



**Queensland  
Government**  

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**Queensland Health**

**Report on the  
Role and Function  
of  
Forensic and Scientific Services  
in the  
Queensland Government**

*October 2005*

*Ministerial Taskforce  
Forensic and Scientific Services*

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## TABLE OF CONTENTS

<b>1.0</b>	<b>EXECUTIVE SUMMARY AND RECOMMENDATIONS .....</b>	<b>1</b>
1.1	Executive Summary .....	1
1.2	Recommendations .....	4
<b>2.0</b>	<b>TERMS OF REFERENCE .....</b>	<b>16</b>
2.1	Introduction.....	16
2.2	Objectives .....	16
2.3	Methodology .....	17
<b>3.0</b>	<b>BACKGROUND .....</b>	<b>18</b>
3.1	Queensland Health Scientific Services .....	18
3.2	Queensland Police Service.....	18
3.3	Department of Justice and Attorney-General .....	19
<b>4.0</b>	<b>LEADERSHIP AND GOVERNANCE .....</b>	<b>20</b>
4.1	Leadership .....	20
4.1.1	The Current Situation .....	20
4.1.2	Organisational Culture.....	20
4.2	Governance.....	21
4.3	Future Governance Model .....	22
4.3.1	Introduction.....	22
4.3.2	Phase I.....	23
4.3.3	Phase II .....	24
4.3.4	Future Governance Council.....	24
4.3.5	Challenges for the Future.....	24
<b>5.0</b>	<b>ORGANISATIONAL STRUCTURE.....</b>	<b>27</b>
5.1	Analysis of Existing Organisational Structure .....	27
5.2	Proposed Organisational Structure.....	27
<b>6.0</b>	<b>BUSINESS PROCESSES AND BACKLOGS – OVERVIEW .....</b>	<b>30</b>
6.1	Background .....	30
6.2	Queensland Police Service.....	30
6.3	Queensland Health Scientific Services .....	32
6.3.1	Forensic Biology .....	32
6.3.2	Forensic Chemistry .....	32
6.3.3	Forensic Toxicology .....	32
6.3.4	Forensic Pathology.....	32
6.3.5	Forensic Sciences Liaison Unit .....	33

	6.3.6	Public Health Sciences.....	33
6.4		Backlog Project .....	33
	6.4.1	Background .....	33
	6.4.2	Backlog Definition.....	33
	6.4.3	Funding.....	34
	6.4.4	Prioritisation .....	36
	6.4.5	Automation.....	37
	6.4.6	Outsourcing .....	37
6.5		Backlog Project – Next Steps .....	38
7.0		FORENSIC BIOLOGY – ISSUES .....	39
	7.1	Background .....	39
	7.2	Crime Scene – Sample Collection.....	39
	7.3	Sample Transportation.....	41
	7.4	Receipt/Destruction of Samples at Queensland Health Scientific Services .....	41
	7.5	Workflow in Forensic Biology .....	41
	7.6	Future Funding Needs .....	43
	7.7	Information Management in Forensic Biology .....	45
	7.8	Forensic Biology Structure.....	45
	7.9	Forensic Biology Work Space .....	46
8.0		FORENSIC CHEMISTRY (CLANDESTINE DRUG LABORATORIES) – ISSUES .....	47
	8.1	What is a Clandestine Drug Laboratory .....	47
	8.2	The Criminal Justice Process.....	48
	8.3	Strategies to Address Clandestine Drug Laboratory Backlog.....	49
	8.3.1	General.....	49
	8.3.2	National Initiatives to Reduce Access to Pseudoephedrine.....	49
	8.3.3	Amount of Scientific Analysis.....	50
	8.3.4	Summary Jurisdiction .....	52
	8.3.5	Reporting Requirements for Precursors .....	55
	8.3.6	Possession of Precursors and Production Charges .....	55
	8.3.7	Outsourcing .....	57
	8.3.8	Process Re-engineering.....	57
	8.4	Forensic Scientists Attending Illicit Drug Sites .....	57
	8.5	Destruction of Clandestine Drug Laboratories .....	58
	8.6	Workplace Health and Safety .....	59
	8.7	Overtime .....	59
	8.8	Forecast Elimination of Clandestine Drug Laboratory Backlog.....	59
9.0		FORENSIC PATHOLOGY / CORONIAL ISSUES .....	61
	9.1	Background .....	61
	9.2	Coronial Autopsies.....	61

