology used comprised the following key stages:

### **Stage 1 - Understand the context**

A desktop review of key PSNI papers relating to the implementation of the recommendations was conducted.

### **Stage 2 – Brief the Service**

The ACC (Crime Operations) was briefed concerning the scope and focus of the inspection.

### Stage 3 - Carry out reality checks

The report's findings are drawn from examination of documentation and extensive interviews with staff from different specialisms within the Scientific Support branch, regional and headquarters staff within the PSNI, together with additional interviews with 'key' external stakeholders.

During the course of their fieldwork, the representatives of the Inspectors undertook interviews, discussions, meetings and visits to gather evidence to support findings within the inspection.

### Stage 4 - Publish a report

A draft report was sent to the Chief Constable with the opportunity to comment further on matters of factual accuracy and content. This final report is published on the CJI website.

# Appendix 3: PSNI Action Plan for CJI/HMIC follow-up review of Scientific Support - March 2009

Target Completion	November 2009	November 2009	October 2009	November 2009	October 2009	Ų
- G	ž	ž (	Ŏ			fic TBC
Lead	Head of CSI	Head of CSI	Head of Crime Ops HR	Head of PSNI Fingerprint Bureau	Head of Scientific Support	Head of Scientific Support
Action	Performance measures will be explored with MSF group. Further consultation will be undertaken with staff groups and representatives on	Suitable training packages are under review and a programme for CSI will be developed.	Availability of training for recently appointed managers will be reviewed.	PSNI will establish a protocol in which all footwear impressions developed at or received directly into the FSNI will automatically be copied and sent to the PSNI Footwear Unit as a matter of course.	An instruction will be issued to all Districts to audit the contents of fridges and freezers in Custody locations to ensure that all samples	can be accounted for. An audit led by District Forensic Managers of the contents of District cold stores will be conducted.
Outstanding issue as identified by CJI/HMIC	Inspectors express concern at reaction from staff at focus groups to the performance management scheme and suggest a review of the range of performance management for the range of performance management for the conformance management of the confo	CSI. Concern was also expressed regarding availability of refresher training and the availability of	training for newly appointed managers.	Inspectors wish to see the PSNI footwear database populated with all footwear marks from crime scenes including those recovered by or sent directly to FSNI.	Inspectors make reference to an inspection of police custody suite and samples stored there as evidence that further action is	necessary in this area.
Detail	Matters concerning scientific support staff need to be acknowledged and resolved as a matter of priority either directly by the SSM through	a CSI working group, or alternatively via the Serious and Volume Crime User	Groups.	PSNI should work with key stakeholders, particularly FSNI, to determine what databases are required, where they should be located and how access can be managed.	Continued monitoring and action on quality control and continuity of evidence issues is necessary to ensure that trends	and patterns within the Police Service are identified and actioned.
Rec.	10			12	20	

Rec.	Detail	Outstanding issue as identified by CJI/HMIC	Action	Lead	Target Completion Date
23	Exhibits and samples should be correctly packaged and labelled as any errors will result in delays.	Links directly to Recommendation 20.	Continuous monitoring will be undertaken with FSNI of the quality of submissions.	Head of CSI/forensic Submissions	On-going
74	A common numbering and identification system, in bar code format and easily scanned, should be agreed and introduced by both PSNI and FSNI.	Inspectors recognise further progress against this recommendation can only be achieved when the DSM1 phase of the causeway system goes live.	PSNI and FSNI will each be able to scan and recognise common barcodes from the date of implementation of Causeway phase DSM1.	Head of ICS.	January 2010

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