NSW POLICE



Business Case

Forensic Information Management System (FIMS)

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1 Introduction

Forensic procedures contribute significantly to the detection and reduction of crime in NSW. Advances in Forensic Science and the need to assist investigations of crime are resulting in a greater emphasis being placed on proactive policing and the implementation of efficient information management systems.

NSW Police is currently failing to effectively manage the forensic workflow process from collection of samples to results analysis and the discovery of links. These deficiencies were highlighted in the NSW Ombudsman's Report into the operation of the Forensic Procedures Act 2000. The deficiencies identified in the report are most evident in the area of DNA database links but equally apply to other forensic procedures such as fingerprints, ballistics, and hair and fibre samples. The report makes 146 recommendations to improve DNA information management and workflows. This proposal will address 32 of the 38 DNA processing recommendations and 7 of the 47 procedural recommendations.

This proposal will provide a fully integrated system, which will more effectively manage identification links between offenders and scenes, scene-to-scene, categories of crime and geographical locations. These would be centrally recorded and made available to police investigators and forensic service providers throughout NSWP. It will enable the forensic evidence process to be streamlined and managed in a holistic fashion with forensic information aggregated and matched against multi-faceted offender profiles. The data will be managed in a rigorous manner that satisfies Court evidentiary rules.

It is proposed to adopt a disciplined staged approach to the project and deliver the core integrated process to manage DNA results provided by the NSW Health Division of Analytical Laboratories (DAL), followed by the delivery to all LACs throughout NSWP and expansion to other forensic disciplines and service providers.

DNA evidence is proving to be an increasingly valuable tool in the fight against crime and it is imperative that NSWP maximises its use of this technology. The provision of an integrated Forensic Information Management System, coupled with electronic interfacing to major forensic service providers such as DAL, is a fundamental requirement to achieve these aims.

1.1 Background and Purpose

Forensic Crime Scene Intelligence represents the future of Policing in relation to solving major crime. Currently NSWP does not effectively manage the workflow process from collection of samples (such as DNA) through to analysis of the results, and the discovery and dissemination of links. This directly impacts on the ability of police to take advantage of forensic evidence to assist investigations and to use the information provided by links in a timely manner. This means that the full value of the intelligence being provided by forensic procedures is not being harnessed to lead to better policing outcomes.

In addition to identified shortcomings in the current process identified by the NSW Ombudsman, major changes to the DNA forensic workflow process are being scheduled with the introduction in 2006 of a centralised FSG unit to coordinate the submission of all samples to the NSW Health Division of Analytical Laboratories (DAL), the outsourcing of DNA testing work, and the integration of the NSW DNA database with the national

CrimTrac NCIDD database. The application of forensic procedures is also likely to escalate as greater emphasis is placed on proactive policing especially in relation to combating terrorism.

All these initiatives need to be underpinned with an effective and efficient information management system that not only tracks and monitors the forensic process and results matching but also allows the increasingly complex nature of the intelligence gained as a result (e.g. multiple matches across multiple scenes) to be clearly communicated to operational police so that they can act on it with immediate effect.

1.2 Scope and Outcomes

This proposal will provide an integrated system, which would enable predictive and retrospective identification links between offenders and scenes, scene-to-scene, categories of crime and geographical locations to be centrally recorded and made available in a structured environment to operational police investigators and forensic service providers. Further functionality to be included is a comprehensive reporting system for forensic activity, performance indicators for forensic personnel and sample result reporting. It will enable the various discrete forensic data to be aggregated and matched against offender profiles. It will manage this data in a rigorous manner that satisfies Court evidentiary rules.

The Forensic Information Management System (FIMS) will deliver a work flow management system that manages the exhibit life cycle from collection and tagging of an exhibit through to finalisation. The system will present multiple different views to different users. It will link to other corporate systems and external service providers to provide a closed loop system in terms of managing forensic exhibits collected at crime scenes. The system will be based on proven industry standards and a Web Services architecture will be adopted to define an end-to-end business process and ensure that the system is not platform or vendor specific.

It is anticipated that the system will significantly increase the capacity of NSWP to solve major crime and to revisit previously unsolved crimes by providing the capacity to link and reconcile previously unrelated pieces of evidence. The benefits will be realised by improvements in FSG's response times, turnaround times, identification rates and brief preparation times for Courts.

The system will:

- Address the deficiencies highlighted in the NSW Ombudsman's Report into the operation of the Forensic Procedures Act 2000.
- Provide NSW Police with forensic intelligence on DNA (and potentially Fingerprint, and Ballistics) identifications by linking suspects between cases
- Increase the number of positive identifications and the time required to achieve them leading to more effective policing outcomes especially in relation to solving crime and preventing potential terrorist activity
- Electronically interface with NSW Health and proactively manage the efficient processing of DNA samples
- Electronically interface with Courtlink and DAL to provide timely management of the destruction of DNA samples in accordance with Court directives

- Assist with the DNA backlog at DAL as all exhibits will be prioritised and actively managed
- Enable supervisors and investigators to more effectively monitor and review forensic case work
- Improve DAL and NSWP capability to effectively manage DNA samples
- Provide Police and DAL standardised methods of recording cold and warm links and eliminations.

This project will deliver the following measurable outcomes and specific deliverables:

- Increased and timely Forensic Information to support investigations.
- Better LAC monitoring of forensic evidence resulting in increased efficiency and accountability
- Increased LAC detection of crime and identification of more offenders across LAC boundaries
- Provide FSG with an integrated case management system able to be utilised by all forensic disciplines, (i.e. Forensic Biology, Ballistics, Fingerprints, Crime Scene) coupled with the controls needed to effectively monitor case work
- Reduction of DNA backlog at DAL through effective and efficient management of forensic exhibits
- Provide FSG with an information system which meets the needs of NATA Accreditation in ISO 17025
- Capture the number of occasions forensic evidence is collected using force.

1.3 Strategic Alignment

The proposed project supports wider Government policy priorities and NSWP business objectives, service delivery outcomes and agreed performance measures (both ICT and non-ICT) as outlined in the NSWP Results and Services Plan (RSP). The proposal also aligns closely to the corporate and IM&T Strategic Plans.

The core strategic objectives of the project can be summarised as follows:

- Provide NSW Police with forensic intelligence on DNA by facilitating the linking of identifications between cases
- Increase the number of positive identifications leading to more effective policing outcomes especially in relation to solving crime and preventing potential terrorist activity
- Electronically interface with NSW Health and proactively manage the processing of DNA samples
- Assist to reduce the DNA backlog at DAL by streamlining the process
- Electronically interface with Courtlink and DAL to provide timely management of the destruction of DNA samples in accordance with Court directives
- Assist with Accreditation of the Forensic Services Group by National Association of Testing Authorities, Australia
- Enable supervisors to more effectively monitor and review forensic case work
- Provide audit mechanisms for FSG systems such as exhibits and assets.

1.4 Government Objectives

At the national level the Australian Police Ministers Council has a strategic objective of reducing the incidence of crime by implementing proactive initiatives including enhanced intelligence systems. It also seeks to utilise effective solutions and opportunities to improve policing. This proposal contributes to the achievement of these objectives while promoting enhanced interoperability and data sharing.

The Information Management & Technology (IM&T) Blueprint for NSW: A Well-Connected Future document reinforces the NSW Government's commitment to seeking new and cost-effective ways to deliver social programs, services and information. A Forensic Information Management System supports all of the key government objectives but, in particular, it significantly increases the ability of NSWP to take advantage of the strategic value of information and clearly demonstrates that NSWP is effectively using technology in the fight against crime.

1.5 NSWP Objectives

1.5.1 Alignment with NSWP Corporate Plan 2004-2007

The Corporate Goal of NSW Police is;

"A safe NSW with a respected police force working with the community to reduce violence, crime and fear"

which is expressed in the NSW Police Corporate Plan 2004/07¹ according to the government priority of "A Safer New South Wales."

This will be accomplished by making the best use of technology to increase operational and administrative productivity and increasing criminal investigation capacity based on scientific method, technology and the effective use of data.

The Corporate Plan specifically identifies the need to **improve work practices** in support of front line policing and the intention to **increase positive investigation outcomes** through enhanced criminal investigation capacity, improved detection processes, and use of cutting edge approaches and technologies (e.g. DNA). The provision of an integrated Forensic Information Management System is a fundamental requirement to achieve these aims.

The project works towards the National Institute of Forensic Science (NIFS) approach of a standard process for all forensic jurisdictions. The project will also support the provision of real time management of DNA profiles obtained through the Forensic Procedures Act, 2000.

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¹ NSW Police Corporate Plan 2004-2007, "People Achieving Results", June 2004

1.5.2 Alignment with IM&T Strategic Plan 2003/04-2007/8

The NSWP IM&T Strategic Plan² details five high level strategies³.

A theme adopted by the NSW Police executive, to determine which IM&T projects and strategies should be included in the Plan, was whether they will produce a sufficient dividend (of reduced crime or fear of crime) for the technology investment to be made.

The Forensic Information Management System (FIMS) Project directly contributes to crime reduction by significantly shortening the process of identifying POIs and apprehending offenders in major crime (and high profile) cases and recidivists in volume crime cases.

The FIMS Project directly supports the IM&T strategy as follows:

NSWP IM&T Strategy ²	Contribution
Enhanced Information Management	Allow the integrated capture of exhibits, forensic process status and matches. This will improve access to forensic information, reduce duplication, reduce reliance on manual recording and provide improved management information to FSG and NSWP in general.
2. Focused Renewal	Deliver a flexible business-oriented technical solution to initially manage DNA evidence that will provide a strategic platform for the integration of other forensic processes.
	The associated procedures and processes will be reviewed to ensure that new system is used in line with FSG business objectives and delivers improvements to the management of forensic evidence.
3. Improving Operational Support	Facilitate the rapid identification of suspects (POIs) and their early apprehension. This in turn will reduce operational demands on NSWP to attend crime scenes, particularly for volume crime where the majority of cases are committed by a small number of high risk recidivist offenders.
	Significantly reduce the effort in workflow and administration of the current DNA process thus freeing FSG personnel to perform other more important operational activities and forensic service providers to deliver better throughput.
4. Upgraded Governance,	Improve compliance and accountability as a result of integrated exhibit and forensic process data capture and a significant

o Enhanced Information Management

Improved Operational Support

² Information Management & Technology Strategic Plan 2003 – 2008, NSW Police, Draft v0.7, January 2004

³ The five strategies are:

o Mainframe Replacement Program

o Focused Renewal

Upgraded Governance, Compliance and Accountability

NSWP IM&T Strategy ²	Contribution
Compliance and Accountability	reduction in manual processes associated with DNA. The automated workflow possible with FIMS will enable the achievement of these improvements and will help to identify where further improvements can be made.

1.6 Project Schedule

A detailed project plan including the key milestones to be achieved at various stages of the implementation strategy is attached at Attachment 6. Broadly the project is divided into a number of key stages as illustrated in the high level representation below. This schedule will be refined during the project initiation phase as the project execution charter and plan are developed and in line with the contractual agreements with third party suppliers and agencies.

		Year/Quarters										
	1	2	3	4	1	2	3	4	1	2	3	4
Analysis Phase												
Detailed Requirements												
Supplier Procurement												
Interface Specifications												
Phase 1 Delivery												
Phase 1 Testing												
Phase 1 Implementation												
Phase 2 Business Case Approval												
Phase 2 Regional Roll Out												
Phase 2 Other Forensic Processes												

1.7 Costs and Benefits

The total capital cost of the project is \$4.9 Million with a net present value of \$1.1 Million. Total recurrent expenditure is expected to be approximately \$670,000 over the five year life of the project. Balanced against these cost will be direct benefits to NSWP of \$6.9 million. The project will be cash positive by Year 3 and exhibit an Internal Rate of Return of 16%. A summary of the expected costs and benefits is given in the following table:

	\$ Year 1 2006/07	\$ Year 2 2007/08	\$ Year 3 2008/09	\$ Year 4 2009/10	\$ Year 5 2010/11	\$ Total
			2008/09	2009/10	2010/11	
Capital Cost	\$902,400	\$3,997,000				\$4,899,400
Recurrent Cost			\$670,000	\$670,000	\$670,000	\$2,010,000
Total Cost	\$902,400	\$3,997,000	\$670,000	\$670,000	\$670,000	\$6,909,400
Benefits / Savings			\$2,829,200	\$2,914,076	\$3,001,498	\$8,744,774
Net Cost /	-\$902,400	-\$3,997,000	\$2,159,200	\$2,244,076	\$2,331,498	\$1,835,374
Benefit						

Table 1 Cost/Benefit Summary Table

The main benefits to NSWP will accrue from:

- Reduction of the DNA backlog at DAL and better triaging of exhibits
- Increased detection of crime and identification of more offenders across LAC boundaries
- Increased and timely Forensic Information to support investigations
- More effective monitoring and prioritisation of case work and exhibits
- Provide NSWP with an information system which meets the needs of National Association of Testing Authorities, Australia (NATA) Accreditation in ISO 17025.

The anticipated benefits have been captured in the Benefits Realisation Register and are summarised in the following table:

Anticipated Realisable benefit	Expected \$ value
Elimination of manual processes for managing the forensic process	\$357,000 PA
Significant reduction in criminal investigation time	\$1,365,000 PA
Increased number of positive identifications	Measurable reduction in crime.
Prioritisation of investigations and exhibits	\$422,700 PA
Reduction in effort to follow up the status of forensic evidence	\$600,000 PA
Improved visibility of the exhibit process	Improved business processes
Performance improvement mechanisms	Improved efficiency
Improved tracking of evidence	Improved efficiency
Compliance with Court Orders for Destruction	Improved business processes
Improved auditability of the forensic process	Improved business processes

The Benefits Realisation Register (Attachment 7) provides more detail on the metrics and methodologies for achieving these benefits.

1.8 Risks

The proposed solution is a packaged application approach delivered as the result of the standard IT systems procurement exercise and therefore represents a minimum risk to NSWP. This judgment is supported a risk assessment conducted using the Department of Commerce online Risk Profile Assessment tool⁴. The risk rating derived for this project is 22 which indicates that the proposed solution is rated as relatively low risk.

⁴ http://www.smarterbuying.nsw.gov.au/gateway

While there are risks associated with delivery a project of this size and scope, they can be minimised through the implementation of the ICT Project Risk Management Framework and the ICTMB Governance process. A strong focus on risk mitigation will be taken commencing at project inception and continuing throughout the project. The primary risks identified with the project include the following:

- Scope creep may be hard to control as expectations within Police expand
- The result does not support all the required functionality.
- The system is not consistent with key legislation.
- Unavailability or loss of key staff prior to completion of the implementation.
- There may be a lack of executive and team commitment to the project, including suppliers, BTS staff and users.
- The ESB does not deliver the required functionality.
- Implementation of the system may not be completed on time or to budget.
- Insufficient recurrent funding is available to maintain the system.

The overall risks of the project will also be limited by adopting a staged and phased approach to the project. After the completion of each phase an assessment will be conducted as to the viability of moving to the next phase. In addition, the project has been divided into two stages to minimise the risk and exposure to both NSWP and Treasury. At the end of Stage 1 a revised Business Case will be developed. At that point both NSWP and Treasury will have the capacity to evaluate the prior stage of the project and objectively determine whether additional funding should be committed.

1.9 Impact of Not Proceeding

Failing to proceed with this project is a high risk strategy that ignores serious issues relating to the management of forensic evidence and leaves NSWP exposed to potentially damaging situations as highlighted in the Ombudsman's report. At worst, it could leave NSWP open to charges of failing to act whilst in possession of information that could have prevented a major crime from being committed (as happened in the UK in the case of the Soham murders in 2002 and highlighted in the subsequent Bichard Inquiry⁵).

Significant legal issues also arise with regard to ensuring the timely destruction of DNA material in compliance with the Forensic Procedures Act and Court Orders. Currently the processes employed to comply can result in lengthy delays leaving NSWP potentially in breach of the legislation.

In a recent case in South Australia, the Judge ruled that the accused had been arrested unlawfully on the basis of a match against a DNA sample that should have been destroyed. The South Australia Forensic Procedures Act, in common with the equivalent NSW Act, directs the Commissioner of Police to destroy forensic material including the results of any analysis, as soon as practicable after the discontinuance of a charge. Penal consequences attach where information is intentionally or recklessly retained on the database in circumstances not authorised by the Act.

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⁵ The Bichard Inquiry report 22 June 2004, prepared for the UK House of Commons, HC653 (www.bichardinquiry.org.uk)

The SA Commissioner, Mal Hyde, has acknowledged that Police illegally kept DNA records and has come under pressure to explain why identified deficiencies in the process had not been satisfactorily addressed. A similar situation could easily arise in NSW so action must be taken now to prevent this

1.10 Approval

As the Project Sponsor, I will take responsibility for the successful delivery and management of the business outcomes of this project, including:

- Approval of the business case;
- Acceptance of organisational responsibility for managing delivery of the project, business process changes and benefits realisation; and
- Commitment to the role and responsibilities of Project Sponsor outlined in Attachment 3 of this business case.

(Project Sponsor's signature and date)

Assistant Commissioner Carlene York, Director FSG

2 The Case for Change and Project Purpose

Forensic Crime Scene Intelligence represents the future of Policing in relation to solving major crime. Currently NSWP does not effectively manage the workflow process from collection of samples (such as DNA) through to analysis of the results, and the discovery and dissemination of links. This directly impacts on the ability of police to take advantage of forensic evidence to assist investigations and to use the information provided by links in a timely manner. This means that the full value of the intelligence being provided by forensic procedures is not being harnessed to lead to better policing outcomes.

In addition to identified shortcomings in the current process, major changes to the DNA forensic workflow process are being scheduled with the introduction in 2006 of a centralised FSG unit to coordinate the submission of all samples to the NSW Health Division of Analytical Laboratories (DAL), the outsourcing of DNA testing work, and the integration of the NSW DNA database with the national CrimTrac NCIDD database. The application of forensic procedures is also likely to escalate as greater emphasis is placed on proactive policing especially in relation to combating terrorism.

All these initiatives need to be underpinned with an effective and efficient information management system that not only tracks and monitors the forensic process and results matching but also allows the increasingly complex nature of the intelligence gained as a result (e.g. multiple matches across multiple scenes) to be clearly communicated to operational police so that they can act on it with immediate effect.

2.1 Current Situation

The Forensic Procedures Implementation Team (FPIT) at FSG is responsible for the management of DNA database links. Unlike fingerprints and other forensic procedures, DNA results originate from an organisation (NSW Health DAL) external to NSWP. This has impacted the implementation of viable COPS system solutions to effectively record and report DNA results.