9.2.1	Professional Relationships Between Forensic and Other Pathologists .....	62
9.2.2	Organisational Responsibility for Mortuary Staff.....	62
9.2.3	Consistent Mortuary Policies, Practices and Standards .....	63
9.2.4	Information System Support .....	63
9.3	Coronial Anatomical Specimens.....	64
9.4	Services Provided by Government Undertakers.....	64
9.4.1	Role of Government Undertaker .....	64
9.4.2	Preparation of Body.....	65
9.4.3	Complaints Procedure .....	65
10.0	QUALITY .....	67
11.0	CHEMICAL, BIOLOGICAL OR RADIOLOGICAL EMERGENCIES .....	69
12.0	PERFORMANCE MEASUREMENT .....	70
13.0	EXTERNAL RELATIONS AND COMMUNICATION .....	72
13.1	Client Relationships .....	72
13.2	Information Systems .....	73
13.2.1	Integrated Justice Information Strategy .....	73
13.2.2	AusLab.....	74
13.2.3	Notification of Court Dates .....	75
13.3	Communication Protocol.....	75
13.4	Strategic Communication – Queensland Police Service .....	76
13.5	Strategic Communication – Director of Public Prosecutions .....	76
13.6	Use of Video Conferencing and Teleconferencing in Court.....	77
14.0	CORPORATE SERVICES .....	79
14.1	Impact of Shared Services.....	79
14.2	Recruitment Practices .....	79
14.3	Records Management .....	80
14.4	Financial Management .....	80
14.5	Zero Base Budget .....	81
14.6	Workplace Health and Safety .....	82
14.7	Food Services.....	82
14.8	Motor Vehicles .....	83
15.0	RESEARCH AND DEVELOPMENT .....	84
15.1	Background .....	84
15.2	National Research Centre for Environmental Toxicology .....	86
15.3	Governance Arrangements for Research and Innovation .....	87
15.4	National Forensic Innovation Facility.....	89
15.5	Professional Development .....	89
15.6	Institute Training Model.....	90
16.0	STRATEGIC INFRASTRUCTURE.....	92

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16.1	Current Infrastructure Issues.....	92
16.2	Current Accommodation Issues .....	93
16.3	Future Infrastructure Issues .....	94
17.0	ALTERNATIVE MODELS .....	96
17.1	Background .....	96
17.2	Forensic and Scientific Service Delivery .....	96
17.3	International Models of Service Delivery .....	97
18.0	FUTURE TRENDS AND TECHNOLOGIES.....	98
19.0	IMPLEMENTATION .....	100
19.1	Governance Arrangements .....	100
19.2	Implementation Team .....	100
19.3	Reporting Arrangements .....	100
19.4	Communication.....	100
19.5	Transition Issues .....	101
19.6	Establishing the Institute “Brand Name” .....	102
19.7	Funding Implications.....	102
20.0	GLOSSARY OF TERMS.....	104
21.0	APPENDICES.....	108
22.0	ADDENDUM	

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## **1.0 EXECUTIVE SUMMARY AND RECOMMENDATIONS**

### **1.1 Executive Summary**

Queensland Health Scientific Services (QHSS) has the potential to play a key role in delivering the Government's Smart State Agenda. However, major reforms are required across many aspects of QHSS's operations for this to be achieved.

The Taskforce is of the view that new executive management arrangements are required to lead QHSS into the future. Change management within QHSS will be an important feature of future reforms.

QHSS does not have well developed corporate governance arrangements. Business planning, financial management, risk management, performance management, and asset management are inadequately developed and applied across the campus. Improved governance arrangements at QHSS need to be established as a priority.

The major focus of QHPSS has been on the hospital environment. Given the diversity of business at QHSS there are insufficient synergies to justify maintaining a reporting relationship with QHPSS.

The Taskforce proposes that QHSS should progress through a phased approach to establish an entity to be known as the Queensland Institute of Forensic and Scientific Services (the Institute). Phase I (to be undertaken over 3 years) would involve the immediate excision of QHSS from QHPSS to create the Institute as a separate entity within Queensland Health (QH).

During this phase, the Institute would examine the establishment of fee-for-service arrangements with government customers to underpin the business focus of the Institute. The Institute also needs to develop full cost pricing policies for all fee-for-service clients and develop clear criteria for undertaking non-core business in such a way that it is not detrimental to core business, and is otherwise of benefit to the Institute.

Also during this phase, a review would be undertaken to determine the most appropriate organisational arrangements and portfolio placement to best position the Institute to achieve the priorities for the Smart State Agenda. This review would determine whether it was more appropriate for the Institute to be placed under the auspices of a department or whether a statutory body model is more appropriate. The outcome of this review would be introduced during Phase II of the reforms.

The Taskforce proposes that a Council be established to provide strategic advice and guidance to Institute management. The Council would be formed at a senior level from Queensland Health (Chair), Queensland Police Service (QPS), Justice and Attorney-General, Premier and Cabinet and Queensland Treasury as well as the Chief Executive Officer of the Institute.

The Taskforce believes there are positive client relationships between QHSS and key clients. Relations with QPS would be strengthened by having a single Service Level Agreement covering all services provided to QPS. The Inter-Departmental Standing Committee on Forensic Sciences (IDSCFS) has demonstrated tangible benefits in terms of inter-agency communication but should have played a much stronger leadership role in addressing the issues facing forensic services across government. The role of the IDSCFS will be superseded by the Council for the Institute, and the IDSCFS abolished.