Currently, FPIT use an interim spreadsheet-based (Excel) system for publishing DNA and forensic procedures information on the NSWP Intranet. This mechanism assists LACs to monitor DNA links and provides some accountability but has limitations. The information provided relates just to DNA identification (Person Links) and it does not handle scene to scene links. The system also does not address cross LAC links effectively and the full value of the information and intelligence being provided by these forensic links is not being harnessed to lead to better policing outcomes.

FPIT are receiving increasingly more 'cold' links from DAL (a match of person's DNA sample where that person was not a suspect for the offence), approximately 60-70 are received a week, and the complexity of the information being received is also increasing (e.g. multiple matches at scenes). There is currently no effective system support for cold links and FPIT does not have the staff to resource alternative manual business processes. (Please refer to Attachment 9 for more detailed statistics relating to NSWP forensic procedures and the numbers of DNA links being made.)

Managing cold links is only part of the full DNA forensic workflow process from collection of samples to results analysis.

Other factors to be considered include the integration of Evidence and Exhibit Management solutions with COPS processes, the reduction of manual lookup and rekeying of COPS data, and improvements to the electronic exchange of data with DAL.

The lack of integration of Forensic Information across disciplines, the time taken to disseminate crucial information to investigators and the disjointed nature of the end-to-end process for managing forensic evidence seriously impacts on the performance of NSW Police and must be addressed. If this initiative is not progressed then the ability of NSW Police to exploit the real value of the forensic intelligence that it gathers will be compromised and the likelihood of meeting the corporate goals relating to improved work practices and the use of forensic processes significantly reduced.

Major changes to the DNA forensic workflow process are also in the pipeline with the introduction in 2006 of a centralised FSG unit to coordinate the submission of all samples to DAL, the outsourcing of the DNA testing work, and the potential to integrate the NSW DNA database with the National Criminal Intelligence DNA database (NCIDD) at CrimTrac. The management of DNA links is part of this wider complex business environment.

The provision of Forensic Information extends beyond the requirements for managing DNA links and encompasses all other types of forensic evidence such as fingerprints (LiveScan), ballistics (IBIS), gunshot residues, shoe prints, and hair and fibre analysis. Each of these forensic procedures generates not only evidence relevant to a particular crime scene but also information regarding linkages to other crime scenes and persons.

All these disciplines need to be underpinned with an effective and efficient information management system that not only tracks and monitors the forensic process and matching but also allows the increasingly complex nature of the intelligence gained as a result (e.g. multiple matches across multiple scenes) to be clearly communicated to operational police in a timely manner so that they can act on it.

This issue has been raised previously within NSW Police and various discrete business cases, process improvements and funding requests have been presented concerning the DNA forensic process. However, these approaches have not previously focused on delivering a long term strategic solution for the effective management of all forensic information that progresses the identified issues to a final resolution and delivers a suitable platform to allow disparate systems to be integrated in a standardised manner.

2.2 Opportunities

In its review of the Crimes (Forensic Procedures) Act 2000, the NSW Ombudsman made in excess of 140 recommendations ranging from modifications to the Act through to specific proposals in relation to the recording, processing and reporting of DNA evidence. This proposal directly addresses 27 percent of the recommendations made. Excluding the recommendations related to Legislative changes and training and development this proposal addresses in a complete and or partial manner 73 percent of the Ombudsman's process related recommendations. Further, the proposal will make a significant contribution to improving procedures by providing a more structured and formalised workflow. In this regard 23 recommendations will be addressed through updated SOPs and procedures introduced as part of the change management process implemented as part of the proposed system.

2.3 Project Purpose

The primary purpose of the Forensic Information Management System is to realise Government objectives for the efficient and effective use of forensic data. This proposal will provide an integrated system to address the limitations of the existing manual systems as well as address the recommendations of the NSW Ombudsman.

2.3.1 Alignment with NSW Government ICT Strategies

The NSW Government's vision for Information & Communications Technology (ICT), is:

"To become a world leader in using Information & Communications Technology to deliver Government services to the people of NSW"

The FIMS project will employ modern information and resource management technology to improve the front line service delivery of Government services to the people of NSW. IT supports the Government's principal ICT strategies and objectives as follows,

NSW Go	NSW Government Information & Communications Technology Strategy						
Number	Objectives/Benefits	NSWP FIMS Project Compliance					
1	To ensure that the Government's Public Sector Wide approach to ICT is adopted.	FIMS will electronically interface with NSW Health and Courtlink to enable the proactive management and efficient processing of DNA samples and the timely management of the destruction of DNA samples in accordance with Court directives. In the long term the proposed system will integrate a vast array of forensic service providers under a common ICT infrastructure.					
2	To improve Agency Executive management of ICT in order to achieve the Government's identified business objectives.	This proposal will enhance and underpin NSWP Executive management with an effective and efficient information management system that not only tracks and monitors the forensic process and results matching but also allows the increasingly complex nature of the intelligence to be applied effectively.					
3	To manage Government information throughout its life cycle as a valued resource, ensuring security, accuracy, integrity and timeliness.	This initiative will enable DNA information to be managed as a valued resource, ensuring security, accuracy, integrity and timeliness by electronically integrating the separate forensic processes together across the boundaries between agencies and commands within NSWP. This information will be available across the complete life cycle of the DNA processing from collection to dissemination of results.					

 $^{^6}$ IM&T Blueprint for NSW - A well connected future - Published: 1997, reaffirmed May 2000 in Premier's Memorandum 2000-12.

NSW Go Number	vernment Information & Commu Objectives/Benefits	NSWP FIMS Project Compliance
4	To create a Public sector wide ICT environment which facilitates improved design and delivery of Government services to meet community needs.	Through improved design FIMS will promote enhance service delivery and lead to increased capacity to solve crime and serve community needs for an effective Police Force. This will be achieved through improved turnaround of forensic processes and enhanced information to reduce criminal investigation time. It will allow potential suspects to be identified earlier, suspects to be eliminated from inquiries earlier, cases to be prioritised on the basis of available evidence, and allow greater co-operation and sharing of data.
5	To take advantage of existing and emerging information and telecommunications services to facilitate access to transparent solutions.	The FIMS system will provide the ability to record and audit the process effectively both within the NSW Police and DAL environments and across agency boundaries. It will deliver a transparent solution using existing information and telecommunications services and standards. It will provide open, standardised interfaces with other agencies such as NSW Health DAL and Courtlink that can be leveraged in future service deliver initiatives.
6	To ensure the efficient and effective operation of the ICT procurement life cycle.	Goods and services required for this project will be supplied according to NSWP purchasing and supply policies and procedures. The solution will be based on an existing software package or set of integrated commercially available software packages that would be provided by a private sector systems supplier and procured under an open Request for Tender.
7	To ensure that the community and public sector staff have the awareness and skills that are appropriate to gain maximum benefit from the increasing role of ICT in the delivery of Government services.	The proposed Change Management Program for this project reflects a 'cradle to grave' approach, ensuring the appropriate level of planning; stakeholder involvement, implementation and support can be effectively and comprehensively delivered. It will ensure that all stakeholders have the appropriate skills and awareness to maximise the benefits of the propose system.
8	To ensure that appropriate technologies are adopted in the Public Sector.	The proposed solution will be based around recognised ICT standards. The emphasis will be on procuring a proven solution that meets the key functional criteria, it cost effective, technically sound, and combines ease of use and system performance with security, data integrity and scalability.
9	To use ICT to promote economic, social and business development for the NSW community.	In the long term the proposed system will integrate a vast array of forensic service providers under a common ICT infrastructure. It will promote economic, social and business development by allowing private sector laboratories and forensic organisations to provide forensic services and results to NSWP in a consistent, standardised and cost effective manner. It will encourage competition by creating a market for th provision of forensic services that is independent of existing institutional constraints.

2.3.2 Alignment with NSW Police's Goals and Strategies

The FIMS project is aligned with the key priorities of the NSW Police Corporate Plan. The priorities of the plan in the areas of Crime Reduction, Rationalised & Improved Work Practices, Employee Job Satisfaction & Motivation, and Public Satisfaction, will be supported by the planned project outcomes.

The projects are also consistent with the Commissioner's Reform Agenda for reviewing and refining systems and processes across the organisation to ensure more efficient and effective support of front-line policing and improved standards of customer service.

The corporate objectives of the NSW Police Service are:

- Reduced crime and violence
- Efficient delivery of effective policing services
- A high level of public trust and confidence
- Increased public safety

The following Service Delivery Programs will support the achievement of these objectives:

- Community Support:
- To improve community safety and security, reduce crime and minimise the adverse effects of public emergencies and disasters.
- Criminal Investigation:
- To detect, investigate and reduce the incidence of crime.
- Judicial support:
- To provide efficient and effective court case management; safe custody; fair and equitable treatment to alleged offenders and victims.
- Common sub-program:
- Internal support services to provide effective, efficient infrastructure and systems.

The projects proposed in this Business Case will support the achievement of these objectives and service delivery programs by improving resource management, rostering and information management, thus contributing to,

- more effective and efficient delivery of policing services
- improvement of judicial support
- improvement of crime prevention.

2.3.3 Alignment with NSW Police IM&T Strategic Plan for 2003-2006

The NSWP IM&T Strategic Plan, details five high level strategies₈.

A theme adopted by the NSW Police executive, to determine which IM&T projects and strategies should be included in the Plan, was whether they will produce a sufficient dividend (of reduced crime or fear of crime) for the technology investment to be made.

The Forensic Information Management System (FIMS) Project directly contributes to crime reduction by significantly shortening the process of identifying POIs and apprehending offenders in major crime (and high profile) cases and recidivists in volume crime cases.

The projects of this business case are consistent with, and directly supportive of, the NSW Police Service Information & Management Technology (IM&T) Strategic Plan for 2001-2004. They directly support the constituent strategies as follows,

NSWP IM&T Strategy 1	NSWP FIMS Project Compliance.
Enhance Information Management	The FIMS project will directly contribute to enhancing information management within NSWP by:
	Building on a framework for managing information use and sharing
	Automating information exchanges, and
	Implement new technology and processes to improve process execution
	The proposed system will allow the integrated capture of exhibits, forensic process status and matches. This will improve access to forensic information, reduce duplication, reduce reliance on manual recording and provide improved management information to FSG and NSWP in general.
Improving Service	Facilitate the rapid identification of suspects (POIs) and their early apprehension. This in turn will reduce operational demands on NSWP to attend crime scenes, particularly for volume crime where the majority of cases are committed by a small number of high risk recidivist offenders.
	Significantly reduce the effort in workflow and administration of the current DNA process thus freeing FSG personnel to perform other more important operational activities and forensic service providers to deliver better throughput.
Enhancing Capabilities	Deliver a flexible business-oriented technical solution to initially manage DNA evidence that will provide a strategic platform for the integration of other forensic processes.
	The associated procedures and processes will be reviewed to ensure that

o Enhanced Information Management

Improved Operational Support

Forensic Management Information System

⁷ Information Management & Technology Strategic Plan 2003 – 2008, NSW Police, Draft v0.7, January 2004

⁸ The five strategies are:

o Mainframe Replacement Program

o Focused Renewal

Upgraded Governance, Compliance and Accountability

The Case for Change and Project Purpose

NSWP IM&T Strategy 1	NSWP FIMS Project Compliance.				
	new system is used in line with FSG business objectives and delivers improvements to the management of forensic evidence.				
Improved Operational Support	In addition to the strategies identified in the IM&T Strategic Plan this proposal will enhance the operational support objective. The system will improve compliance and accountability as a result of integrated exhibit and forensic process data capture and a significant reduction in manual processes associated with DNA. The automated workflow possible with FIMS will enable the achievement of these improvements and will help to identify where further improvements can be made.				

3 Project Scope

3.1 Deliverables

The principal deliverables will include:

~	·
Business Analysis and User Requirements	Initial Business Analysis Stage to conduct a thorough stakeholder requirements gathering process and prepare agreed user requirements confirming the project scope
Requirements Specification	Detailed Requirements gathering, review of current systems, and the creation of a specification to act as a baseline for procurement
System Procurement	Procurement process encompassing a Request for Tender. As part of the tender process a technological/operational trial may be conducted with key stakeholders as part of the evaluation process.
Systems Customisation	Delivery of the configured system for NSWP testing and acceptance
Hardware/Software Acquisition	Acquisition and implementation of all associated hardware and software.
Change Management	Planning, resourcing, training and education for all business and technology stakeholders.
	Completions of end user training, business process redesign, contingency planning and support documentation.
Phased Implementation	Phased implementation of a pilot LAC then on a regional basis commencing with metropolitan regions.
	Commissioning of new environments and interfaces in all functional and geographical locations.

3.2 Scope of Work

Realisation of the proposed system is seen as a two stage project. The scope of the first stage of the project extends from conducting a detailed business analysis and stakeholder requirements gathering through to the phased implementation of a new forensic management information system for DNA only throughout NSWP commencing with the high volume metropolitan regions. A detailed requirements phase will be utilised to confirm the project scope and a set of comprehensive specifications will be developed as a baseline for system procurement. The initial requirements work will encompass all forensic disciplines to ensure the system can accommodate all forms of forensic evidence as well as DNA. A Request for Tender for a proven packaged solution will be developed and released for open and competitive bidding. A fixed price customisation of the packaged software will be undertaken and a configured system for NSWP testing and acceptance will be delivered. All associated hardware and software will also be acquired and implemented as part of the tender process. A comprehensive change management program will be initiated encompassing planning, business process redesign, education, end user training and support documentation for all business and technology stakeholders.

The second stage of the project, which will be subject to a separate Business Case to Treasury, will be the extension of the system to incorporate other forensic evidence such as Ballistics, fibre and chemical. This Business Case will be developed in parallel with Stage 1.

To ensure that the technical and operation implementation remains controlled and meets the needs of Operational Police the implementation will be phased with appropriate milestones and break points to confirm progress and verify outcomes. The approach will be to initially insert the Forensic Information Management System into the current process and data flows so that the relevant data for DNA evidence can be captured and the processes streamlined.

Once this has been achieved, the full benefits of the project can be realised by delivering the 'value add' services that will enhance the usefulness of the information being provided to police and improve the effectiveness of the processes employed to manage forensic evidence. Further forensic processes such as fingerprints, ballistics, etc. will be incorporated as part of Stage 2

The project is dependent on interfacing capability as well as integrating to other NSWP Corporate systems including COPS and in the future MRP. In this regard, facilities developed as part of the MRP initiative such as the Enterprise Service Bus are critical in achieving the interoperability objectives of this system. Failure of the MRP initiative to provide this technical infrastructure comprising the Enterprise Service Bus implementation itself and all associated interface standards and software application programming interfaces (APIs) would require additional costs to implement an equivalent solution.

The development of a proposed Exhibits Management System is complementary to this business case but not a direct dependency.

3.3 Impacts

A Forensic Information Management Strategy and Analysis Stage to define and improve the workflow with regard to DNA Forensic Intelligence is a critical first step in the process to investigate business linkages and integration.

The Analysis Stage will recommend the most effective way forward to deliver the supporting services necessary to achieve the goals of the Forensic Information Management System via extensive independent stakeholder engagement throughout NSWP. It is planned to undertake this stage as an initial step in the project lifecycle to confirm alignment with operational policing requirements and review available software solutions prior to requirements gathering and procurement.

The NSW Police units that will be directly affected by the project are listed in the table below:

NSW Police unit/support unit	Nature of the impact
Forensic Procedures Implementation Team	Improved process and procedures
Forensic Services Group	Integration of data sources, improved ability to service other units and more effective management reporting capabilities

NSW Police unit/support unit	Nature of the impact
Local Area Commands	Timely identification of offenders / Increase positive investigation outcomes
State Crime Command	Timely identification of offenders / Increase positive investigation outcomes
Counter Terrorism Command	Timely identification of offenders / Increase positive investigation outcomes
Public Order & Riot Squad	Timely identification of offenders / Increase positive investigation outcomes
Crime Management Support Unit	Policies and procedures of Crime Management Units
Legal Services	Legal advisories
Education Services	New Education programs
Financial Services	Fiscal management support / advice
Business Technology Services	Realisation of NSWP Enterprise Architecture objectives
	Increased workload to support technical infrastructure and interfacing

Other external direct beneficiaries of the project include:

Other Organisations	Nature of the impact
NSW Health	Improved management reporting capability and reduced costs
DAL	Streamlined process and procedures
	Efficient transmission of results
	Reduction of the current backlog
Courts	Timely compliance with Court directives

The proposed project implementation will have a significant impact on the existing manual systems used currently to process DNA samples. The system will allow the integrated capture of exhibits, forensic process status and matches. This will improve access to forensic information, reduce duplication, reduce reliance on manual recording and provide improved management information to FSG and NSWP in general. As such, the system can be anticipated to have a significant impact on existing business processes and work practices. This impact is expected to be mitigated through a comprehensive change management program and extensive independent stakeholder engagement throughout NSWP to ensure alignment with operational policing requirements.

The proposed system will be consistent with and build on existing ICT architectures, standards and applications and is therefore anticipated to have little impact in this area.

While FIMS will have limited impact on the internal operations of suppliers it will fundamentally change their interaction with NSWP. The system will replace an essentially manual system with a transparent electronic solution utilising existing information and telecommunications services and standards. The FIMS system will provide the ability to record and audit the process across agency boundaries.

In the long term, the proposed system will integrate a vast array of forensic service providers under a common ICT infrastructure. It will allow forensic services and results to be exchanged with NSWP in a consistent, standardised and cost effective manner.

The acquisition process will be managed in accordance with BTS project management standards using accredited project management practitioners. The overall project will be coordinated by senior Police who have an extensive history of implementing effective IT solutions to operational Policing problems. Successful projects managed by this team have included Missing Persons, PhotoTrac Image Capture and Suspect Identification, Disaster Victim Identification (DVI) and various web based applications. The success in implementing these systems confirms the capability of the proposed project management team to effectively implement FIMS.

4 Project Objectives, Planned Outcomes and Benefits

4.1 Objectives

This proposal will provide an integrated system, which would enable predictive and retrospective identification links between offenders and scenes, scene-to-scene, categories of crime and geographical locations to be centrally recorded and made available in a structured environment to operational police investigators and forensic service providers. Further functionality to be included is a comprehensive reporting system for forensic activity, performance indicators for forensic personnel and sample result reporting. It will enable the various discrete forensic data to be aggregated and matched against offender profiles. It will manage this data in a rigorous manner that satisfies Court evidentiary rules.

4.2 Outcomes to be achieved

It is anticipated that the system will significantly increase the capacity of NSWP to solve major crime and to revisit previously unsolved crimes by providing the capacity to link and reconcile previously unrelated pieces of evidence.

The system will also:

- Provide NSW Police with forensic intelligence on DNA (and potentially Fingerprint, and Ballistics) identifications by linking suspects between cases
- Increase the number of positive identifications and the time required to achieve them leading to more effective policing outcomes especially in relation to solving crime and preventing potential terrorist activity
- Electronically interface with NSW Health and proactively manage the efficient processing of DNA samples
- Electronically interface with Courtlink and DAL to provide timely management of the destruction of DNA samples in accordance with Court directives
- Assist with Accreditation of the Forensic Services Group by NATA.
- Assist with the DNA backlog at DAL as all exhibits will be prioritised
- Enable supervisors and investigators to more effectively monitor and review forensic case work
- Improve DAL and NSWP capability to effectively manage DNA
- Provide Police and DAL standardised methods of recording cold and warm links and eliminations.

4.3 Risk Management

While there are risks associated with a project of this size and scope, they can be minimised through the implementation of the ICT Project Risk Management Framework and the ICTMB Governance process.

A strong focus on risk mitigation will be taken commencing at project inception and continuing throughout the project. An assessment of the major identifiable risks envisaged for this project is presented below.

Potential Risk	Category	Planned Action	Responsibility	
Business Requirements Risk: Scope creep may be hard to control as expectations within Police expand	High	The IT Governance methodology which forms part of the Project will include formalised change control procedures.	Steering Committee Project Director Project Manager	
Business Requirements Risk: The result does not support all the required functionality.	Medium .	This initiative will build on existing processes and utilise proven software, where possible.	Steering Committee Project Director Project Manager	
Legislative Risk: The system is not consistent with key legislation.	Low .	The Analysis Stage will identify the main legislative issues resulting from the business process improvements identified to date. This initial work will be used as the basis upon which to develop plans and approaches to address these issues as early in the process as practicable.	Steering Committee Project Director Project Manager	
Resource Availability Risk: Unavailability or loss of key staff prior to completion of the implementation.	Low .	Project plans for each phase will identify at an early stage, the internal and external resources required. Police and civilian staff will be seconded to the project team and appropriate Risk Management strategies put in place for loss of key internal and external staff.	Project Sponsor Steering Committee Project Director Project Manager	
Delivery Risk: There may be a lack of executive and team commitment to the project, including suppliers, BTS staff and users.	Medium .	This project is sponsored by the Assistant Commissioner FSG, who will take executive management responsibility for the success of the project. Because the proposed system is of direct benefit to operational police, commitment is expected to be high. Fixed Price Contracting arrangements are proposed	Project Sponsor Steering Committee Project Director	
Interfacing Risk: The ESB does not deliver the required functionality.	Medium .	A contingency plan will be developed to utilise alternative technologies as required. If interface dependencies significantly compromise the viability of the project and the achievement of the required outcomes then the project may be re-scoped.	Project Sponsor Steering Committee Project Director Project Manager BTS	
Scheduling Risk: Implementation of the system may not be completed on time or to budget.	Medium .	Prior to the commencement of the project appropriate project management methodologies and standards will be implemented NSWP will also implement a governance structure that will include management with appropriate experience to mitigate the risks of budget and deadline over-runs.	Steering Committee Project Director Project Manager	

Potential Risk	Category	Planned Action	Responsibility
Ongoing Funding Risk:	Low .		Project Sponsor
Insufficient recurrent funding is available to maintain the system.		and implementation costs.	Steering Committee Project Director

4.4 Benefits

The following outlines some of the key benefits and advantages of the FIMS Project.

Benefit 1 Address recommendations of NSW Ombudsman

One of the primary benefits of the proposed system is that it will allow NSWP to specifically address in a comprehensive manner the criticisms and recommendations made by the NSW Ombudsman in its review of the Crimes (Forensic Procedures) Act 2000.

The NSW Ombudsman made in excess of 140 recommendations ranging from modifications to the Act through to specific proposals in relation to the recording, processing and reporting of DNA evidence. This proposal directly addresses 27 percent of the recommendations as demonstrated in the table below. Excluding the recommendations related to Legislative changes and training and development this proposal addresses in a complete and or partial manner 73 percent of the Ombudsman's process related recommendations.

Further, the proposal will make a significant contribution to improving procedures by providing a more structured and formalised workflow. In this regard 23 recommendations will be addressed through updated SOPs and procedures introduced as part of the change management process implemented as part of the proposed system. The number Ombudsman recommendations addressed by this proposal is summarised in the following table:

Recommendation Type	Number	Addressed by proposal	Partially Addressed
DNA Processing	38	32	
Legislative	49		
Training and Development	12		
Procedures	47	7	23
Total	146	39	23

A full list of the Ombudsman's recommendations can be found at Attachment 8.

Benefit 2 Elimination of manual processes for managing the forensic process

The current processes that support the gathering, management, analysis and reporting of samples involves a number of manual steps that impact on the efficiency of delivering timely results to police and incur significant additional costs to police.

The primary bottlenecks in the interfacing of DNA data to DAL, which would be streamlined are:

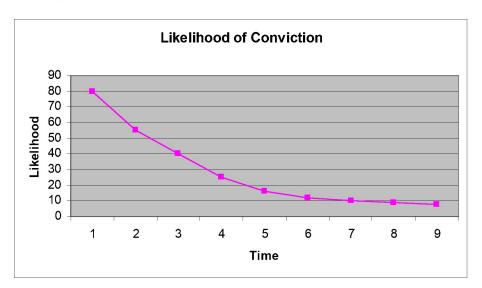
- Filling in manual P377 forms to accompany samples
- Removal of the need to re-key data on receipt of samples at DAL
- Removal of the need to re-key data on receipt of results at FPIT
- Production of hard copy reports at DAL
- Collation of results and matching data at FPIT and the publishing of this data
- Maintenance of spreadsheets and other discrete databases related to the forensic process by investigators at Local Area Commands and other Commands such as the State Crime Command.

Benefit 3 Significant reduction in criminal investigation time

In approximately 50% of cases involving major crime, forensic evidence plays a significant role.

Improved turnaround of forensic processes and enhanced information regarding 'person to scene' and 'scene to scene' links will significantly assist operational police to reduce criminal investigation time. It will allow potential suspects to be identified earlier, suspects to be eliminated from inquiries earlier, cases to be prioritised on the basis of available evidence, and allow greater co-operation and sharing of data between Local Area Commands and other Commands such as the State Crime Command.

The true value of this benefit to operational police investigators can be illustrated by reference to the relationship between the likelihood of conviction and the time taken by police to investigate.



Source: Research, Development and Statistics Directorate. United Kingdom Home Office (http://www.homeoffice.gov.uk/).

It can thus be seen that as the time required to conduct the investigation is reduced, this leads not only to greater efficiency in the investigation process itself but the likelihood of a successful conviction is corresponding increased.

This reduction in criminal investigation times is important as the majority of volume crime is committed by a small number of high-risk, recidivist (repeat) offenders.

Benefit 4 Increased number of positive identifications

DNA testing and the DNA database instituted under the Forensic Procedures Act 2000 has provided police with person links to 6,165 crime scenes and eliminated over 800 suspects from further investigation to date. By reducing the current DNA backlog (8,087 cases as of 01/01/2006) and integrating the data and linkages between persons and scenes of crime across all forensic disciplines into a single system, the number of positive identifications achieved by NSWP will be increased.

Acting on more timely information will also help to reduce the number of unsolved cases, and cases which are unable to proceed after an extended period of time in circumstances such as the death of witnesses or the offender.

It is important to understand that currently NSWP is not able to manage the receipt of DNA cold hits effectively (the result of a match against another DNA profile stored in the DAL database). The current process provides information related just to DNA identification (Person Links) and it does not handle scene to scene links. This means that a large percentage of cold hits (60 to 70 are being received each week) are not being actively followed up by police to deliver positive identifications.

Benefit 5 Prioritisation of investigations and exhibits

Modern policing investigation, particularly in the case of major crime, often results in a large volume of potential forensic evidence being gathered. This results in significant workload for the analysis laboratories and the requirement for investigators to manage a significant volume of data. For example the number of exhibits submitted for murder cases averages 22. By implementing an standard triage process to improve the likelihood of achieving useful forensic evidence with more effective turnaround and reporting processes, the money spent on forensic processes can be more efficiently targeted and investigators can focus on the most likely lines of enquiry.

FIMS will provide an integrated forensic system so that investigations can be prioritised on the basis of the quality of forensic evidence obtained and the likelihood of achieving positive outcomes. This prioritisation can be based on defined and agreed business rules relating to the seriousness of the offence, statistics relating to the likelihood of obtaining positive identification from the exhibits collected, and any applicable deadlines associated with the progress of the case.

This would be a significant advance on the current system of prioritisation that is performed by receipting officers at NSW Health DAL when exhibits are received from police and predominantly uses offence type as the primary classification mechanism.

This will not only assist operational police to focus available resources on those cases that have the most chance of a positive outcome but will also help to prioritise and manage the current backlog at DAL.

Benefit 6 Reduction in effort to follow up the status of forensic evidence

Significant effort is currently spent by police in determining the status of forensic processes, such as the testing of DNA samples by DAL. By electronically integrating the separate forensic processes together across the boundaries between agencies and commands within NSWP, investigators will have access to the latest status and result information available on demand.

Coupling this with a dissemination mechanism so that officers are alerted when results become available will eliminate the need for police to spend time telephoning and contacting forensic service providers to access this information.

Benefit 7 Improved visibility of the exhibit process

By tracking the workflow and outcomes of the forensic process within a central information management system, NSWP FSG will be able to more effectively monitor and review forensic case work. This will allow better allocation and planning of FSG resources.

An integrated system will also reduce effort within the analysis laboratories such as DAL by preventing resources being expended on analysis work in cases when forensic evidence is no longer of high importance such as if the suspect has decided to plead guilty, has died, or for cases which have been solved using other forms of identification.

Benefit 8 Performance improvement mechanisms

FIMS will create a mechanism to monitor forensic service provider performance and assist in the management of providers in terms of monitoring service level achievement and costs as well as create a direct feedback loop between the delivery of service and the impact of the result.

By integrating all forensic data relating to a Crime Scene and tying this back to COPS identifiers such as Event Numbers and CNIs, the impact of forensics and their relationship to policing outcomes can be quantitatively ascertained. This allows a clear method for tracking the benefits of the project over time and will create an extremely valuable corporate resource to analyse the impact of forensic evidence on policing outcomes.

Benefit 9 Improved tracking of evidence

Currently forensic exhibits are only bar-coded once they are received at NSW Health DAL. This can create problems reconciling the records of exhibits held within police systems and those held at DAL particularly in circumstances where details such as offender name differs between the two as a result of data entry or transcription error or there are multiple exhibits that are very similar.

By effectively tagging and tracking exhibits from their point of origin at the crime scene and using a common identifier when the exhibits are physically exchanged between agencies, as well as in electronic exchanges of data, the quality of data will be improved, less effort will need to be expended to uniquely differentiate exhibits by description, and fewer exhibits will be lost or require manual intervention to resolve queries over discrepancies. This improved tracking of evidence will also contribute to a better demonstration of the continuity of evidence in court.

Benefit 10 Compliance with Court Orders for Destruction

Part 10 of the Forensic Procedures Act 2000 contains provisions for the destruction of forensic materials. Currently the processes employed to comply with this legislation can result in lengthy delays.

By establishing electronic interfaces between FIMS and the Courts using Courtlink and with the DAL DNA database, the ability of NSW Police and NSW Health to comply with the legislation will be significantly enhanced and will allow a level of automation to be introduced into the process.

Benefit 11 Improved auditability of the forensic process

A recent review prepared by the NSW Ombudsman into the Crimes (Forensic Procedures) Act 2000 for submission to the NSW Parliament provides a detailed analysis of the current operation of the Act particularly with respect to NSW Police and DAL processes and makes over a hundred recommendations for improvement. These recommendations are reproduced in Attachment D with a compliance mapping to the FIMS business case.

Many of these recommendations directly relate to the ability to record and audit the process effectively both within the NSW Police and DAL environments respectively and across agency boundaries. The FIMS system will deliver the vehicle that will allow NSW Police to comply with many of the key recommendations in this report and will deliver an information management environment that can effectively audit the operation of the Act.

4.5 Contribution of benefits to NSW Police

The contribution of the above eleven (11) benefits to NSW Police are categorised below.

		Contributing FIMS Benefit										
Benefit	Benefit Category	1	2	3	4	5	6	7	8	9	10	11
Improved Effectiveness	Improved Service	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Υ
	Wider Range of Services	Υ							Υ			
	New Regulations										Υ	
Efficiency Benefits	Reduced Operating Budget								Υ			
	Competition for Resources	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ			
	Growing Demands		Υ	Υ	Υ	Υ	Υ	Υ	Υ			
	Changes in Technology Price/Performance								Υ			
Enabling Benefits	Support for Business Process Re- engineering (BPR)	Υ				Υ		Υ	Υ	Υ	Y	Y

The Benefits Realisation Register, Attachment 7, provides more detail on the metrics and methodologies for achieving these benefits and is summarised below:

Anticipated Realisable benefit	Expected \$ value	Best case	Worst Case	Realisable
Elimination of manual processes for managing the forensic process	\$357,000 PA	\$285,600 PA	\$428,400 PA	N
Significant reduction in criminal investigation time	\$1,365,000 PA	\$1,092,000 PA	\$1,638,000.0	N
Increased number of positive identifications	Measurable reduction in crime.	Large reduction in crime	Limited reduction in Crime	N
Prioritisation of investigations and exhibits	\$422,700 PA	\$338,160 PA	\$507,240 PA	N
Reduction in effort to follow up the status of forensic evidence	\$600,000 PA	\$480,000 PA	\$720,000 PA	N
Improved visibility of the exhibit process	Improved business processes			N
Performance improvement mechanisms	Improved efficiency	Significant efficiency improvement	Insignificant efficiency improvement	N
Improved tracking of evidence	Improved efficiency	Significant efficiency improvement	Insignificant efficiency improvement	N
Compliance with Court Orders for Destruction	Improved business processes	Significant business process improvement	insignificant business process improvement	N
Improved auditability of the forensic process	Improved business processes	Significant business process improvement	insignificant business process improvement	N

A detailed Benefits Management plan has been developed which identifies the responsibilities for managing the achievement of benefits. It is anticipated that the benefits will begin to flow from year 3 after implementation of Phase 1 of the project. However, during the scoping and requirements phase it can be expected that business improvements will be identified in the existing manual process which will lead to improved efficiencies. The benefits identified for this business case however, are only those that are likely to be directly attributable to the implementation of the FIMS system.

4.6 Impact of Not Proceeding

Failing to proceed with this project is a high risk strategy that ignores serious issues relating to the management of forensic evidence and leaves NSWP exposed to potentially damaging situations as highlighted in the Ombudsman's report. At worst, it could leave NSWP open to charges of failing to act whilst in possession of information that could have prevented a major crime from being committed (as happened in the UK in the case of the Soham murders in 2002 and highlighted in the subsequent Bichard Inquiry).

5 Estimates of Resources and Project Plans

5.1 Estimates of Resources

It is anticipated that the FIMS system will be developed using a combination of internal police personnel, external project management, business analysis and technical contractors, BTS liaison and engaging one or more external companies to provide fixed price deliverables.

Internal resources

These resources will be sourced from:

- NSW Police sworn officers and unsworn staff, both seconded to the project and on a consultative basis
- NSW Police Forensic Management personnel both seconded to the project and on a consultative basis
- NSW Police Business and Technology Services (BTS) both seconded to the project and on a consultative basis
- Administrative staff both seconded to the project and on a consultative basis

External

Project Managers, technical experts, business analysts and specialist skills.

All internal resources including over-strength positions created for Police Officers will be funded from NSW Police recurrent funds.

A summary of the projected resource requirements are provided in the following table:

Year 1	Days	Rate	Res	Total
Project Initialisation	25			\$75,000
Setup Project Governance	5	1400	1	\$7,000
Develop EOI	15	1400	1	\$21,000
Develop Evaluation Criteria	5	1400	1	\$7,000
Install Project Infrastructure				\$40,000
Engage Project Team	31			\$45,400
Release EOI	10	1400	1	\$14,000
Evaluation Team	5	1400	1	\$7,000
Evaluate EOI	5	1400	1	\$7,000
	2	800	3	\$4,800
Prepare Evaluation Report	2	1400	1	\$2,800
Engagement Approval				
Engage Project Manager	2	1400	1	\$2,800
Engage Business Analysts	5	1400	1	\$7,000
Business Analysis Phase	144			\$372,200
Prepare Project Plan	10	1500	1	\$15,000
Collect background material	30	1200	3	\$108,000
Arrange Interviews	10	800	1	\$8,000
Conduct Interviews	25	1200	3	\$90,000
Document interviews	15	1200	3	\$54,000

Prepare Business Requirements	15	1200	2	\$36,000
Modify as required	3	1200	2	\$7,200
Project Management	36	1500	1	\$54,000
Detailed Requirements	67	1300	<u> </u>	\$202,200
Review Business Requirements	5	1200	2	\$12,000
Review existing systems	20	1200	2	\$48,000
Analyse options	15	1200	2	\$36,000
prepare system requirements	20	1200	2	\$48,000
Complete Requirements documentation	3	1200	2	\$7,200
Project Management	34	1500	1	\$51,000
Supplier Procurement	174	1300		\$207,600
Prepare Tender documentation	25	1400	2	\$70,000
Engage Dept of Commerce	3	1400	2	\$8,400
Incorporate Commerce Requirements	5	1400	1	\$7,000
Prepare Evaluation Criteria	10	1400	2	\$28,000
Release Tenders	10	1400	1	
Evaluate Tenders	-		2	\$14,000
Evaluate renders	15	1400		\$42,000
Despess Tonder Fuelvetien Depost	15	600	3	\$27,000
Prepare Tender Evaluation Report	5	1400	1	\$7,000
Tender approval process	5	1400	4	#4.000
Engage Supplier	3	1400	1	\$4,200
Year 2	220	1500	1	¢220.000
NSWP Project Management	220	1500	1	\$330,000
Supplier Project Management NSWP Integration and Interfaces	70	2000 1500	5	\$140,000 \$150,000
Review Technical environment	20	1300	3	φ150,000
Prepare interface specifications	1			
Modify Interfaces	1			
Test	1			
Complete interface documentation	1			
Business sign-off	1			
Infrastructure				\$1,345,000
Hardware	l			\$220,000
Software				\$1,125,000
Continuid				ψ1,120,000
System Customisation	110	1500	5	\$825,000
Generic workflow				. ,
Create Exhibit Record	1			
Allocate Exhibit Priority				
Create actor and actions	1			
Event Processing	1			
Exhibit Processing	1			
Exhibit Escalation	1			
Reporting	1			
Security and Audit	1			
Management Consol	1			
Error Management	1			
Testing				\$560,000
Unit Testing	55	1500	5	\$412,500
Integration Testing	15	1500	3	\$67,500
UAT	20	800	5	\$80,000

hase 2 - Business Case			\$51,800		
Prepare Bus Case Proposal	5	1400	1	\$7,000	
Submit Proposal	1	1400	1	\$1,400	
Proposal Approval	40	1400	1		
Prepare Business Case	15	1400	1	\$21,000	
Review Period	10	1400	1	\$14,000	
Finalise Business Case	3	1400	1	\$4,200	
Submit Business Case	3	1400	1	\$4,200	
hange Management			1	\$55,200	
AL Costs	120	1500	3	\$540,000	
Specifications					
FIMS Interface					
Business processing					
Events and Alerts					
Security and Audit					
Reporting					
Error Management					
Testing					
	Year 1	Year 1 Total			
Project Capital Costs	Year 2	Total	\$3,997,000		
,	Projec	t Total	\$4 899 400		

5.2 Project Plans

The project is phased in two stages spread over three calendar years. Stage 1 of the project which is the subject of this business case extends over two calendar years. The scope of the first stage of the project extends from conducting a detailed business analysis and stakeholder requirements gathering through to supplier procurement during year 1. A detailed requirements phase will be utilised to confirm the project scope and a set of comprehensive specifications will be developed as a baseline for system procurement. A Request for Tender for a proven packaged solution will be developed and released for open and competitive bidding and a supplier selected.