A new organisational structure is proposed for the Institute (refer Appendix 8). The Institute will be led by a Chief Executive Officer, supported by four laboratory managers, the Chief Pathologist and a Director of Business Services. A position of Chief Scientist will also be created to provide scientific leadership on the campus, including leading the Institute's research agenda, overseeing scientific quality measures, promoting links to tertiary institutions, and overseeing the professional development of Institute scientists. Given the major issues facing Forensic Biology, the area of QHSS responsible for DNA profiling, a re-organisation of the teams in this area is necessary.

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The proposed structure is much flatter than the current structure, allowing supervising scientists to return to bench work, and facilitating closer management – staff communications. The structure will also allow scientists to progress to a higher classification level (PO6) before taking on a management role. Institute scientists would become part of a more fluid team who would have the opportunity to move across the Institute according to staff development needs and organisational priorities. A competency-based progression strategy would see the development of competencies, and position descriptions reviewed, for each classification level. This would address perceptions of parity with equivalent positions in other government agencies.

As part of the Government's 2004 election commitments, \$11M in funding was provided over 3 years for DNA profiling and crime scene sample backlogs in QHSS. In 2004/05, \$5M was allocated to QHSS with \$3M allocated to QPS for the ensuing 2 years. The \$3M is now recurrent. However, there is a lack of clarity about whether the funding is intended for DNA profiling only, or the provision of other forensic services. The Taskforce has concluded that QHSS is not in a position to enter into proper fee-for-service arrangements at this time and that the \$3M should be incorporated into the Institute's base funding pending the proposed review of the Institute's fee-for-service arrangements.

Based on current processes and technologies, QHSS has insufficient resources to deal with incoming DNA profiling work. The backlog of DNA profiles has continued to increase during 2004-2005. A current Business Enhancement Project aims to cost current processes and model more efficient DNA profiling processes. The Taskforce proposes that interim additional recurrent funding be urgently provided to QHSS to slow the rate of growth of the backlog, with the need for further recurrent funding to be reviewed following an assessment of the Business Enhancement Project outcomes.

QHSS does not have a clear strategy for dealing with the backlog of DNA samples. QHSS management has set aside \$1.5M from the 2004-2005 election commitment funding for the outsourcing of volume crime samples. However this does not account for the required resourcing to sub-sample exhibits prior to outsourcing (including the cost of consumables), or to manage the results of the outsourced DNA analysis (e.g. loading the results on to the national DNA data-base, checking links and advising QPS investigating officers). In addition, QHSS has no strategy to deal with the backlog of Major Crime cases.

Additional funding will be required to process the Volume Crime and Major Crime backlog. However, QHSS does not have any reliable estimates on the number of crime scene samples in the Volume Crime or Major Crime backlog that need to be processed. As such, this funding should only be provided once an urgent review of all outstanding cases is undertaken to assess the number of samples that require processing. The Taskforce has estimated the funding level that should see the backlog eliminated by mid-2007, consistent with the Government's election commitment to eliminate the backlog in 3 years. However, this will need to be closely monitored by Institute management.

Forensic exhibits are transported by QPS officers to QHSS. There have been protracted delays in QPS transporting forensic items from regional areas due to the irregular availability of transport and other policing priorities. These delays have a negative impact on workload management at QHSS. This problem could be addressed by the use of locked receptacles, and transportation by commercial operators, to deliver unescorted samples for forensic analysis, as successfully occurs in other Australian jurisdictions.

Delays in QPS authorising the destruction of forensic samples has also become a protracted problem for QHSS and created major storage problems. QPS needs to ensure that investigating officers comply with the existing policy requiring notification to QHSS to enable the destruction of samples.

The Taskforce has also made other proposals to improve procedures within QPS and the Institute, and between these agencies, in relation to the processing of crime scene samples.

The recent commencement of additional clandestine drug laboratory scientists, as a result of the election funding, will have an immediate impact on the time it will take to analyse incoming cases. (Clandestine drug laboratories are primarily used to produce methylamphetamine or 'speed'). Up

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until recently, courts have been advised that it will take 2 to 2½ years to test a laboratory – this has now been reduced to approximately 12 months. This is a tangible benefit of the Government’s funding commitment.

The Taskforce proposes a range of initiatives to address the backlog of clandestine drug laboratory testing and better meet future demand. These include reducing the amount of scientific analysis undertaken by QHSS through improved case management. In addition, legislative amendments are proposed to establish an offence for the possession of precursors and require the defence to state whether they will contest the fact that an illicit drug has been produced. The Taskforce also notes that national developments to restrict access to pseudoephedrine (the main precursor for methylamphetamine production) also have the potential to impact on illicit drug production.

On the assumption of the current number of clandestine drug laboratory seizures continuing, and no benefits from the proposed reforms, the current backlog should be eliminated by early 2008. The Taskforce proposes that two additional scientists be recruited to eliminate the backlog by mid-2007, consistent with the Government’s election commitment to eliminate the backlog in 3 years. However, this will need to be closely monitored by Institute management.

There are serious workplace, health and safety issues for QPS and QHSS staff in the handling of clandestine drug laboratories. To better address these risks, the Taskforce proposes that a further two additional scientists be engaged in the Institute to accompany QPS officers at clandestine drug laboratory sites, and that a low-cost sampling facility be constructed at QHSS outside of the main laboratories.