In Year 2 a fixed price customisation of the packaged software will be undertaken and a configured system for NSWP testing and acceptance will be delivered. All associated hardware and software will also be acquired and implemented as part of the stage 1 tender process. A phased implementation of new forensic management information system throughout NSWP commencing with a pilot implementation will be undertaken in the second half of the year. This roll-out is expected to continue through Year 3. A comprehensive change management program will be initiated encompassing planning, business process redesign, education, end user training and support documentation for all business and technology stakeholders as part of this process.

The second stage of the project which will begin in the latter months of Year 2 and extend through Year 3 will extend the system to incorporate other forensic evidence such as Ballistics, fibre and chemical.

Estimates of Resources and Project Plan

	Year/Quarters											
	Year 1			Year 2			Year 3					
	1	2	3	4	1	2	3	4	1	2	3	4
Analysis Phase												
Detailed Requirements												
Supplier Procurement												
Interface Specifications												
Phase 1 Delivery												
Phase 1 Testing												
Phase 1 Implementation												
Phase 2 Business Case Approval												
Phase 2 Regional Roll Out												
Phase 2 Other Forensic Processes												

6 Analysis of Alternatives

The scenarios presented in this section are considered to be viable options to deliver a Forensic Information Management capacity but the final details of the implementation approach for each option may differ depending on the most appropriate procurement strategy and technical solution, as well as the commercial proposals put forward by prospective suppliers as part of a Request for Tender.

A technical overview and analysis of the proposed system is provided as Attachment 2.

6.1 Base Case

Currently, there is a limited forensic case management system (FSIMS) located within the core COPS mainframe system. This system does not monitor forensic case work or provide Forensic Information and needs enhancement to manage future forensic work loads. Some forensic locations are not able to utilise the FSIMS system and therefore there is duplication of data processing with various local databases and spreadsheets in operation.

In addition the Forensic Procedures Implementation Team (FPIT) uses an interim spreadsheet-based (Excel) system for publishing DNA and forensic procedures information on the NSWP Intranet. This mechanism assists LACs to monitor DNA links and provides some accountability but has limitations. The information provided relates just to DNA identification (Person Links), it does not handle scene to scene links and does not address cross LAC links effectively.

If a Review Panel for DNA is created, under the Crimes (Forensic Procedures) Act, exhibit continuity, packaging and storage of DNA exhibits will need to be reviewed. The current case management system does not provide any information on exhibit management to assist with this requirement. It should also be borne in mind that even in the "do nothing" scenario the current Forensic Case management system will require further updates, (Forensic Information, Exhibit and Laboratory Management) to meet the future needs of FSG and the NSW Police over the lifetime of this business case.

Continued use of these systems represents the base scenario where the full value of the information and intelligence being provided is not being harnessed to lead to better policing outcomes.

Strenaths

• Maintains current methods of managing forensic cases

Weaknesses

- Does not address the concerns of the NSW Ombudsman
- Does not harness the value of the forensic information currently being held
- Not consistent with Government objectives.
- Does not meet FSG and NSWP forensic case management needs
- Information exchanged with NSW Health DAL and the Courts will continue to be managed in an inefficient and uncoordinated fashion resulting in increasingly larger backlogs
- Maintains fragmented approach to management information and impacts the ability of supervisors to more effectively monitor and review forensic case work

 Does not deliver effective audit mechanisms for FSG systems such as exhibits and assets

Costs

- Least cost short term option
- Restricts NSWP's operational effectiveness.

Benefits

• Minimum impact to operational police.

6.2 Preferred Case – Package Solution

This preferred case scenario will provide an integrated solution, which will enable predictive and retrospective identification links between offenders and scenes, scene-to-scene, categories of crime and geographical locations. Further functionality to be included is a comprehensive reporting system for forensic activity, performance indicators for forensic personnel and sample result reporting. It will enable the various discrete forensic data to be aggregated and matched against offender and scene profiles. It will manage this data in a rigorous manner that satisfies Court evidentiary rules.

This scenario assumes that the solution will be substantially based on an existing software package or set of integrated commercially available software packages that would be provided by a private sector systems supplier and procured under an open Request for Tender. It is envisaged that existing solutions in place in other Australian or overseas jurisdictions may form the basis for such a packaged solution.

The commercial arrangements of this "buy not build" approach are assumed to be along standard software licensing model lines, with an option to procure a perpetual licence available. However an ongoing recurrent maintenance option, which includes full system support under a Service Level Agreement on an annual basis, reduces the upfront capital expenditure and maintains flexibility.

The choice of technology will be largely dependent on the availability of packaged software that can form the basis of the solution although NSWP technical guidelines will be followed where possible. The emphasis will be on procuring a proven solution that meets the key functional criteria, is cost effective, technically sound, and combines ease of use and system performance with security, data integrity and scalability.

The ability to provide standardised interfaces with other agencies such as NSW Health DAL and Courtlink is critical to delivering the benefits of this integrated system.

The system is not within the scope of the proposed MRP system and can in fact be seen as complementary.

Strengths

- Addresses many of the NSW Ombudsman's recommendations concerning the processing of DNA evidence.
- Provides a standard solution to track and monitor the forensic process that will be common across NSWP
- Allows the increasingly complex nature of the intelligence gained to be clearly communicated to operational police in a timely manner

- Delivers an effective and efficient auditable information management system
- Seamless integration with NSW Health and the Courts
- Consistent with Government & NSWP Corporate objectives.

Weaknesses

• A packaged solution may not fully meet NSWP requirements

Costs

• There will be project costs associated with procuring the software and delivering the solution across NSWP.

Benefits

- Provides NSW Police with enhanced Forensic Information
- Increases the number of positive identifications leading to more effective policing outcomes especially in relation to solving crime and preventing potential terrorist activity
- Assists to reduce the DNA backlog at DAL by streamlining the process
- Provides investigators with a current view of the processing status of forensic evidence.
- Enables supervisors to more effectively monitor and review forensic case work
- Provides audit mechanisms for FSG systems
- Assists with Accreditation of the Forensic Services Group by National Association of Testing Authorities, Australia.

6.3 Alternative 1 – Custom Development

The alternative case is a customised development to meet the stated NSWP requirements. The functional scope of this system would be similar to the preferred case, however, any limitations imposed by a packaged solution would be removed allowing the solution to be fully customised to the NSWP environment.

This scenario assumes that the solution will be developed against a formulated NSWP statement of requirement by a private sector systems supplier and procured under a standard software development contract such as the ITS 2036 Panel Contract.

The choice of technology will be determined by NSWP BTS with a J2EE / Oracle solution, consistent with NSWP technical guidelines, the most likely choice. The emphasis will be on delivering a solution that fully meets the functional criteria, is technically sound, and combines ease of use and system performance with security, data integrity and scalability.

Strengths

- Addresses many of the NSW Ombudsman's recommendations concerning the processing of DNA evidence.
- Provides a fully customised solution to track and monitor the forensic process across NSWP
- Allows the increasingly complex nature of the intelligence gained to be clearly communicated to operational police in a timely manner
- Delivers an effective and efficient auditable information management system
- Seamless integration with NSW Health and the Courts

Weaknesses

Future enhancements, extension of functionality and interfaces will incur development costs

Costs

There will be significant project costs associated with building the software and delivering the solution across NSWP.

Benefits

- Provides NSW Police with enhanced Forensic Information
- Increases the number of positive identifications leading to more effective policing outcomes especially in relation to solving crime and preventing potential terrorist activity
- Assists to reduce the DNA backlog at DAL by streamlining the process
- Provides investigators with a current view of the processing status of forensic evidence.
- Enables supervisors to more effectively monitor and review forensic case work
- Provides audit mechanisms for FSG systems
- Assists with Accreditation of the Forensic Services Group by National Association of Testing Authorities, Australia.

6.4 Option Summary

The preferred and alternative cases are broadly similar in terms of the capability that they deliver to NSWP. The key difference is that the alternative case delivers a fully customised solution but at the expense of a higher capital outlay. The preferred case is consistent with NSWP and Government guidelines and would deliver sufficient functionality to meet the core NSWP requirements in the most cost effective manner.

Doing nothing leaves NSWP exposed to deficiencies in the current process (as identified by the NSW Ombudsman) and does nothing to enhance policing outcomes. At worst, it could leave NSWP open to charges of failing to act whilst in possession of information that could have prevented a major crime from being committed (as happened in the UK in the case of the Soham murders and highlighted in the subsequent Bichard Inquiry).

6.5 Cost Analysis

6.5.1 Base Case

The existing process has a number of bottlenecks and introduces delays that affect the ability of police to finalise investigations. Police and analysis laboratory resources are currently unable to effectively monitor and review forensic case work and significant effort is currently spent by police in determining the status of forensic processes.

There is insufficient management information available about the effectiveness of forensic processes and NSWP is unable to manage the receipt of DNA cold hits effectively. The full value of the information and intelligence is not being harnessed to lead to better policing outcomes.

The estimated cost to NSW Police of these inefficiencies is approximately \$2.89 million annually (that is the benefits forgone by not proceeding with the proposed system – see Attachment 1). This estimate does not include the social costs associated with additional crime that could have been avoided if DNA matches were available to investigators earlier leading to the early apprehension of recidivist offenders.

Overall therefore, the five year cost of the do nothing option is \$15.0 million with a net present cost of \$12.9 million.

6.5.2 Packaged (preferred) Solution

This option assumes that the solution will be substantially based on an existing software package or set of integrated commercially available software packages that would be provided by a private sector systems supplier and procured under an open Request for Tender.

The primary costs associated with this option are related to the specification of requirements, supplier procurement and package purchase and customisation. In addition, costs are anticipated to be incurred in modifying the DAL system to interface with FIMS and to automate the exchange of data, events and results.

Total capital costs of \$4.89 million over a two year period will be required to implement the core functionality. Expanding this core functionality to include other forensic evidence will be the subject of a separate Stage 2 Business Case. In addition \$670,000 will be required annually in recurrent funds to maintain the proposed system.

The anticipated costs of this option are summarised in the following table and detailed estimates supporting this summary are contained at Attachment 1.

			Year	,	
İ	1	2	3	4	5
Capital Costs					
Project Initialisation	\$75,000				
Project Team Engagement	\$45,400				
Business Analysis	\$372,200				
Detailed Requirements	\$202,200				
Supplier Procurement	\$207,600				
NSWP Project Management		\$330,000			
Supplier Project Management		\$140,000			
Hardware		\$220,000			
Software		\$1,125,000			
NSWP Integration and Interfaces		\$150,000			
System Customisation		\$825,000			
Testing		\$560,000			
Change Management		\$55,200			
Phase 2 - Business Case		\$51,800			
DAL Costs		\$540,000			
Total Capital	\$902,400	\$3,997,000			
Recurrent Costs			\$670,000	\$670,000	\$670,000
Total Costs	\$902,400	\$3,997,000	\$670,000	\$670,000	\$670,00
'					
Benefits			\$2,829,200	\$2,914,076	\$3,001,49
Elimination of manual processes					
Reduction in criminal					
investigation time					
Prioritisation of investigations and exhibits					
Status of forensic evidence					

Estimated Five Year Costs of the preferred option (packaged solution)

Visibility of the exhibit process					
Net Cost/Benefit	-\$902,400	-\$3,997,000	\$2,159,200	\$2,244,076	\$2,331,498

Net Present Value @ 5%	\$1,053,370
IRR	16%

6.5.3 Alternative Case – Customised Development

This option is similar to the preferred case except that the solution would be custom developed rather than based on an existing software package. It is anticipated that all activities prior to the procurement of the vendor (specification of requirements and supplier procurement) would remain the same.

The primary difference is that the vendor would supply software development expertise rather than a package-based solution. It is expected that the developed software would conform to the NSWP technical architecture (J2EE/Oracle) and that the development could leverage existing software licenses although a small increase in computing capacity can be anticipated. As with option 2, costs are expected to be incurred in modifying the DAL system to interface with FIMS and to automate the exchange of data, events and results.

To implement the core functionality the total capital required for this option is \$8.2 million over a two year period which reflects the additional costs associated with developing the core functionality such as workflow. As with the preferred case these costs do not include integrating other forensic evidence or rolling the system out across all LACs in NSW. In addition, to these capital costs, annual recurrent funding of \$890,000 will be required.

The anticipated costs of this option are summarised in the following table and detailed estimates supporting this summary are contained at Attachment 1.

Estimated Five Year Costs of the Alternative Case (Custom Development)

	Year				
	1	2	3	4	5
Capital Costs					
Project Initialisation	\$75,000				
Project Team Engagement	\$45,400				
Business Analysis	\$372,200				
Detailed Requirements	\$202,200				
Supplier Procurement	\$207,600				
NSWP Project Management		\$330,000			
Supplier Project Management		\$140,000			
Hardware		\$220,000			
Technical Specifications		\$150,000			
System Development		\$4,875,000			
Testing		\$965,000			
Phase 2 - Business Case		\$51,800			
DAL Costs		\$540,000			
Total Capital	\$902,400	\$7,271,800			
Recurrent Costs			\$890,000	\$890,000	\$890,000
Total Costs	\$902,400	\$7,271,800	\$890,000	\$890,000	\$890,000
5			40.000.000	40.044.000	40.004.400
Benefits			\$2,829,200	\$2,914,076	\$3,001,498
Elimination of manual					
Processes Reduction in criminal					
investigation time					
Prioritisation of investigations					
and exhibits					
Status of forensic evidence					
Visibility of the exhibit process					
	1				
Net Cost/Benefit	-\$902,400	-\$7,271,800	\$1,939,200	\$2,024,076	\$2,111,498
	40.400.000				
Net Present Value @ 5%	-\$2,460,385				
IRR	-13%				

6.6 Impact Statement

The costs and benefits of each of the options are displayed in the following table:

	Year					
	1	2	3	4	5	
Base Case - Maintain Existing						
	-\$2,829,200	-\$2,914,076	-\$3,001,498	-\$3,091,543	-\$3,184,290	
Net Present Value @ 5%	-\$12,968,831					
IRR	N/A					

Preferred Case - Package Solution

Total Costs	-\$902,400	-\$3,997,000	-\$670,000	-\$670,000	-\$670,000
Benefits			\$2,829,200	\$2,914,076	\$3,001,498
Net Cost/Benefit	-\$902,400	-\$3,997,000	\$2,159,200	\$2,244,076	\$2,331,498
Net Present Value @ 5%	\$1,053,370				
IRR	16%				

Alternative Case - Custom Development

Total Costs	-\$902,400	-\$7,271,800	-\$890,000	-\$890,000	-\$890,000
Benefits			\$2,829,200	\$2,914,076	\$3,001,498
Net Cost/Benefit	-\$902,400	-\$7,271,800	\$1,939,200	\$2,024,076	\$2,111,498
Net Present Value @ 5%	-\$2,460,385				
IRR	-13%				

The preferred option of a package solution is the only option that demonstrates a positive return over the five year analysis period. The option demonstrates a \$1.1 million net present value over five years which represents an Internal Rate of Return of 16%. While the custom development alternative also demonstrates positive returns over time, these returns are not realised until year 8. This delay reflects the greater level of capital expenditure required early in the project life. Both options are demonstratively preferable to the base case option which has a net cost to the organisation over five years of \$12.9 million in 2006 dollar terms.

6.7 Cost Estimate Summary

The 3-point estimates for the various alternatives are summarised in the below Cost Estimate Comparisons Table,

	isons ruote,			
		Most Likely Cost of alternative	Base Case Scenario (Minimum Cost of alternative)	Worst Case Scenario (Maximum Cost of alternative)
Base Case	Capital			
	Recurrent	\$8,744,774	\$6,995,819	\$10,493,729
	TOTAL COST	\$8,744,774	\$6,995,819	\$10,493,729
	Benefits/savings	43,711,771	¥ 3,5 5 €, 6 15	\$ 23,132,1 <u>2</u> 3
	NET COST/BENEFIT	-\$8,744,774	-\$6,995,819	-\$10,493,729
Preferred Case	Capital	\$4,899,400	\$3,919,520	\$5,879,280
[Package	Recurrent	\$1,608,460	\$1,286,768	\$1,930,152
solution]	TOTAL COST	\$6,507,860	\$5,206,288	\$7,809,432
	Benefits/savings	\$8,744,774	\$8,744,774	\$8,744,774
	NET COST/BENEFIT	\$2,236,914	\$3,538,486	\$935,342
Alternative Case	Capital	\$8,174,200	\$6,539,360	\$9,809,040
[Custom	Recurrent	\$2,612,583	\$2,090,067	\$3,135,100
Development]	TOTAL COST	\$10,786,783	\$8,629,427	\$12,944,140
	Benefits/savings	\$8,744,774	\$8,744,774	\$8,744,774
	NET	-\$2,042,009	\$115,348	-\$4,199,366

Forensic Management Information System

Analysis of Alternatives

	Most Likely Cost of alternative	Base Case Scenario (Minimum Cost of alternative)	Worst Case Scenario (Maximum Cost of alternative)
COST/BENEFIT		,	,

Table 2 3-Point Cost Estimate Comparisons

7 Project Appraisal

7.1 Economic Appraisal

The preferred option of a package solution is the only option that demonstrates a positive return over the five year analysis period. The option demonstrates a \$1.1 million net present value over five years which represents an Internal Rate of Return of 16%. While the custom development alternative also demonstrates positive returns over time, these returns are not realised until year 8. Both options are demonstratively preferable to the base case option which has a net cost to the organisation over five years of \$12.9 million in 2006 dollar terms.