The Taskforce notes that QHSS has reduced turnaround times in the Illicit Drugs and Forensic Toxicology areas, funded in part from the election funding, to a level acceptable to clients.

QHSS and QPS have significantly improved communication in recent years with the establishment of the Forensic Sciences Liaison Unit (FSLU) and the DNA & Forensic Sample Management Unit (QPS). These Units play important roles in prioritising cases for analysis. However the roles of these Units need to be clarified and a protocol developed and communicated to all relevant QPS and Institute staff. Communication between Institute scientists and QPS officers would also be improved by developing agreed terminology for use between the agencies.

Providing up-to-date information on court dates is essential to the efficient prioritisation of cases. Changes to inter-agency communication to improve this information flow are necessary, including placing Forensic Sciences at the Institute within the scope of the Integrated Justice Information Strategy (IJIS) Project.

QHSS has recently undergone two independent quality audits of their facilities. Although the audits were generally favourable, the recommendations for improvement contained in the audits need to be actioned expeditiously.

QHSS is a critical part of the Government’s preparedness for a chemical, biological or radiological (CBR) emergency. To address potential workplace, health and safety issues, the Taskforce proposes that a triaging facility for CBR substances be established.

The primary laboratory information system supporting QHSS is AusLab, which was modified from the hospital pathology environment. Although many areas of QHSS are using AusLab, there is widespread concern among QHSS staff with the way in which AusLab was implemented and the loss of functionality with the system. An independent review of the AusLab system needs to be undertaken to determine its suitability to the forensic and public health sciences environments.

Skilled scientists see scientific excellence, including access to research opportunities, as an essential part of a scientific career. Applied research is also essential to on-going improvements in client service. To fully develop as a scientific campus, the Institute needs to substantially enhance its governance arrangements for research and innovation, and link this with staff attraction, development and retention strategies. The governance arrangements also need to include strategies to engage in the development of the proposed National Forensic Innovation Facility.

A competency-based professional development program across all sciences is required, including a requirement for all scientists who are required to attend court to undergo a formal training and accreditation process.

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There is a widespread view among QHSS scientists that QHSS receives little or no benefit from the co-location of the National Research Centre for Environmental Toxicology (EnTox) with QHSS. The blurred accountabilities with the joint Director of QHSS and EnTox has exacerbated this problem. It is essential that any future arrangements for research tenants on the Institute campus be governed by a series of key principles ensuring full transparency and accountability, with the arrangement being of mutual benefit to all parties.

There are a range of pressing accommodation and strategic infrastructure needs for the Institute campus. High risk areas identified by the Taskforce include the power supply and air conditioning being at near capacity; deficiencies in laboratory space leading to workplace, health and safety risks; and scope for enhanced security. Professional engineering advice is required as a matter of urgency to prioritise and sequence future infrastructure needs for the Institute.

It is proposed that an Implementation Team based at the Kessels Road campus be established for up to 12 months to implement the approved recommendations. The implementation process will be overseen by the Institute Council.

The funding to implement the above reforms is estimated at \$2.4M recurrent and \$3.9M non-recurrent. Further recurrent funding of up to \$1M will be required for Forensic Biology following the completion of the Business Enhancement Project, and a further amount of up to \$2M non-recurrent will be required for outsourcing of DNA profiles. In addition, approximately \$1.2M recurrent and \$5M non-recurrent may be required to address infrastructure deficiencies once the professional engineering assessment is completed.

## 1.2 Recommendations

### Recommendation 1:

It is recommended that the Director-General, Queensland Health:

- (i) Excises Queensland Health Scientific Services from Queensland Health Pathology and Scientific Services to create an Institute within Queensland Health to be known as the Queensland Institute of Forensic and Scientific Services **immediately**;
- (ii) Appoints a full time Chief Executive Officer for the Institute reporting to a Senior Executive as determined by the Director-General of Queensland Health **immediately**;
- (iii) Ensures appropriate resources from the Office of the Executive Director, Queensland Health Pathology and Scientific Services are transferred to the Institute by **31 January 2006**;
- (iv) Instructs the Audit and Operational Review Unit to commence an organisational review of the Office of the Executive Director, Queensland Health Pathology and Scientific Services to ensure the Office's remaining organisational arrangements are appropriate and functional as a consequence of (iii) by **31 January 2006**;
- (v) Establishes a Council of the Institute with the following members (or delegates) by **31 October 2005**;
  - Director-General, Queensland Health, Chair;
  - Commissioner, Queensland Police Service;
  - Director-General, Department of Justice and Attorney-General;
  - Director-General, Department of the Premier and Cabinet;
  - Under-Treasurer, Queensland Treasury; and
  - Chief Executive Officer of the Institute.
- (vi) Establishes the role of the Council by **31 October 2005** to:
  - Provide advice and guidance to the Institute Management Team;

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- Ensure inter-agency issues are addressed; and
  - Oversee the implementation of the Ministerial Taskforce's recommendations.
- (vii) In consultation with the Commissioner, Queensland Police Service, transfers the Physical Evidence Unit, Forensic Services Branch, Queensland Police Service, the incumbent staff and associated resources to the Institute by **31 July 2006**.

**Recommendation 2:**

It is recommended that the Chief Executive Officer of the Institute develops and implements:

- (i) A corporate governance framework including executive committee structures that addresses as a minimum the following by **30 April 2006**;
  - Strategic and business planning;
  - Human resource management and workforce;
  - Financial management;
  - Risk management;
  - Quality management;
  - Research;
  - Capital works and asset management; and
  - Performance management.
- (ii) A communication strategy to ensure that all staff at the Institute are aware of and receive ongoing information concerning the new corporate governance framework and Executive Committee structure by **30 April 2006**.

**Recommendation 3:**

It is recommended that the Director-General, Department of the Premier and Cabinet commissions a review to determine the most appropriate organisational arrangements and portfolio placement for the Institute having regard to the Government's strategic directions for scientific activities under the Smart State Agenda by **31 January 2007**.

**Recommendation 4:**

It is recommended that the Chief Executive Officer of the Institute:

- (i) Implements the new organisational structure as detailed in Appendix 8 **immediately**;
- (ii) Establishes the Executive Management Committee comprising the Chief Executive Officer of the Institute and the seven senior managers by **31 October 2005**; and
- (iii) Develops and implements the competency based progression strategy, including the review of position descriptions by **31 January 2007**.

(Estimated recurrent costs: \$567,000 per annum)

**Recommendation 5:**

It is recommended that the Chief Executive Officer of the Institute:

- (i) Removes from the term "backlog" all cases where no further analysis or reporting requirements can be undertaken at that time by **31 October 2005**;
- (ii) Defines the term "backlog" as being the number of cases not completed within a time agreed with the client by **31 October 2005**; and
- (ii) Ensures that the systems are altered to ensure the appropriate reporting reflects the definitions determined for "backlog" by **31 January 2006**.

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**Recommendation 6:**

It is recommended that the Commissioner, Queensland Police Service transfer the \$3M of recurrent election funding from the Queensland Police Service to the Institute for the periods 2005/06 and 2006/07 by **31 October 2005** pending the development of proper fee-for-service arrangements.

**Recommendation 7:**

It is recommended that the Chief Executive Officer of the Institute and the Superintendent, Forensic Services Branch, Queensland Police Service:

- (i) Review the role of the Forensic Sciences Liaison Unit and the DNA & Forensic Sample Management Unit to ensure they are complementary by **31 January 2006**;
- (ii) Expand the role of the DNA & Forensic Sample Management Unit and Forensic Sciences Liaison Unit to facilitate case conferences under clear guidelines with relevant parties on all major crime and Clandestine Laboratory cases by **31 January 2006**; and
- (iii) Ensure that the DNA and Forensic Sample Management Unit, in conjunction with the Forensic Sciences Liaison Unit, review all outstanding cases and cleanse all backlog data by **31 January 2006**.

**Recommendation 8:**

It is recommended that the Chief Executive Officer of the Institute ensures that when validating future equipment the validation work undertaken by other jurisdictions to introduce equipment and/or automation processes is utilised to minimise validation time whilst maintaining scientific accountability and integrity by **31 October 2005**.

**Recommendation 9:**

It is recommended that the Chief Executive Officer of the Institute in consultation with the Superintendent, Forensic Services Branch, Queensland Police Service develop standard terminology and statistical counting measures for forensic evidence by **31 July 2006**.

**Recommendation 10:**

It is recommended that the Commissioner, Queensland Police Service reviews the requirement for forensic exhibits to be entered in an Exhibit Register within designated Queensland Police Service forensic property points **immediately**.

**Recommendation 11:**

It is recommended that the Commissioner, Queensland Police Service:

- (i) Ensures that forensic exhibits requiring analysis are transported to Queensland Health Scientific Services as soon as possible after collection but no more than 30 days by **30 April 2006**; and
- (ii) Introduces a system for transporting unescorted forensic samples through the use of locked receptacles and commercial transport where appropriate by **30 April 2006**.

**Recommendation 12:**

It is recommended that the Chief Executive Officer of the Institute implements standardised procedures within the Central Property Point by **31 January 2006**.

**Recommendation 13:**

It is recommended that the Commissioner, Queensland Police Service ensures compliance with existing policies in relation to the notification and subsequent destruction of forensic samples by **31 January 2006**.

**Recommendation 14:**

It is recommended that the Chief Executive Officer of the Institute develops and implements a data dictionary of scientific terminology for use by Queensland Police Service staff to enable the ready interpretation of outcomes and results downloaded from AusLab to the Forensic Register by **31 July 2006**.

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**Recommendation 15:**

It is recommended that the Chief Executive Officer of the Institute and the Superintendent, Forensic Services Branch, Queensland Police Service develop and implement protocols to minimise the duplication of presumptive testing by **31 January 2006**.