7.2 Technical/Impact

Currently there are approximately 500 FSG personnel directly involved in the management of major crime and volume crime cases and 1000s of case officers at the LACs and within specialist commands such as State Crime Command who need access to forensic information. These personnel currently use manual and mainframe based applications to enter data and access information related to crime scene investigations.

The Forensic Information Management System (FIMS) will be work flow management system that manages the exhibit life cycle from collection and tagging of an exhibit through to finalisation. The system will present multiple different views to different users. It will link to other corporate systems and external service providers to provide a closed loop system in terms of managing forensic exhibits collected at crime scenes.

Workflow nodes will contain actions (units of work) that are triggered when the node is activated. An action might be to invoke a program or send an XML message to another application. A process engine will manage the execution of the workflow. XML will be used to represent data and a messaging service will be used for communication with other workflows and applications.

Web Services (BPEL, SOAP, WSDL and XML) will be utilised to define an end-to-end business process and ensure that the system is not platform or vendor specific. BPEL (Business Process Execution Language for Web Services) will be utilised for defining an end-to-end business process flow including asynchronous transactions, flow control and business logic.

Standards-based Commercial-off-the-shelf (COTS) applications running on an open non-proprietary platform will be sought to deliver the FIMS technical solution and the customisation of these applications will be part of the COTS tender conditions and contract.

The technical requirements for the procurement will include provisions for compliance with the BTS enterprise architecture to ensure:

- commitment to open standards
- standardisation of technology platform
- compliance with security requirements
- high levels of reliability and scalability

- acceptable system performance
- high degree of operator efficiency.

It is envisaged that the server architecture and hardware will be dedicated to FSG and the FIMS application with loose coupling to other NSWP systems such as COPS via the BTS Enterprise Service Bus (ESB) architecture and with external agencies such as DAL and the Courts. The clients will be any current NSW Police (TIE/SOE9) compliant desktop connected to the NSW Police network TIE/LAN-WAN10.

There will be no need to alter or enhance any of the mainframe applications. The development of a proposed Exhibits Management System is part of the scope of MRP and is complementary to this business case but not a direct dependency.

More details on the technical impact of this project are provided in Attachment 2.

7.3 Financial Appraisal

The assumed discount rate is 5%. This rate is consistent with the long term bond rate and is considered to reflect the NSW Government's cost of capital.

The existing contract rates paid to contractors utilised by NSWP and salary rates applying to NSWP Police and staff form the source for cost assumptions (eg, wage increases)

All existing systems are and therefore there are no savings associated with retiring of older assets and/or associated maintenance savings.

A sensitivity analysis of the project's risks and probability assumptions based on a worse case scenario of cost increases and reduced benefits or savings being achieved; and there are no third party revenues anticipated

The preferred option has a total capital cost of the project is \$4.9 Million with a net present value of \$1.1 Million. The project will be cash positive by Year 3 and exhibit an Internal Rate of Return of 16%. A sensitivity analysis conducted to assess the impact of the discount rate used indicates that the project remains economically viable. The discount rate was varied from 3% to 7% with the following results:

Discount Rate	NPV
Net Present Value @ 5%	\$1,053,370
Net Present Value @ 7%	\$802,372
Net Present Value @ 3%	\$1,337,305
IRR	16%

⁹ TIE/SOE = NSW Police Technical Infrastructure Enhancement program; Standard Operating Environment for desktops

¹⁰ LAN-WAN = Wide Area Network & Local Area Network that are TIE compliant.

7.4 Financial Impact Statement

NSWP is not in a position to fund this project from internal sources and capital funding will be required from NSW Treasury. In addition, the NSW Police will require an addition \$670,000 in recurrent funds to maintain the proposed system.

7.5 Governance Arrangements and Management Approaches

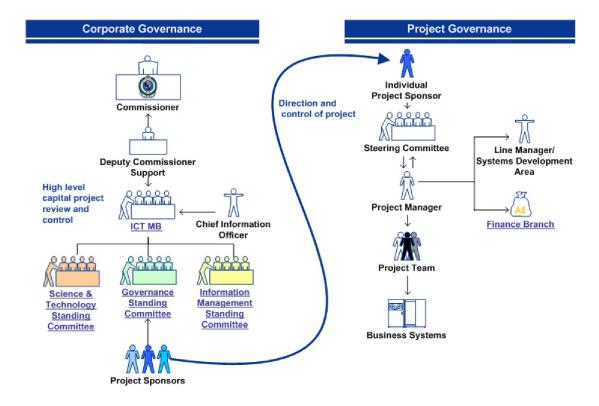
IT Governance within NSW Police controls and monitors the strategic technical direction taken and the information management infrastructure within NSW Police. This ensures effective and compatible systems are developed, implemented and managed in alignment with the corporate plan and future direction.

IT Governance is managed at two levels:

- Corporate Governance
- Project Governance.

At the Organisation Level, the strategic direction is reviewed, policies and standards are set and major IT Projects are monitored. At the Project Level, IT Governance is complied with on a day-to-day, project-specific basis by the appointed Project Manager with regular reporting to the Project Director, Sponsor and Steering Committee.

The two diagrams below illustrate the roles and relationships of the two IT Governance Levels within NSW Police.



7.5.1 Project Roles and Responsibilities

The FIMS Project will be managed according to the NSWP Standard Project Management methodology. Approval for the project to commence and to progress through key milestones and project phases will be granted by the Project Steering Committee.

The following table outlines the responsibilities and accountabilities for the project.

Resource	Responsibility					
Project Steering	As set out in the Terms of Reference.					
Committee	Membership will comprise:					
	Project Sponsor					
	Project Director					
	Project Manager					
	Representatives from involved business units					
Project Sponsor	Act as the corporate champion for the project					
Troject openion	Delivery of the Project					
	Ensure the project's strategic direction is consistent with NSWP plans and goals.					
	 goals Chair the Project Steering Committee 					
	 Provide support for the project at executive level. 					
	Fund and resource the project					
	Report to the Commissioner's Executive Team.					
	Achieve the benefits in the Benefits Realisation Register.					
Droiset Disector	Direct the project at a business level.					
Project Director	Strategic management of the project across the whole of NSWP.					
	Report progress to the Project Sponsor.					
	Be the point of escalation for issues.					
Droiget Manager	Develop project plan.					
Project Manager	Deliver benefits to the Project Sponsor.					
	Monitor and achieve project tasks.					
	Risk management.					
	Create and maintain project documentation.					
	Manage day-to-day activities of staff assigned to project tasks.					
	Periodic review of milestones to ensure their compliance with the NSWP APT Project Management Standard.					
	Manage the communications to the Project Sponsor, Director and team members.					
	Manage the project budget.					
	 Ensure all variation in scope is raised with the Project Director. 					
Pusiness Analyst	Develop requirements.					
Business Analyst	Assist with validating processes for software and hardware.					
	Modify processes and procedures.					
	System testing.					
Subject Matter Experts	Provide information and expertise to Business Analysts and Change Management.					
LAPOITO	Provide technical and business expertise to the project.					
Change Manager	Assess and create a climate for change.					
Onange Manager	Provide information to the users, relating to scope, change and progress of					
	project.					
	Develop and implement training.					
	Address user resistance.					

Resource	Responsibility			
Business	Provide business requirements			
Representatives	User Acceptance Test and provide feedback.			
Benefits Manager	Report ongoing benefits realisation to the Project Sponsor.			
	Conduct the post-implementation review to verify the nature of benefits actually realised, and to compare the results with those proposed in the business case. (This role to be appointed by the Project Sponsor.)			

7.6 Risk Assessment

A risk assessment has been conducted through the Department of Commerce online Risk Profile Assessment tool11 and the risk rating derived for this project is 22. This assessment indicates that the proposed solution is relatively low risk.

This assessment is supported by the packaged solution approach projected for this project which is the standard IT systems procurement exercise. In addition a phased approach has been adopted for the project. After the completion of each phase an assessment will be conducted as to the viability of moving to the next phase. In addition, the project has also been divided into two stages to minimise the risk and exposure to both NSWP and Treasury. At the end of Stage 1 a revised Business Case will be developed. At that point both NSWP and Treasury will have the capacity to evaluate the prior phases of the project and objectively determine whether additional funding should be committed.

7.7 Benefits Realisation

In this Business Case, performance measures that form the initial measures included in the BMP have been identified. These are highlighted as part of Attachment 7 – Benefits Realisation Register (BRR). These measures have been developed with operational police and NSW Police personnel to both articulate the benefits and develop the change percentage achievable and where possible a monetary value for each performance measure. Conservative change measures have been applied to both the planned changed percentage and the performance measures selected. It would be quite reasonable to suggest that both the number of performance measure highlighted and the change percentage will increase through the life of the project especially once a solution is selected.

A summary of the anticipated benefits from the Benefits Realisation Register is provided in the following table:

No	Anticipated Realisable benefit	Expected \$ value
1	Elimination of manual processes for managing the forensic process	\$357,000 per year for FTE wages. Not directly realisable in money terms.
2	Significant reduction in criminal investigation time	\$1,365,000 per year for FTE wages. Not directly realisable in money terms

¹¹ http://www.smarterbuying.nsw.gov.au/gateway

3	Increased number of positive identifications	Measurable reduction in crime. Not Realisable in money terms
4	Prioritisation of investigations and exhibits	\$422,700 per year. (based on the 04/05 DAL operating costs of \$4.227M
5	Reduction in effort to follow up the status of forensic evidence	\$600,000 per year for FTE wages. Not directly realisable in money terms
6	Improved visibility of the exhibit process	Not Realisable in money terms. Improved business processes
7	Performance improvement mechanisms	Not Realisable in money terms. Improved efficiency
8	Improved tracking of evidence	Not Realisable in money terms. Improved efficiency
9	Compliance with Court Orders for Destruction	Not Realisable in money terms. Improved business processes
10	Improved auditability of the forensic process	Not Realisable in money terms. Improved business processes

The Benefits Realisation Register, Attachment 7, provides more detail on the metrics and methodologies for achieving these benefits.

7.8 Business Case Gateway Review Report

The proposed project has been subject to a Gateway Project Profile and the results of this profile are attached at Attachment 5. The results of this review indicate that the proposed project is low risk with a score of 22 (from a possible 73).

Attachment 1 - Economic Appraisal

Option 2 – Package Customisation Cost Benefit Analysis

	Year				
	1	2	3	4	5
Capital Costs	•			•	
Project Initialisation	\$75,000				
Project Team Engagement	\$45,400				
Business Analysis	\$372,200				
Detailed Requirements	\$202,200				
Supplier Procurement	\$207,600				
NSWP Project Management		\$330,000			
Supplier Project Management		\$140,000			
Hardware		\$220,000			
Software		\$1,125,000			
NSWP Integration and Interfaces		\$150,000			
System Customisation		\$825,000			
Testing		\$560,000			
Change Management		\$55,200			
Phase 2 - Business Case		\$51,800			
DAL Costs		\$540,000			
Total Capital	\$902,400	\$3,997,000			
Recurrent Costs			\$670,000	\$670,000	\$670,000
Total Coata	¢000 400	¢2.007.000	¢670.000	¢¢70,000	¢670.000
Total Costs	\$902,400	\$3,997,000	\$670,000	\$670,000	\$670,000
Benefits			\$2,829,200	\$2,914,076	\$3,001,498
Elimination of manual processes			·-,,	, _, · · ·, · · ·	, -,,
Reduction in criminal investigation					
time					
Prioritisation of investigations and					
exhibits Status of forensic evidence					
Visibility of the exhibit process					
Visibility of the exhibit process					
Net Cost/Benefit [-\$902,400	-\$3,997,000	\$2,159,200	\$2,244,076	\$2,331,498
		9			
Net Present Value @ 5%	\$1,053,370				
IRR	16%				

Custom Development Costs

	Year					
	1	2	3	4	5	
Capital Costs						
Project Initialisation	\$75,000					
Project Team Engagement	\$45,400					
Business Analysis	\$372,200					
Detailed Requirements	\$202,200					
Supplier Procurement	\$207,600					
NSWP Project Management		\$330,000				
Supplier Project Management		\$140,000				
Hardware		\$220,000				
Technical Specifications		\$150,000				
System Development		\$4,875,000				
Testing		\$965,000				
Phase 2 - Business Case		\$51,800				
DAL Costs		\$540,000				
Total Capital	\$902,400	\$7,271,800				
Recurrent Costs			\$890,000	\$890,000	\$890,000	
Total Costs	\$902,400	\$7,271,800	\$890,000	\$890,000	\$890,000	
Benefits			\$2,829,200	\$2,914,076	\$3,001,498	
Elimination of manual processes			. , ,	. , ,	. , ,	
Reduction in criminal						
investigation time						
Prioritisation of investigations						
and exhibits						
Status of forensic evidence						
Visibility of the exhibit process						
Net Cost/Benefit [-\$902,400	-\$7,271,800	\$1,939,200	\$2,024,076	\$2,111,498	
Net Present Value @ 5%	-\$2,460,385					
IRR	-13%					

FIMS Benefits

Benefit	Est. Value
Elimination of manual processes	\$357,000
Reduction in criminal investigation time	\$1,365,000
Prioritisation of investigations and exhibits	\$422,700
Status of forensic evidence	\$600,000
Visibility of the exhibit process	\$84,500

Total Annual Benefits	\$2,829,200
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Attachment 2 - Technical Impact Report

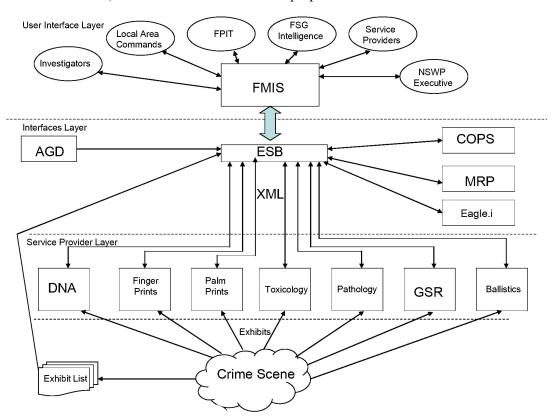
FIMS TECHNICAL ANALYSIS

OVERVIEW

The Forensic Information Management System (FIMS) will be work flow management system that manages the exhibit life cycle from collection and tagging of an exhibit through to finalisation. The system will present multiple different views to different users. It will link to other corporate systems and external service providers to provide a closed loop system in terms of managing forensic exhibits collected at crime scenes.

Workflow nodes will contain actions (units of work) that are triggered when the node is activated. An action might be to invoke a program or send an XML message to another application. A process engine will manage the execution of the workflow. XML will be used to represent data and a messaging service will be used for communication with other workflows and applications.

Web Services (BPEL, SOAP, WSDL and XML) will be utilised to define an end-to-end business process and ensure that the system is not platform or vendor specific. BPEL (Business Process Execution Language for Web Services) will be utilised for defining an end-to-end business process flow including asynchronous transactions, flow control and business logic. The benefits will be realised by improvements in FSG's response times, turnaround times, identification rates and brief preparation times for Courts.



Outline FIMS System Architecture

KEY FEATURES

The key technical features of the system will be:

- Built around Web Services/XML/BPEL to simplify exchange of data between disparate and different systems
- Utilise the NSWP Enterprise Services Bus to provide a standardised exchange mechanism
- Use a browser interface to provide access based on security profiles rather than access to fixed networks
- Utilise a brokering model where only data that is relevant to the management of exhibits is maintained and other data such as POI/event data will maintained in other corporate systems eg COPS and Eagle.i
- Status of exhibits accessed from COPS/Eagle.i as a hyperlink. (i.e. the service will be exposed and not the application)
- Reporting:
 - Provide and report consolidated management and operational views of all FSG activities
 - Performance management data. Response times, time to examine Crime Scene, process times, turnaround times and success rate (e.g. Hit Rates) need to be captured and analysed on a group, section and individual level
- Eliminate duplication of data-entry by recording the details once
- Tag and track exhibits through the entire process
- System generated Exhibit prioritisation based on rules (i.e. enter information concerning
 the crime and the exhibit and FIMS, allocates the exhibit a priority based on a set of built in
 rules.
- A consolidated case management view of all exhibits relating to an investigation
- A Reference number that ties and tracks all Forensic jobs back to the originating event and the appropriate records in eagle.i and COPS
- Minimise paper
- Generate reports based on standard paragraphs integrated with MS word
- Electronically track exhibits the processing status of each exhibit will be tracked through the system to finalisation
- Support multiple level exhibits and independently track each level
- Manage the destruction of exhibits
- Maintain a "chain of possession" of exhibits
- Maintain "to-do-lists" with automatic scheduling.

VIEWS

The system will present multiple different views of the forensic exhibit process. Each view will be tailored to the specific requirements of each user. The major views will be:

Forensic Services

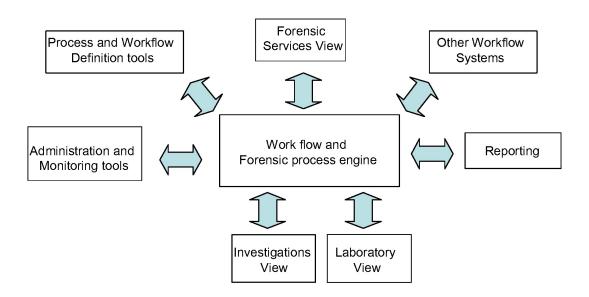
- View of all exhibits across all service providers
- Reporting across the forensic exhibit process
- Statistics on the forensic exhibit process
- Redirect exhibits to other service providers

Investigators

- Unique view of all exhibits relating to an investigation
- Status of all exhibits
- Forensic dash-board
- Escalation
- Reporting
- Track and manage forensic exhibits and the capability to consolidate a view of all the forensic exhibits and work associated with an investigation.