**Recommendation 16:**

It is recommended that the Chief Executive Officer of the Institute:

- (i) Immediately recruit additional staff in Forensic Biology to meet ongoing service demands by **31 October 2005**;  
(Estimated recurrent cost: \$1M)
- (ii) Reassess the sufficiency of (i) above in light of a costing model for DNA processing currently being developed through the Business Enhancement Project by **31 January 2006**;
- (iii) Subject to (ii) above recruit additional staff in Forensic Biology to meet ongoing service demands by **31 January 2006**;  
(Estimated recurrent cost: up to \$1M, additional to the \$1M recurrent funding provided from 2005/06)
- (iv) Develop a comprehensive strategy for the processing of the Volume Crime and Major Crime backlog once the prioritisation of samples and data cleansing is completed (Recommendation 7(iii)) by **31 January 2006**; and  
(Estimated non-recurrent cost: \$1M in 2005/06, up to an additional \$2M in 2006/07)
- (v) Subject to the above recommendations, develop proposals for the introduction of staggered and/or double shifts by **31 January 2006**.

**Recommendation 17:**

It is recommended that the Chief Executive Officer of the Institute:

- (i) Review the terminology used to describe milestones in the analysis process by **31 July 2006**;
- (ii) Ensure administrative staff undertake data input into AusLab wherever this is deemed to be a more efficient and effective use of resources by **31 January 2006**; and
- (iii) Ensure data collection and reporting supports government and management needs and priorities by **31 July 2006**.

**Recommendation 18:**

It is recommended that the Chief Executive Officer of the Institute reviews the outcomes of the Business Enhancement Project and implements a new work group approach in Forensic Biology by **31 October 2005**.

**Recommendation 19:**

It is recommended that the Director-General of Queensland Health develops and progresses a paper which proposes that all jurisdictions require name and address to be supplied for the purchase of S3 pseudoephedrine-based pharmaceuticals for consideration by the Australian Health Ministers' Conference by **31 January 2006**.

**Recommendation 20:**

It is recommended that the Chief Executive Officer of the Institute, in consultation with the Superintendent, Drug Squad, Queensland Police Service, introduce a case management approach to the analysis of clandestine drug laboratories for a 6 month trial by **31 January 2006**.

**Recommendation 21:**

It is recommended that the Chief Executive Officer of the Institute, in consultation with the Superintendent, Drug Squad, Queensland Police Service and the Director of Public Prosecutions, review the effectiveness of the case management arrangements by **31 July 2006**.

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**Recommendation 22:**

It is recommended that the Director-General, Justice and Attorney-General progress amendments to the *Drugs Misuse Act 1986* to:

- (i) Require the defence to state whether they will contest the fact that methylamphetamine had been produced with the seized equipment by **31 March 2006**;
- (ii) Insert an evidentiary aid to remove the requirement for scientific testing of sealed proprietary pharmaceuticals, unless challenged by the defence by **31 March 2006**; and
- (iii) Clarify that a certificate is admissible as evidence of the identity of the drug even if it does not contain the actual quantity of the dangerous drug analysed by **31 March 2006**.

**Recommendation 23:**

It is recommended that the Commissioner, Queensland Police Service introduce a committal mention process for clandestine drug laboratory cases, if this is necessary to effectively implement Recommendation 22(i), by **31 January 2006**.

**Recommendation 24:**

It is recommended that the Director-General, Justice and Attorney-General:

- (i) Progress amendments to the *Drugs Misuse Act 1986* (Section 13) to increase the maximum penalty a Magistrate can impose to 3 years by **31 March 2006**; and
- (ii) Examine options for clandestine drug laboratory production offences to be heard summarily, in consultation with the Commissioner, Queensland Police Service and the Director-General, Queensland Health, and report to Cabinet on the outcomes by **31 January 2006**.

**Recommendation 25:**

It is recommended that the Director-General, Justice and Attorney-General, in consultation with industry stakeholders, progress amendments to the *Drugs Misuse Regulation 1987* to expand the items listed in Schedule 6 to bring it broadly into line with Category I of the Code of Practice for Supply Diversion into Illicit Drug Manufacture, plus other items from Category II as appropriate by **30 April 2006**.

**Recommendation 26:**

It is recommended that the Director-General, Justice and Attorney-General:

- (i) Progress amendments to the *Drugs Misuse Act 1986* by **31 March 2006** and *Drugs Misuse Regulation 1987* by **30 April 2006** to establish an indictable offence for the possession of precursors, and other chemicals, for the production of an illicit drug, with the precursors and other chemicals being prescribed under regulation modelled on the items in Category 1 in the national Code of Practice; and
- (ii) Progress amendments to the *Drugs Misuse Act 1986* by **31 March 2006** and *Drugs Misuse Regulation 1987* by **30 April 2006** so that the seizure of certain combinations of precursors, reagents, apparatus or end-product would be conclusive evidence that production of methylamphetamine had occurred, or was intended, unless evidence is presented to the contrary, or that the possession of such items would be an offence, with a maximum penalty of 25 years imprisonment.

**Recommendation 27:**

It is recommended that the Chief Executive Officer of the Institute, in consultation with Superintendent, Drug Squad, Queensland Police Service:

- (i) Establish a team of two forensic scientist positions specialising in clandestine drug laboratory analysis to be on-call at all times to attend call-outs from the Queensland Police Service Illicit Laboratory Investigation Team by **31 July 2006**; and

- 
- (ii) Develop protocols to clarify which clandestine drug laboratory situations will require a forensic scientist attendance by **31 July 2006**.

(Estimated recurrent cost: \$205,000 per annum)

**Recommendation 28:**

It is recommended that the Director-General, Queensland Health, in consultation with the Director-General, Department of Industrial Relations, extend the current interim arrangements for payment of overtime to scientists PO4 level and above who are attending illicit clandestine drug laboratory sites **immediately**.

**Recommendation 29:**

It is recommended that the Chief Executive Officer of the Institute review these arrangements when the backlog of work is reduced by **31 January 2007**.

**Recommendation 30:**

It is recommended that the Chief Executive Officer of the Institute employ two additional staff in Forensic Chemistry to analyse clandestine drug laboratories by **31 January 2006**.

(Estimated recurrent cost: \$133,000 per annum)

**Recommendation 31:**

It is recommended that the Director-General, Queensland Health:

- (i) Ensures arrangements continue for Forensic Pathologists at the Institute to maintain their professional links with the Queensland Health Pathology and Scientific Services pathologists by **31 January 2006**;
- (ii) Ensures the continuation of the current Right of Private Practice Arrangements for Forensic Pathologists by **31 January 2006**;
- (iii) Ensures the co-ordination of training for Forensic Pathology Registrars in Anatomical and Forensic Pathology by **31 January 2006**;
- (iv) Ensures the State-wide co-ordination of relief for pathologists who undertake coronial autopsies by **31 January 2006**;
- (v) Reviews the reporting arrangements for non-metropolitan hospital mortuary staff with a view to providing an improved service to the coronial system by **31 July 2006**; and
- (vi) In consultation with the State Coroner, ensures that all persons undertaking autopsies in Queensland Health facilities enter the autopsy results in the AusLab system by **31 January 2006**.

**Recommendation 32:**

It is recommended that the Chief Pathologist/Manager, Forensic Pathology develop standards for autopsy and mortuary services in Queensland Health facilities by **31 July 2006**, including:

- Consistent autopsy practices and procedures;
- Consistent training for mortuary staff;
- Appropriate workplace health and safety procedures;
- Appropriate mortuary access and security, and facilities for the observation of autopsies and viewings;
- Mortuary building standards and policies to guide upgrades and new mortuary construction;
- Arrangements to cover for leave and major disasters; and
- Consistent Employment Assistance Service (EAS) support and stress counselling for mortuary staff.

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**Recommendation 33:**

It is recommended that the Director-General, Justice and Attorney-General, in consultation with the Chief Executive Officer of the Institute, review the period of retention for specimen tissue and amend the *Coroners Act 2003* accordingly by **30 April 2006**.

**Recommendation 34:**

It is recommended that the Commissioner, Queensland Police Service issue formal advice to police officers that general duties police officers are authorised under the *Coroners Act 2003* to direct a government undertaker to prepare a body for viewing for identification if necessary by **31 October 2005**.

**Recommendation 35:**

It is recommended that the Registrar of the State Coroner ensures information about the complaints mechanism in relation to government undertakers is included in its coronial information brochures when re-printed by **31 October 2005**.

**Recommendation 36:**

It is recommended that the Chief Executive Officer of the Institute:

- (i) Addresses the shortfalls as highlighted in the existing audit and evaluation reports by **30 April 2006**;
- (ii) Establishes a dedicated Quality Management function within the responsibilities for the Chief Scientist of the Institute by **30 April 2006**;
- (iii) Ensures Opportunity for Quality Improvement processes are completed in a timely manner by appropriate officers by **30 April 2006**; and
- (iv) Ensures all Standard Operating Procedures are regularly updated by **31 July 2006**.

**Recommendation 37:**

It is recommended that the Chief Executive Officer of the Institute:

- (i) Establishes a triaging facility for a Chemical, Biological or Radiological emergency by **31 January 2006**; and
- (ii) Provides essential equipment for the triaging function by **31 January 2006**;  
(Estimated non-recurrent cost: \$161,000)

**Recommendation 38:**

It is recommended that the Chief Executive Officer of the Institute:

- (i) Develops and implements a performance reporting system for the Institute by **31 January 2006**;
- (ii) Develops criteria consistent with organisational goals and objectives for non-core business by **31 July 2006**; and
- (iii) Ensures the costing analysis of all laboratory services at the Institute is finalised by **31 July 2006**.

**Recommendation 39:**

It is recommended that the Chief Executive Officer of the Institute develops a single Memorandum of Understanding with Queensland Police Service which incorporates all services provided by the Institute by **31 January 2006**.