Service Providers

- Status of individual samples
- View of all exhibits processed by that service provider
- Record sample progress and testing results
- Prepare reports on exhibit testing
- Interfaces to Forensic Services Providers including
 - o Division of Analytical Laboratories (DAL),
 - Australian Government Analytical Laboratories (AGAL)
 - Seeds Laboratory
 - Private Service Providers



FIMS Views Summary

LINKS

- External Service Providers
- Laboratory Management Systems
- COPS
- Eagle.i
- MRP

FIMS will be shielded from the implementation specifics of these systems by the ESB, Web Services and standardised XML implementations.

INTERFACES

- Web Services
- XML
- COPS
- Eagle.i
- Service providers' systems

FUNCTIONAL OVERVIEW

The key functional features of the system will be:

Workflow System

- Manage forensic exhibit process execution
- Immediate and deferred process execution
- Generate complete process audit trail
- Support sophisticated business rules
- Incorporate human decision points into process execution
- Automatically manage process exceptions
- Maintain multiple active versions of a process
- Maintain multiple active views of a process
- Implement new process versions without interrupting active work items
- Receive inbound business event messages to initiate or continue processes
- Initiate outbound business event messages from a process

Business Event System

- Communicate processing events among systems within and beyond NSWP
- Support message-based system integration
- Maintain a catalogue of events, systems, communication agents, and subscriptions
- Propagates events via Queuing / Processing triggered by events
- Sends events to workflow processes for routing and processing

Notification System

- Send notification messages to individuals and roles
- Process responses from recipients to Workflow Engine
- Automatic notification forwarding and response
- Support changing participants in a group role without changing the business process
- Internet-enabled: Standard Web browser to review and respond
- E-mail
 - Standard mail protocols: inbound IMAP, outbound SMTP
 - o Supports IMAP-enabled e-mail client
 - Detail and summary message formats / Plain text or HTML message body

Process Monitor

• Graphically review and administer workflow events

- Single site for end users and administrators
- View and analyse transaction history
- Retry or skip any activity / Rewind and re-execute any process
- Review summary of decision makers / View current decision maker

System Management

- Complete system management
- Monitor and view overall system status
- View system metrics and throughput information
- Configure notification mailers and monitor notification mailer status and throughput
- Monitor status Workflow system processes, including background engines, agent listeners, queue propagation, and purging

Directory Service

- Supports synchronisation with Internet Directory (OID) for Lightweight Directory Access Protocol (LDAP) integration
- Synchronise with other external user directories.

Attachment 3 Governance Arrangements and **Management Approaches**

Governance Structure

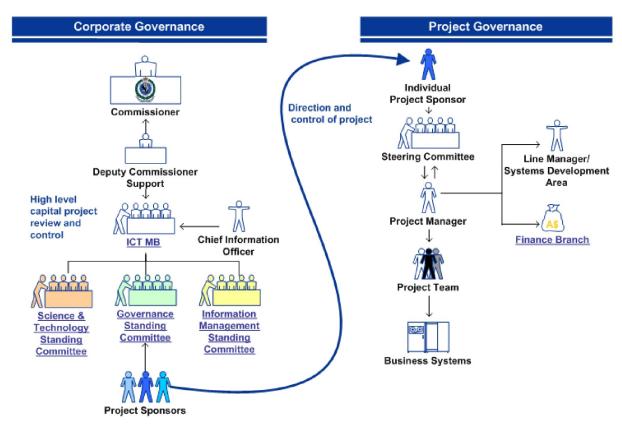
IT Governance within NSW Police controls and monitors the strategic technical direction taken and the information management infrastructure within NSW Police. This ensures effective and compatible systems are developed, implemented and managed in alignment with the corporate plan and future direction.

IT Governance is managed at two levels:

- Corporate Governance
- Project Governance.

At the Organisation Level, the strategic direction is reviewed, policies and standards are set and major IT Projects are monitored. At the Project Level, IT Governance is complied with on a day-to-day, project-specific basis by the appointed Project Manager with regular reporting to the Project Director, Sponsor and Steering Committee.

The two diagrams below illustrate the roles and relationships of the two IT Governance Levels within NSW Police.



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Roles and Responsibilities

The FIMS Project will be managed according to the standard NSWP Project Management methodology. Approval for the project to commence and to progress through key milestones and project phases will be granted by the Project Steering Committee.

The following table outlines the responsibilities and accountabilities for the project.

Resource	Responsibility
Project Steering	As set out in the Terms of Reference.
Committee	Membership will comprise:
	Project Sponsor
	Project Director
	Project Manager
	Representatives from involved business units
Project Sponsor	Act as the corporate champion for the project
	Delivery of the Project
	 Ensure the project's strategic direction is consistent with NSWP plans and goals
	Chair the Project Steering Committee
	Provide support for the project at executive level.
	Fund and resource the project
	Report to the Commissioner's Executive Team.
	Achieve the benefits in the Benefits Realisation Register.
Project Director	Direct the project at a business level.
	 Strategic management of the project across the whole of NSWP.
	Report progress to the Project Sponsor.
	Be the point of escalation for issues.
Project Manager	Develop project plan.
	Deliver benefits to the Project Sponsor.
	Monitor and achieve project tasks.
	Risk management.
	Create and maintain project documentation.
	Manage day-to-day activities of staff assigned to project tasks.
	 Periodic review of milestones to ensure their compliance with the NSWP APT Project Management Standard.
	 Manage the communications to the Project Sponsor, Director and team members.
	Manage the project budget.
	Ensure all variation in scope is raised with the Project Director.
Business Analyst	Develop requirements.
	Assist with validating processes for software and hardware.
	Modify processes and procedures.
	System testing.
Subject Matter Experts	Provide information and expertise to Business Analysts and Change Management.
	Provide technical and business expertise to the project.

Resource	Responsibility			
Change Manager	Assess and create a climate for change.			
	Provide information to the users, relating to scope, change and progress of project.			
	Develop and implement training.			
	Address user resistance.			
Business	Provide business requirements			
Representatives	User Acceptance Test and provide feedback.			
Benefits Manager	Report ongoing benefits realisation to the Project Sponsor.			
	Conduct the post-implementation review to verify the nature of benefits actually realised, and to compare the results with those proposed in the business case. (This role to be appointed by the Project Sponsor.)			

Management Approached

Overall responsibility for the project rests with the Sponsor, Assistant Commissioner Carlene York..

Project Methodology

The FIMS project will be managed according to the NSWP approved Project Management Methodology. Project Managers engaged for the project will be certified practitioners of that methodology

Approval

Approval for the project to commence and to progress through key milestones will be granted by the FMIS Project Steering Committee.

Reporting

Project reporting will be in accordance with NSWP project management methodology standards. A monthly report will be submitted to the ICT Management Board, Governance Standing Committee for project oversight and resolution of issues, risks or change requests at executive level.

Post Implementation Review

A Post-Implementation Review will be undertaken following each major implementation included in the overall project plan. The Benefits Manager, appointed by the Project Sponsor, will undertake these reviews.

A Work In Progress report addressing project milestones, benefits realisation and any problems in project realisation will be prepared and forwarded to the Office of Information and Communications Technology on an annual basis.

Quality Management

Quality will be the responsibility of the Project Manager, the NSWP Audit Group and the Benefits Manager.

Security Management

Security will be the responsibility of the Project Manager and the BTS Computer Security Group.

Change Management

A Change Management Strategy will be developed under the direction of the Project Manager. It will ensure the timely resolution of business decisions and approval of business design that may affect the project. The strategy will include:

- Involve the Business Representatives in gathering the specification. This will ensure that their requirements are taken into consideration up front.
- Involve the Business Representatives in the evaluation of the change. This will ensure that their requirements are met.
- Assessing and creating a climate for change. This will require a gap analysis of the current mode of operation and the future mode of operation.
- Involving Business Representatives, to allow them to take control of the process. Using the gap analysis, conducting interviews and brainstorming sessions with the Business Representatives will help to identify the best possible implementation approach.
- Provide information to Business Representatives regarding, impact, scope and progress of the project. The Change Manager will develop a communication strategy that will promote the change and provide continual updates to the Business community and stakeholders throughout the project.
- Develop and implement training. The Change Manager will design and manage the development of the training materials. This will include all training documentation for the end users and Train-the-Trainer for Education Services, user guides, quick reference guides and any other documentation required.
- Develop appropriate Standard Operating Procedures (SOPs). The Change Manager will guide the development of appropriate SOPs and ensure the integration of these procedures into the standard operating protocols.
- Resolve any user resistance. The Change Manager will assess the level of acceptance for the change, and develop strategies to reduce anticipated resistance. The Change Manager will also be responsible for resolving ad hoc issues.
- Create a user support system. As part of the implementation, the Change Manager will ensure that a comprehensive support system is implemented that will meet the needs of the user community.

Procurement Management

Goods and services required for this project will be supplied according to NSWP purchasing and supply policies and procedures.

Attachment 4 - Benefits Management Plan

Overview

FIMS Benefits Management Plan (BMP) is a joint development between relevant business units and the Change Management component of FIMS Project. Through the development and validation of the BMP, the business engagement process will take place to ensure business input to and support of the BMP. Active business involvement in the development and monitoring of the BMP will be pivotal to a successful realisation of the project benefits.

Purpose

The BMP provides the structured process for the Project Director to manage and demonstrate the achievement of the benefits from FIMS project. The BMP provides the Project Sponsor with a tool that shows the linkage between FIMS, Government policy priorities and NSW Police Corporate Objectives and Services Plan. The BMP describes the management process and accountabilities that will be used to ensure that the benefits expected from the project are identified, owned, validated, monitored and realised.

The BMP shows how work is progressing on achieving the benefits claimed until they are fully realised. The BMP has a life beyond that of the capital project, it provides a clear method of:

- Seeing what benefits have been achieved to date;
- Identifying what benefits are still to accrue before and after implementation;
- Documenting the relevant accountabilities for measuring, monitoring and achieving benefits.

Governance

The BMP incorporates three Benefits Governance Principles:

- Strong commitment at Executive level;
- Project sponsor accountability for benefits realisation;
- Project director accountability for measuring, monitoring and reporting benefits.

NSW Police have recently adopted a corporate view on the importance of benefit realisation, both business improvements and savings. In the recent restructure of NSW Police, the Commissioner's Inspectorate was established lead by an Assistant Commissioner. The Commissioner's Inspectorate has a specific mission to improve and monitor organisational performance. The Commissioner's Inspectorate will oversee benefits realisation. Further it is expected that improvements to operational efficiency and savings are featured in the performance agreements of the Senior Executive, thus linking the responsibility of the Project Sponsor of capital programs.

Information, Communication and Technology Management Board

The Information, Communication and Technology Management Board (ICTMB) have a strong commitment to the project and for the benefits to be realised. This is evidenced by:

- Establishment and approval of project sponsorship;
- Linking of the project sponsor's performance agreement to the successful delivery of the projects benefits;
- Implementing and conducting regular strategic reviews of progress of project benefits to ensure that the investment is focused on delivering desired business benefits. The period of time between reviews will depend on the scale of the project and should be linked to other project review milestones);
- Approval of all benefit revisions;
- Receiving monthly reports that report on the progress of the benefits realisation process;
- Ensuring that the overall management structure and processes are established to manage the benefits realisation process for the project.

Project Sponsor

The sponsor is the Director, FSG who is the corporate owner and champion of the project, accountable for strategic alignment to the corporate plan, project expenditure, delivery of the project objectives and benefit realisation.

The Project Sponsor:

- Is the formal report to the ICTMB for benefit identification, revision and realisation;
- Provides benefits familiarisation / awareness with key Executive and staff members:
- Ensures links are maintained with other Agency or Sector projects / processes (eg, risk management, quality assurance) to maximise benefits opportunities.

Project Steering Committee

The Steering Committee is the over arching advisory and decision making body for a project, accountable for the overall strategic direction of the project, policy decisions, IT governance, project expenditure and monitoring of benefits.

The Steering Committee ensures the Project Director has the necessary and appropriate resources to identify, measure, monitor and report on benefits realisation.

The Steering Committee comprises key stakeholders, internal and external, who are:

- Beneficiaries of the project;
- Able to influence the project;
- Affected by the project deliverables.

Project Director (Business Owner)

The Project Director is accountable to the Project Steering Committee for the management of the project through all phases of the project lifecycle; the integration of project

objectives ensuring that they meet requirements; the implementation of the appropriate changes in policing methods within NSW Police; and the subsequent monitoring and reporting of the realisation of planned benefits until they are realised, which in many cases will be post project closure.

The Project Director will have the delivery of the specific project tasks and outcomes for benefit realisation included in his/her performance agreement, where applicable.

The Project Director has the following accountabilities:

- Functional beneficiary engagement;
- Ensuring that the appropriate resources and processes are in place to identify measure, monitor and report benefits realisation;
- Collating monthly progress information from functional beneficiaries for consolidation into the ICTMB monthly report;
- Updating and maintaining the project's Benefits Realisation Register (monthly during project execution and quarterly after project closure, with actual versus target performance);
- Analysing and distributing progress reporting information from the Benefits Realisation Register;
- Ensuring follow-up and corrective action is taken to maximise benefits opportunities.

Functional Beneficiaries

The functional beneficiary is the Command Manager whose function will benefit from the project and who has the authority to allocate and mobilise resources.

The functional beneficiaries are accountable for the delivery of project business benefits. This will include taking ownership of:

- Achievement of project tasks and outcomes as documented in the Benefits Realisation Register;
- The processes necessary to complete the recording and reporting of base line measures and benefits;
- Taking action to maximise the benefits realisation opportunities;
- Establishing operational management systems to manage the benefits realisation process. Ensuring that procedures are in place for staff to monitor, measure and record benefits until fully realised;
- Where practical this should be linked to the functional beneficiaries' performance agreement.

User Representatives

Reporting to the functional beneficiary, the user representative is responsible for performing the benefits realisation process:

- Providing input to the Benefit Management Plan;
- Performing and reporting base line measurement outcomes;
- Measuring and reporting progress.

Project Manager

The Project Manager is accountable to the project director for the day to day management of the project and its execution to deliver the project objectives and benefits. The Project Manager is responsible for managing the benefits realisation process during the life of the project.

Change Management

Commitment from key business managers is critical to the success of the BMP. The BMP will receive strong business commitment as it will be developed transparently in consultation with business owners, business managers and Project Sponsors.

FIMS benefits realisation approach will ensure that baselining / benchmarking of all agreed performance measures is completed. FIMS change analysts working with business experts will identify and measure baseline indicators in consultation with business representives for agreed benefits, indicators which will validate the success of the project post-implementation. This analysis will require field research and developing of a common view of the measure to be applied against a specific benefit (e.g. time to complete a charge entry), and the value or effort involved, (e.g. average 40 minutes to complete).

The BMP will also confirm the following important components to ensure successful delivery of the benefits:

- Governance structure for managing benefits;
- Task Management: Each benefit will have numerous tasks assigned and each task
 will have a business representative responsible to deliver on that task. These tasks
 are them monitored to ensure successful deliver of the benefits;
- Approach to Benefits Realisation and Validation of Benefits;
- Risk Assessment Schedule: Assess the barriers / risks that may affect the delivery of the benefits;
- Benefits framework:
 - How FIMS will manage the benefits process e.g. assigning responsibility and coordinating the delivery outcomes;
 - o How FIMS will manage expectation of business and stakeholders;
- Management of base line measures:
 - o Determine which baseline measures and processes are to be measured;
 - Who is responsible for validating and approving base line indicators;
 - When baseline indicators will be measured:
 - Handed over by the Steering Committee to the ICT Management Board for the completion of benefits realisation assessment post project implementation;
- Benefits Realisation Register and schedules.

Throughout the development and validation of the BMP, the business engagement process will take place to ensure business input to and support for the benefits in the BMP. Active business involvement in the development and monitoring of the BMP will be pivotal as the business is both recipients and owners of the realisation process.

Under the coordination of FIMS Change Management team, the Steering Committee members and specified business unit managers will identify and agree on the targeted benefits and preferred baseline indicators for the BMP. After the indicators are fully developed, the validated and approved BMP will be presented to all relevant NSW Police managers and executives. They will be provided with an overview of the BMP monitoring process as well as the methodology used to confirm that a benefit has been realised.

Benefits Measurement

In this Business Case, performance measures that form the initial measures included in the BMP have been identified. These are highlighted as part of Attachment 7 – Benefits Realisation Register (BRR). These measures have been developed with operational police and NSW Police personnel to both articulate the benefits and develop the change percentage achievable and where possible a monetary value for each performance measure. Conservative change measures have been applied to both the planned changed percentage and the performance measures selected. It would be quite reasonable to suggest that both the number of performance measure highlighted and the change percentage will increase through the life of the project especially once a solution is selected.

As the BMP is a live document which will be reviewed by the Steering Committee on an ongoing basis, the BMP will be continually updated as the project becomes aware of information that affects the BMP.

Appendix A Sample of Benefits Calculations

Benefit 2.2: Improved management of individual workloads

General Statistics	Statistic Ref No.	Value		Level
S1. Swom officer's average daily rate	RT-01	\$	292.73	Sworn Practitioner
S2. Number of work hours per day	ST-91		7.6	Sworn Officers
S3. Number of NSWP business operation days per year	ST-119		365.25	
S4. Swom officer's average daily rate	RT-02	\$	366.01	Sworn Supervisor

A. Managing individual workload					
	Statistic Ref No.	Value	Rationale / Comments		
A1. Estimated time taken daily to manage workload	ST-97	30	minutes per NSWP operational staff		
A2. Average number of NSWP officers using system on any given day	ST-83	7,000			
A3. Total equivalent officer hours spent on managing workload per day = $(A1/60)$ x A2		3,500			
A4. Total equivalent officer days spent on managing workload per annum = (A3 x S3) / S2		168,207			
A5. Total equivalent officer costs per annum (A4 x S1)		\$ 49,238,974	based on Sworn Practitioner salary rate		
A6. Target % Improvement		15%	Based on operational experience/expertise of FIMS business representatives		
Assessed Value/ Savings = (A5 x A6)		\$ 7,385,846	per annum		
Assessed Value reflected in BRR		\$ 7.39	M per annum		
Improvement in time spent per day per officer on managing workload			minutes per officer per day		

B. Work to be Prioritised			
	Statistic Ref No.	Value	Rationale / Comments

Attachment 4 - Benefits Management Plan

B1. Average number of work items to be prioritised per day	ST-122	4,000	
B2. Estimated time to prioritise each work item ST-125		12	minutes per work item
B3 . Total equivalent officer hours per day = (B1 x B2 / 60)		800	
B4. Total equivalent officer days per annum = (B3 x S3) / S2		38,447	
B5. Total equivalent officer cost per annum = (B5 x S4)		\$ 11,254,623	based on Sworn Supervisor salary rate
B6. Target % Improvement		25%	Based on operational experience/expertise of FIMS business representatives
Assessed Value/ Savings = (B5 x B6)		\$ 2,813,656	per annum
Assessed Value reflected in BRR		\$ 2.81	M per annum

C. CIDS Messages to be verified				
	Statistic Ref No.	Value	Rationale / Comments	
C1. Average number of work items to be prioritised per day	ST-123	3,500		
C2. Estimated time to prioritise each work item	ST-126	5	minutes per work item	
C3. Total equivalent officer hours per day = (C1 x C2 / 60)		292		
C4. Total equivalent officer days per annum = (C3 x S3) / S2		14,017		
C5. Total equivalent officer cost per annum = (C4 x S4)		\$ 5,119,808	based on Sworn Supervisor salary rate	
C6 Target % Improvement		25%	Based on operational experience/expertise of FIMS business representatives	
Assessed Value/ Savings = (C5 x C6)		\$ 1,279,952	per annum	
Assessed Value reflected in BRR		\$ 1.28	M per annum	

D. Events to be verified				
	Statistic Ref No.	Value	Rationale / Comments	
D1. Average number of work items to be prioritised per day	ST-124	7,800		
D2. Estimated time to prioritise each work item	ST-127	10	minutes per work item	
D3 . Total equivalent officer hours per day = (D1 x D2 / 60)		1,300		

Confidential

Attachment 4 - Benefits Management Plan

D4. Total equivalent officer days per annum = (D3 x S3) / S2	62,477	
D5. Total equivalent officer cost per annum = (D4 x S4)	\$ 22,867,140	based on Sworn Supervisor salary rate
D6 Target % Improvement	25%	Based on operational experience/expertise of FIMS business representatives
D7. Assessed Value/ Savings = (D5 x D6)	\$ 5,716,785	per annum
Assessed Value reflected in BRR	\$ 5.72	M per annum

Total Assessed Value of Benefit 2.2:	\$17,196,239 per annum
Total Assessed Value reflected in BRR	\$ 17.20 M per annum

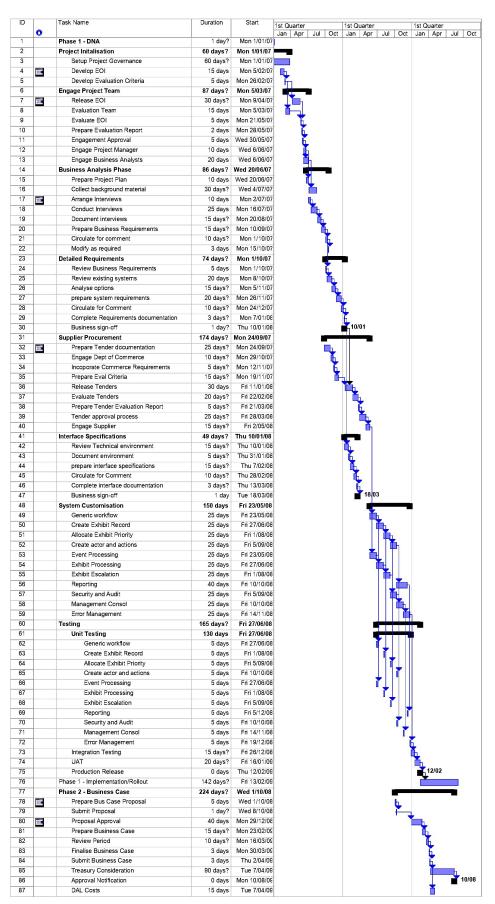
Attachment 5 Business Case Gateway Review Report and Responses

To be added on completion of review.

Attachment 6 - Project Plan

Attachment 6 - Project Plan

Attachment 6 - Project Plan



Attachment 7 - Benefits Realisation Register

Attachment 7 – Benefits Realisation Register

Ref		Person Responsible for Realising the Benefit	Description of Current Situation/ Performance of the Business Process	Current Cost / Performance Measure of the Business Process	Target Cost / Performance Measure after the Planned Change	Target Date for the Benefit to be Realised	Triggers or events that will cause the Benefit to be Realised	Type of Contribution to the Business	Assessed Value of the Benefit or Saving	Comment about the Assessed Value	Corporate	Contribution of this Benefit to Achieving the Strategic and Corporate Objectives and RSP outcomes	Benefit Realised
1	Elimination of manual processes for managing the forensic process	Director FSG	Filling in manual P377 forms to accompany samples Re-keying data on receipt of samples at DAL Re-keying data on receipt of results at FPIT Production of hard copy reports at DAL Collation of results and matching data at FPIT and the publishing of this data Maintenance of spreadsheets and other discrete databases related to the forensic process by investigators at LACs and other Commands such as SCC.	Cost of manual processes	Elimination of these items	2009	FIMS application and electronic interfaces operational Training on new SOPs for forensic process	savings	DAL receives approx 850 cases per month. If a saving of 1 hour per case is obtained across all the manual steps in the process then this represents 10,200 hours per year or \$357,000 per year for FTE wages Not directly realisable in money terms	Realisable Cost avoidance if FIMS implemented. Resources redirected to processing the backlog of exhibits and addressing the increasing workload of forensic evidence.		Improved integrity and efficiencies in managing forensic evidence	

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1	Ref	Description of the Benefit to be Achieved			Current Cost / Performance Measure of the Business Process	Target Cost / Performance Measure after the Planned Change		December 1	Type of Contribution to the Business	Assessed Value of the Benefit or Saving	Comment about the Assessed Value	Corporate	Contribution of this Benefit to Achieving the Strategic and Corporate Objectives and RSP outcomes	
	2	Significant reduction in criminal investigation time	Director FSG	The workflow cycle for forensic evidence from collection to the receipt of results has a number of bottlenecks and introduces delays that affect the ability of police to finalise investigations	Cost of the personnel's time	Reduction of the time taken to complete the current workflow cycle	Gradually from 2009	FIMS application and electronic interfaces operational Training on new SOPs for forensic process	Increased productivity of FSG, investigating police officers and personnel in processing serious indictable crime.	officers save 45 minutes per week then 39,000 hours per year	Avoidance of effort expressed in person hours if FIMS implemented Improved efficiency and resource utilisation	policing services	Improved integrity and efficiencies in managing forensic evidence	

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Ref		Person Responsible for Realising the Benefit		Current Cost / Performance Measure of the Business Process	Target Cost / Performance Measure after the Planned Change	Target Date for the Benefit to be Realised	December 1	Type of Contribution to the Business	Assessed Value of the Benefit or Saving	Comment about the Assessed Value	Corporate	Contribution of this Benefit to Achieving the Strategic and Corporate Objectives and RSP outcomes	Benefit Realised
3	Increased number of positive identifications	Director FSG	NSWP is not able to manage the receipt of DNA cold hits effectively (the result of a match against another DNA profile stored in the DAL database)	percentage of cold hits (60 to	The effective management of all forensic linkages.	Gradually from 2009	Training, revised SOPs, and deployment of FIMS across DAL and all FSG areas in NSW	Provide a seamless and integrated workflow and processes	Earlier and increased identification of POIs and apprehension of offenders in major crime & high profile cases or volume crime has significant benefits and savings to NSWP and the community	Measurable reduction in crime. Not Realisable in money terms	Increased public and Police safety Reduce crime and violence	Improved NSWP service delivery to the community	

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4	Prioritisation of investigations and exhibits	Director FSG	Large volumes of potential forensic evidence are often gathered. This results in significant backlogs for the analysis laboratories.	Reduced productivity	An integrated forensic system so that investigations and exhibits can be prioritised on the basis of the quality of forensic evidence obtained and the likelihood of achieving positive outcomes	Gradually from 2009	Training, revised SOPs, and deployment of FIMS across DAL and all FSG areas in NSW	More efficient use of Police and analysis laboratory resources	If this reduced the number of exhibits requiring examination by 10% then \$422,700 per year (based on the 04/05 DAL operating costs of \$4.227M)	Not Realisable in money terms Improved business processes	Increased public and Police safety	Improved NSWP service delivery to the community	
5	Reduction in effort to follow up the status of forensic evidence		Significant effort is currently spent by police in determining the status of forensic processes, such as the testing of DNA samples by DAL	Cost of the personnel's time	By electronically integrating forensic processes across the boundaries between agencies investigators will have access to the latest status and result information available on demand	Gradually from 2009	Training, revised SOPs, and deployment of FIMS across DAL and all FSG areas in NSW	More efficient use of Police and analysis laboratory resources	If 1,430 officers save 12 hours per year then 17,100 hours per year or \$600,000 per year for FTE wages Not directly realisable in money terms	Avoidance of effort expressed in person hours if FIMS implemented Improved efficiency and resource utilisation	delivery of effective policing services	Improved integrity and efficiencies in managing forensic evidence	

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R	Ref		Person Responsible for Realising the Benefit		Current Cost / Performance Measure of the Business Process	Target Cost / Performance Measure after the Planned Change	Target Date for the Benefit to be Realised	Triggers or events that will cause the Benefit to be Realised	Type of Contribution to the Business	Assessed Value of the Benefit or Saving	Comment about the Assessed Value	Corporate	Contribution of this Benefit to Achieving the Strategic and Corporate Objectives and RSP outcomes	
		Improved visibility of the exhibit process		Police and analysis laboratory resources are currently unable to effectively monitor and review forensic case work	cases when forensic evidence	images and related metadata all in the one	Gradually from 2009	Training, revised SOPs, and deployment of FIMS across DAL and all FSG areas in NSW	More efficient use of Police and analysis laboratory resources	If this reduced the number of exhibits requiring examination by 2% then \$84,500 per year (based on the 04/05 DAL operating costs of \$4.227M)	Not Realisable in money terms Improved business processes		Improved integrity and efficiencies in managing forensic evidence	
	7	Performance improvement mechanisms	Director FSG	There is insufficient management information available about the effectiveness of forensic processes		Management of providers in terms of monitoring service level achievement and costs	Gradually from 2009	Training, revised SOPs, and deployment of FIMS across DAL and all FSG areas in NSW	More effective and efficient processes for managing the forensic process	Reduced effort in management reporting. Ability to improve forensic service levels	Not Realisable in money terms Improved efficiency	Efficient delivery of effective policing services	Improved integrity and efficiencies in managing forensic evidence	

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8	Improved tracking of evidence	Director FSG	Forensic exhibits are only bar-coded once they are received at NSW Health DAL	This can create problems reconciling the records of exhibits held within police systems and those held at DAL	Tagging and tracking exhibits from their point of origin at the crime scene using a common identifier when the exhibits are physically exchanged between agencies, as well as in electronic exchanges of data				Quality of data will be improved, less effort will need to be expended to uniquely differentiate exhibits, and fewer exhibits will be lost or require manual intervention to resolve queries over discrepancies	Improved efficiency	Increased public and Police safety	Improved NSWP service delivery to the community	
9	Compliance with Court Orders for Destruction	Director FSG / Attorney General's Department	Current process for evidence destruction is manual and time consuming.	Excessive time spent by personnel in complying with Court Orders. Delays and potential omissions in complying	Perform effective forensic process management on- line with electronic interface with Court systems	2009	FIMS application and electronic interfaces operational Training on new SOPs for evidence destruction	More effective and efficient processes for destruction of evidence and compliance with Court Orders	Reduced effort in evidence destruction. Ability to transmit Court Orders electronically	Not Realisable in money terms Improved business processes	effective	Improved integrity and efficiencies in destruction of evidence	

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Ref	Description of the Benefit to be Achieved			Current Cost / Performance Measure of the Business Process	Target Cost / Performance Measure after the Planned Change	Target Date for the Benefit to be Realised	Triggers or events that will cause the Benefit to be Realised	Type of Contribution to the Business	Assessed Value of the Benefit or Saving	Comment about the Assessed Value	Corporate	Contribution of this Benefit to Achieving the Strategic and Corporate Objectives and RSP outcomes	Benefit Realised
10	Improved auditability of the forensic process	Director FSG	A large number of deficiencies exist in current processes as documented in the report prepared by the NSW Ombudsman on the operation of the Forensic Procedures Act for the NSW Parliament	forensic processes Lack of information	Significant improvement in audit trail and integrity of forensic processes	2009	FIMS application operational Training on new SOPs for forensic process management	More effective and efficient processes for managing the forensic process and demonstrating compliance to legislation	effort in compliance	Not Realisable in money terms Improved business processes	,	Improved integrity and efficiencies in managing forensic evidence	

Ref	Ombudsman Recommendation	Supported by FIMS
1.	Audits of local area commands include a review of records and systems relating to other types of forensic procedures, as well as DNA samples.	✓
2.	For each of the procedures selected for auditing, the auditor reviews the authority for the procedure (consent form, senior police order or court order) and watches the video of the procedure.	
3.	NSW Police ensure officers conducting forensic procedures have appropriate training and experience. In particular, NSW Police consider implementing the following reforms	
a.	NSW Police develop a forensic procedures portfolio in each local area or specialist command, with a designated and fully trained forensic procedures officer responsible for the portfolio.	Partial
b.	Individual commands consider developing a small team of officers with forensic procedures expertise who will primarily be responsible for conducting forensic procedures in those commands.	✓
C.	Accreditation for a police officer to conduct any forensic procedure be conditional upon annual training.	
4.	NSW Police finalise, as a matter of priority, a forensic processes book as a single register in commands of forensic procedures.	✓
5.	NSW Police review present electronic (COPS and custody management) recording of procedures to ensure a standard process which enables meeting legal requirements including detention requirements.	✓
6.	NSW Police consider the development of a hard copy forensic procedures manual.	✓
7.	NSW Police take into account problems with recording forensic procedures demonstrated in this review in its mainframe replacement program	✓
8.	NSW Police clarify in SOPs for how long and in what circumstances electronic recordings of forensic procedures (i.e. video tapes etc) should be kept, and provide this advice to commands.	✓
9.	The Attorney General clarify who is the "responsible person" for the purposes of the Crimes (Forensic Procedures) Act 2000.	
10.	The Attorney General develop a plain English version of the information that is required to be provided under the Crimes (Forensic Procedures) Act 2000, as a matter of urgency, and consider whether this should be prescribed by regulation or included in a schedule to the Crimes (Forensic Procedures) Act 2000.	
11.	The Crimes (Forensic Procedures) Act 2000 be amended so that police are required to inform volunteers that the forensic procedure may produce evidence against the volunteer that might be used in a court of law.	
12.	Police inform volunteers who provide DNA samples that their DNA profile will be stored on the DNA database but will only be matched within the particular case, and will not be matched against anything else on the database, unless the volunteer indicates that he or she agrees to his or her DNA profile to be used for unlimited purposes.	
13.	The Crimes (Forensic Procedures) Act 2000 be amended to require police to provide information about forensic procedures to child suspects and volunteers, and develop plain English versions of this information for children of different ages in consultation with the Commission for Children and Young People.	

Ref	Ombudsman Recommendation	Supported by FIMS
14.	The Crimes (Forensic Procedures) Act 2000 be amended to require police to provide information about forensic procedures to incapable persons, and develop plain English versions of this information suitable to persons with an intellectual disability in consultation with the Intellectual Disability Rights Service.	
15.	Police consider informing suspects who have been taken into detention after arrest, and who are likely to undergo a forensic procedure, that police may wish to conduct a forensic procedure on the person, such as a DNA sample, and that this information be provided when police give suspects their summary of the provisions of Part 9 of the Law Enforcement (Powers and Responsibilities) Act 2002.	
16.	The Crimes (Forensic Procedures) Act 2000 be amended so that police are required to give volunteers and suspects who are not under arrest a period of notice, specified in the Act or Regulation, before asking them to provide a DNA sample.	
17.	The forensic procedure SOPS include guidelines on identifying and communicating with incapable people. These guidelines should be established in consultation with the Guardianship Tribunal and disability advocates and should cover the information and factors to be considered in assessing a suspect or volunteer's capacity.	
18.	NSW Police provide further training and guidance to police officers on the practical and legal considerations in dealing with `incapable persons' under the Crimes (Forensic Procedures) Act 2000.	
19.	The Crimes (Forensic Procedures) Act 2000 be amended so that a senior police officer order can authorise a suspect to provide a DNA sample by self-administered buccal swab.	
20.	The form used for recording senior police officer orders be amended so that the senior police officer who makes an order authorising a forensic procedure can record their reasons for believing the suspect committed an offence, the grounds on which the officer believes the procedure might produce evidence tending to confirm or disprove that the suspect committed the offence, and the reasons why carrying out of the procedure without consent is justified in all the circumstances. The amended form should also include information about any submissions received from the suspect, their legal representative or interview friend. Any amended form for senior police officer orders should-also be included in the proposed forensic processes book.	Partial
21.	The Crimes (Forensic Procedures) Act 2000 be amended to provide clearer guidance to senior police officers about when carrying out a forensic procedure without consent will be "justified in all the circumstances", including factors which must be considered in making this decision.	
22.	The Crimes (Forensic Procedures) Act 2000 be amended to require a senior police officer making an order under sections 18 or 19 to be independent of the investigation.	
23.	NSW Police clarify to officers in the field that an acting sergeant is a "senior police officer" for the purposes of the Crimes (Forensic Procedures) Act 2000.	
24.	The Crimes (Forensic Procedures) Act 2000 be amended to allow an order under Part 4 to be made in relation to a suspect who has been charged and remanded in police custody as if the suspect were still under arrest.	
25.	The Crimes (Forensic Procedures) Act 2000 be amended to provide clearer guidance to magistrates about when carrying out a forensic procedure without consent will be "justified in all the circumstances", including factors which must be considered in making this decision.	
26.	The Crimes (Forensic Procedures) Act 2000 be amended to clarify that applications may be heard in open court.	

Ref	Ombudsman Recommendation	Supported by FIMS
27.	The definition of "volunteer" in the Crimes (Forensic Procedures) Act 2000 be amended so that it provides words to the effect that a volunteer is a person who is not under suspicion, who consents to a request by a police officer to undergo a forensic procedure, or in the case of a child or incapable person, whose parent or guardian consents to a request by a police officer that the child or incapable person undergo a forensic procedure.	
28.	The Crimes (Forensic Procedures) Act 2000 be amended in respect of the child volunteer provisions for children aged between 15 and 17, allowing these children to consent to forensic procedures for within case matching or limited purposes on their own behalf	
29.	The Crimes (Forensic Procedures) Act 2000 be amended to provide that where a forensic procedure is conducted on a volunteer who is an incapable person, and DNA profile obtained, only be used within the case for which it was provided, and not permitted to be matched against any other indexes on the DNA database.	
30.	The Minister regulate arrangements for mass screenings. The relevant regulation should include:	
a.	a definition of what constitutes a "mass screenings".	
b.	a requirement that a senior officer (Superintendent or above) approve the undertaking of a mass screening	
c.	the criteria to be met before a senior officer approves a mass screening	
d.	that samples obtained during a mass screening only be used for "within case matching" with the relevant criminal investigation	
e.	a requirement that samples be destroyed within a specified period after the relevant case or investigation is finalised	
f.	the information to be provided to volunteers	
g.	the arrangements for conduct of mass screening procedures	
31.	That the SOPS specifically state that the caution be electronically recorded.	Partial
32.	That the caution be included at the beginning of the information sheet.	
33.	That commands develop and keep up to date lists of names and contact details of acceptable community members and representatives from local service providers who can be used as interview friends and independent persons.	
34.	NSW Police consider translating the information sheet into the most commonly used community languages.	
35.	Section 117 of the Law Enforcement (Powers and Responsibilities) Act 2002 be amended so that time taken to conduct a forensic procedure is to be disregarded as "time out" in determining how much of an investigation period has elapsed.	
36.	The Crimes (Forensic Procedures) Act 2000 specify that police must conduct all forensic procedures as quickly as is reasonably possible, and that the maximum lime permitted to conduct any forensic procedure is 2 hours.	
37.	NSW Police amend the SOPS to reflect the best practice for video recording of forensic procedures. In particular we recommend:	
a.	Where an officer takes measures to minimise contamination, for example by cleaning the table, that this be done on video	
b.	The testing officer and person being tested are clearly visible at all times	
c.	The testing officer states the date and time at the start and end of the procedure	
d.	The testing officer introduces himself or herself	

Ref	Ref Ombudsman Recommendation		
e.	The testing officer identifies by name and role any other persons present, including other police officers		
f.	The testing officer provides an overview of the forensic procedure and process		
g.	The testing officer cautions the person being tested		
h.	The testing officer reads out all relevant information to the suspect or volunteer		
i.	The testing officer obtains both the written and verbal consent of the suspect or volunteer		
j.	The testing officer asks the suspect or volunteer whether they consent to the electronic recording of the conducting of the forensic procedure after consent has been obtained and prior to commencing the procedure		
k.	Where the forensic procedure is the taking of a DNA sample, the opening of the DNA sample kit, the sampling process and the sealing of the tamper-evident bag are clearly visible and the contents of the DNA sample kit are visible at all times		
l.	The testing officer at the completion of the forensic procedure asks the suspect or volunteer if they have any complaints about the way the procedure was conducted.		
38.	NSW Police consider clarifying their training and procedures to reflect that where possible, every effort should be made to obtain DNA person samples using the least intrusive method available.		
39.	When police officers seek an order for a person DNA sample, the request include that the order permit the option for the sample to be taken as either a buccal swab, a hair sample or a blood sample and that these choices be provided to the person being tested.		
40.	NSW Police procedures clarify that only one DNA sample is required from any person.		
41.	NSW Police consider reviewing all directives issued to forensic service group and crime scene officers so that they not only reflect the provisions of the Crimes (Forensic Procedures) Act 2000 but also assist in ensuring that relevant evidence is not lost.		
42.	NSW Police be required to report on the number of occasions forensic procedures are conducted using force, in its Annual Report.	√	
43.	NSW Police ensure that SOPs require officers to:		
a.	Review and consider alternatives prior to force being used to carry out, or facilitate carrying out of, forensic procedures		
b.	Document their consideration of alternatives to the use of force and the reasons why they believe that these options are not practicable in the circumstances.	✓	
44.	NSW Police ensure that regular and timely review of documents and recordings of the use of force are carried out by either specialised forensic procedure officers as described in recommendation 3(a) or FPIT so as to assess the:		
a.	Appropriateness of the use of force		
b.	Reasonableness of the use of force		
c.	Appropriateness of the methods applied by the officers concerned		
d.	Any training needs identified for the officers concerned		
45.	NSW Police ensure that forensic procedures involving the use of force are carried out in appropriately sized and equipped areas, which minimise the likelihood of injury to the testing officers and suspects.		

Ref	Ombudsman Recommendation	Supported by FIMS
46.	NSW Police amend their SOPs to ensure that all communication and negotiation with the suspect by testing officers and/or senior police officers is recorded on video prior to the use of force.	
47.	NSW Police ensure that SOPs relating to the identification of all persons present and the explanation of their role are complied with.	
48.	The Crimes (Forensic Procedures) Act 2000 be amended so that Part 6 Division 6 reflects the following principles:	
a.	it is unnecessary to share person DNA samples	
b.	the provision of other material is also unnecessary, unless material remains available (after the initial analysis) that is sufficient for independent analysis and the suspect has requested this	
C.	if there is more than sufficient material available (for the initial analysis) at the time the sample is collected, and a request is made by the suspect, the testing officer should supply a share of the sample at this time	
d.	the results of DNA analysis, or the analysis of other samples taken under the Act, only be required to be provided to persons where the results are to be used in evidence in proceedings, or if a request is received	Partial
e.	photographs only be provided where they are to be used as evidence in proceedings or if a specific request is received.	
49.	The Attorney General consider amending the Crimes (Forensic Procedures) Act 2000 so that Part 6 Division 6 does not apply to volunteers.	
50.	NSW Police develop and implement strategies to ensure officers are complying with the current procedures for sharing forensic material and photographs with suspects.	
51.	NSW Police consider expanding the use of digital photographs for forensic procedures to ensure copies of photographs can be provided expeditiously and receipts obtained.	
52.	NSW Police provide clear advice to officers about when photographs can be taken under sections 133 and 136 of the Law Enforcement (Powers and Responsibilities) Act 2002, and when in addition photographs can be taken under the Crimes (Forensic Procedures) Act 2000.	
53.	NSW Police keep records of the number of covert DNA samples submitted for analysis, the reason why the sample was taken covertly, and the results of the analysis, and includes these in its annual report.	✓
54.	Parliament consider regulating the collection of covert samples to include under what circumstances covert samples can be collected, whether a court order should be required, and how profiles obtained from covert samples should be managed on the NSW DNA database.	
55.	NSW Police consider amending SOPs for forensic procedures conducted on victims in particular as concerns consent and information requirements.	
56.	The Crimes (Forensic Procedures) Act 2000 be amended to specifically provide the following:	
a.	the taking of a DNA sample from a child under the age of 10 be prohibited except when a court order authorises the sample having given due consideration to the age of the child and where:	
i.	the paternity of the child is of evidentiary value in an indictable or prescribed offence; or	Partial
ii.	the DNA is required for exclusionary purposes.	Partial

Ref	f Ombudsman Recommendation		
b.	the only permitted matching for a DNA profile obtained from a DNA sample from a child under the age of 10 is within case matching, and that the profile not be placed on any index of the DNA database.	√	
57.	Training for forensic procedures include information that the primary reason for rejecting DNA person samples is that there is insufficient material on the FTA card and therefore reinforce the need to obtain sufficient forensic material when taking a DNA sample by buccal swab.		
58.	NSW Police remove the option of "other" on the sample information form.		
59.	The Attorney General consider including in the regulations provision for an additional index on the NSW DNA database that allows DAL to continue their practice of segregating profiles to be used for "in-case" matching.		
60.	NSW Police and DAL implement a process so that DAL only accepts DNA samples from suspects and volunteers where there are sufficient details enabling DAL to identify the case to which the sample belongs.	✓	
61.	DAL reviews its processes for storing firearms and takes all reasonable precautions to ensure they are kept safely, in accordance the Firearms Act 1996.		
62.	Part 11 of the Crimes (Forensic Procedures) Act 2000 be amended to permit the matching of DNA profiles within the suspects index.		
63.	DAL continues to use volunteer samples only within the case for which the sample was provided, unless it has confirmed with the relevant police officer that the volunteer did actually intend that his or her profile be placed on the "unlimited purposes" index.	√	
64.	DAL deletes all profiles provided by volunteers for `within case matching' from the database, once the relevant court proceedings have been finalised.	√	
65.	NSW Police remove the option of samples not being placed on any index from the volunteer consent form.		
66.	DAL and NSW Police standardise their methods of recording cold links, warm links and eliminations.	√	
67.	DAL in consultation with NSW Police develop a set of agreed outcomes for analysis conducted in relation to suspect samples, and record an outcome for each case in which a suspect sample is submitted.	✓	
68.	DAL provide an appropriate central unit in NSW Police (such as FPIT or FSG) with DNA analysis results for each sample analysed.	√	
69.	DAL and NSW Police consider publishing outcomes from all links made from the NSW DNA database, not just cold links, in their respective annual reports	√	
70.	DAL and NSW Police include explanations on how they calculate links in their respective annual reports.		
71.	DAL and NSW Police consider regularly publishing this information on their respective websites.	√	
72.	NSW Police in addition to the information currently included in their annual report on the number of cold links and person DNA tests undertaken include additional information on:	✓	
a.	how many DNA samples have been analysed (including person samples and crime scene samples),	√	
b.	how many profiles are on the database,	✓	
C.	the results of analysis,	✓	
d.	how many samples have been rejected and the reasons for this	✓	

Ref	Ombudsman Recommendation	Supported by FIMS
e.	how many samples are submitted to the National DNA database (NCIDD) when it becomes operational	√
f.	how many matches are made on the National DNA database (NCIDD) when it becomes operational	√
73.	NSW Police commence recording how many non DNA forensic procedures are undertaken by type and the results achieved following these procedures.	√
74.	NSW Police and DAL agree on new turnaround times (for items as well as cases), based on DAL's current caseload.	✓
75.	Appropriate changes be made to DAL's case management system, so DAL can state how many cases are on hand, and the status of each; and any cases which are overdue, according to any agreed turnaround times, are flagged.	✓
76.	As well as providing monthly reports detailing turnaround times for cases completed and cases finalised, DAL provides NSW Police with monthly reports detailing cases on hand. This should include the number of cases and items awaiting analysis, and how long they have been at DAL. For cases which have been finalised, the length of time between a case being received and it being started, and between it being completed and filed, should also be indicated.	√
77.	NSW Police implements a reliable system for ensuring DAL is informed about key information affecting case prioritisation, including advice about when analysis is no longer needed.	✓
78.	An audit process be established between DAL and FPIT to ensure the information on the database is correct, including that DNA profiles are identified by a person's real name and not an alias.	✓
79.	The NSW Attorney General consider implementing, and/or facilitating the implementation of, recommendations 15 to 20 made by the Commonwealth Independent Review as they relate to the functions of the NSW Government. It is also recommended that:	
a.	The Crimes (Forensic Procedures) Act 2000 be amended to enable the implementation of recommendations 15-20 made by the Commonwealth Independent Review as they relate to NSW	
b.	The NSW Parliament consider establishing a scheme similar to that in the Law Enforcement (Controlled Operations) Act 1997 and the Telecommunications (Interception) (NSW) Act 1987, to regulate external audits of records relating to forensic material obtained under the Crimes (Forensic Procedures) Act 2000.	
80.	The DNA Advisory Committee and/or the Attorney General's working group participate in any review of the proposed outsourcing trial being considered by NSW Police. This review should properly consider, in addition to the specific outcomes of the trial, the broader question of the long term position of DNA analysis services in NSW, including issues of funding, independence, research and development	
81.	The Parliament give further consideration to the recommendations of the NSW Standing Committee on Law and Justice and the Public Accounts Committee regarding the establishment of an independent State Institute of Forensic Sciences.	
82.	The Attorney General and NSW Police take all necessary steps to permit the sharing of appropriate unlimited purpose volunteer, suspect and serious indictable offender DNA profiles via the National Criminal Investigation DNA Database (NCIDD)	Partial
83.	Officers who are authorised to conduct forensic procedures be provided with best practice training to reduce the risk of contamination when conducting forensic procedures	

Ref	Ombudsman Recommendation	Supported by FIMS
84.	NSW Police work with the DNA Advisory Committee or Attorney General's working group to establish protocols and guidelines for the management of crime scene evidence by FSG in line with any quality control and assurance procedures already implemented by DAL	Partial
85.	If NSW Police introduces barcoding of exhibits at the crime scene, DAL work with NSW Police to consider whether this tracking system can be carried through from collection to the proposed initial FSG examination and finally to the DAL analysis of the evidence	√
86.	Staff in all laboratories which provide DNA analysis services to NSW Police be required to provide a DNA sample, to be included on DAL's staff elimination database.	
87.	Consideration be given to establishing a DNA elimination database for all police officers, forensic officers and scene of crime officers in NSW.	
88.	The DNA Advisory Committee consider consulting with the manufacturers of the equipment used for taking DNA samples about the risk of contamination.	
89.	NSW Police amend COPS to include new fields for the date destruction of forensic material is due, and a field to commence recording the date the sample is either destroyed or converted to a convicted offender profile.	✓
90.	NSW Police consult with the Attorney General's Department to develop appropriate formats for electronic notification of court results and extension orders under section 88(5) via CourtLink once it becomes operational.	✓
91.	When DAL receives a destruction request, it deletes the DNA profile from the database, as well as destroying the forensic material and identifying information.	√
92.	Volunteers be given the opportunity to nominate an agreed retention period, and that this information be recorded on the volunteer consent form. Any destruction date nominated should be recorded on COPS so that FPIT is automatically notified of any samples which need to be destroyed.	√
93.	DAL deletes all profiles provided by volunteers for `within case matching' from the database, once the relevant court proceedings have been finalised.	√
94.	DAL's case management system be developed so that any cases where a destruction date is approaching, and the relevant crime scene evidence has not been examined, are flagged for prioritised examination.	✓
95.	Section 87 of the Crimes (Forensic Procedures) Act 2000 be amended to require forensic material taken from a suspect must be destroyed as soon as practicable if the suspect is convicted and the conviction is subsequently quashed.	
96.	The Crimes (Forensic Procedures) Act 2000 be amended to provide further guidance on what constitutes special reasons for making an extension order and that a finite extension period be determined by Parliament and included in the Act	
97.	The Attorney General implement a system to ensure that magistrates notify the responsible person of any extension given under section 88, as required by the Crimes (Forensic Procedures) Act 2000.	
98.	That section 81 of the Crimes (Forensic Procedures) Act 2000 be clarified to make clear its application to volunteers including whether it only applies to volunteers whose parent or guardian has withdrawn consent.	
99.	The responsible person consider whether sample material obtained from volunteers should be retained once a profile has been loaded onto database and the relevant proceedings have been finalised.	

Ref	Ombudsman Recommendation	Supported by FIMS
100.	NSW Police implements a system to ensure that prints taken from volunteers for elimination purposes are either destroyed or returned to the volunteer as soon as practicable after they have been used to exclude the person from the investigation, in accordance with section 87A of the Crimes (Forensic Procedures) Act 2000	
101.	NSW Parliament consider what, if any, regulation is required of the way in which material obtained from forensic procedures may be analysed and compared.	

Attachment 9 – 2005 Annual Report Forensic Procedures Statistics

APPENDIX 3

FORENSIC PROCEDURES

Crimes (Forensic Procedures) Act 2000

DNA Database - "Cold" Links to Unsolved Crime

	2004-05	2003-04	Comment
Total DNA 'COLD' Links from 2003-04 to 2004-05	3268	2842	14.9 % Increase in DNA database cold links
Person Identifications	1951	1752	11.4 % Increase
Scene-to-Scene	1317	1091	20.7 % Increase
Average Weekly Links	62.8	54.7	14.8 % Increase
Total Arrests (since database start-up Nov 2001) The total number of cold-linked 'unsolved' crime scenes for which charges ensued is 3182 (up from 1798 to end of 2003-04). These charges have be relation to 3680 offences (up from 2096 from database start-up to end 2003-04).			o end of 2003-04). These charges have been in
Total Convictions (since database start-up Nov 2001) Convictions have been recorded for cold-linked crimes in relation to 2250 off (up from 1154 from database start-up to end 2003-04).			

Note: A cold link occurs when a person's DNA profile is linked to an offence for which that person was not previously considered as a suspect.

DNA TESTS

DNA Tests - Crimes (Forensic Procedures) Act 2000

Total Tests	2004-05	2003-04
Person of Interest DNA Tests*	2576	2313
Inmate DNA Tests	2574	2528

^{*} Includes re-tests resulting from Second Sample Policy requiring suspects to be re-tested for new investigations. This policy is under review.

Photos, Fingerprints and other Forensic Procedures

Over 500 photographs were taken using the powers of the Act, as well as over 40 fingerprints and an estimated 100+ other allowed uses (gun shot residue (GSR), hand-swabs etc.).

CrimTrac

No national DNA database matching has occurred pending the resolution of legal issues concerning the exchange of information in accordance with legislated matching tables.

Ministerial Arrangements

Ministerial arrangements for the direct exchange of DNA database information have been signed with the Commonwealth, Australian Capital Territory, South Australia and Tasmania.

Attachment 9 – 2005 Annual Report Forensic Procedures Statistics

DNA Database - Linked Offences

Since Database Start-up November 2001 to 30 June 2005

'Cold' Links – Incident Type	Total
Murder	26
Attempt Murder	10
Break Enter Steal (BES)	5634
Aggravated BES	133
Other Steal	92
Aggravated Robbery	94
Armed Robbery	318
Home Invasion	20
Steal Motor Vehicle	1157
Steal From Motor Vehicle	586
Assault	26
Aggravated Assault	28
Malicious Wounding	11
Sexual Assault	50
Attempt Sexual Assault	4
Aggravated Sexual Assault	62
Malicious Damage	128
Malicious Damage by Fire	16
Firearms Related	19
Drug Related	13
Fail to Stop	20
Dangerous Driving	38
TOTAL	8485