**Recommendation 40:**

It is recommended that the Director-General of Queensland Health abolishes the Inter-Departmental Standing Committee for Forensic Sciences **immediately**.

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**Recommendation 41:**

It is recommended that the Director-General, Justice and Attorney-General:

- (i) Ensures the Institute's Forensic Sciences is within scope of the Integrated Justice Information Strategy Project by **31 October 2005**;
- (ii) Ensures the Institute is represented on the Integrated Justice Information Strategy Steering Committee by **31 October 2005**; and
- (iii) Provides Queensland-Wide Interlinked Courts System (QWIC) access to all staff members of the Forensic Sciences Liaison Unit excluding Central Property Officers by **31 October 2005**.

**Recommendation 42:**

It is recommended that the Chief Executive Officer of the Institute:

- (i) Commissions an independent review of the AusLab system to determine its suitability to a forensic/public health sciences environment by **31 January 2006**; and
- (ii) Negotiates with Department of Justice and Attorney-General appropriate enhancements to the Queensland-Wide Interlinked Courts System (QWIC) which will enable timely access to relevant information for prioritisation of forensic analysis by **31 January 2006**.

(Estimated non-recurrent cost: \$150,000)

**Recommendation 43:**

It is recommended that the Director-General, Queensland Health gives consideration to realigning the management and ongoing responsibility of the AusLab System and Support Unit to the Information Directorate by **31 January 2006**.

**Recommendation 44:**

It is recommended that the Chief Executive Officer of the Institute, in consultation with the Superintendent, Forensic Services Branch, Queensland Police Service, ensures that communication protocols are developed between Queensland Police Service and the Institute by **31 January 2006**.

**Recommendation 45:**

It is recommended that the Chief Executive Officer of the Institute, in consultation with the Superintendent of Forensic Services Branch, Queensland Police Service, establishes:

- (i) Information sharing/feedback processes relevant to forensic sciences and the collection of crime scene evidence by **30 April 2006**;
- (ii) Staff exchange and development opportunities by **30 April 2006**; and
- (iii) Partnering forums by **30 April 2006**.

**Recommendation 46:**

It is recommended that the Director of Public Prosecutions:

- (i) Establishes a court liaison function for the Brisbane and Ipswich courts to liaise with the Institute on court matters including listings of trial and sentence dates for a 12 month trial by **31 January 2006**; and
- (ii) Subject to the outcome of the trial, continue the court liaison function as an ongoing role by **31 January 2007**.

(Estimated recurrent cost: \$60,000 – recurrent funding subject to outcome of trial)

**Recommendation 47:**

It is recommended that the Director-General, Justice and Attorney-General explore ways, including legislative amendment if necessary, to ensure that forensic evidence is only given in person if it is in the interests of justice by **31 January 2006**.

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**Recommendation 48:**

It is recommended that the Chief Executive Officer of the Institute monitor and evaluate the demand on Institute staff to provide evidence to the Courts and the means by which it is provided by **31 July 2006**.

**Recommendation 49:**

It is recommended that the Chief Executive Officer of the Institute and Senior Executive Director, Resource Management, facilitate a series of workshops to develop a partnering relationship between Shared Service Provider – Corporate and Statewide and the Institute by **31 January 2006**.

**Recommendation 50:**

It is recommended that the Chief Executive Officer of the Institute:

- (i) Ensures all recruitment practices are in accordance with corporate policies and procedures **immediately**; and
- (ii) Reviews the arrangements for the temporary employment of staff in the Backlog Project with a view to appointing staff to permanent positions consistent with government policies by **31 October 2005**.

**Recommendation 51:**

It is recommended that the Senior Executive Director, Resource Management ensures attention is given to the current issues facing the management of records held at Queensland Health Scientific Services with a view to preparing for the implementation of the Whole-of-Government EDRMS solution by **31 October 2005**.

**Recommendation 52:**

It is recommended that the Chief Executive Officer of the Institute ensures:

- (i) A devolved Cost Centre Financial Management system is introduced in the Institute by **31 January 2006**;
- (ii) Budget development is a consultative process with all managers to ensure budgets are understood and adequately allocated within available funding constraints by **31 January 2006**;
- (iii) Appropriate financial reports sourced from the Decision Support System (DSS) and/or FAMMIS are provided to managers on at least a monthly basis by **31 January 2006**;
- (iv) All managers are given adequate training to access and understand the abovementioned reports by **31 January 2006**; and
- (v) Budget performance is an agenda item for all monthly Executive meetings by **31 October 2005**.

**Recommendation 53:**

It is recommended that the Chief Executive Officer of the Institute:

- (i) Establishes a dedicated workplace, health and safety function at the Institute by excising resources, in conjunction with Senior Executive Director, Resource Management, from Queensland Health Pathology and Scientific Services by **31 October 2005**; and
- (ii) Ensures the Director, Business Services takes day to day responsibility for workplace health and safety issues for the Institute, chairs the Workplace Health and Safety Committee and provide monthly reports to the Executive Management Group by **30 April 2006**;

**Recommendation 54:**

It is recommended that the Chief Executive Officer of the Institute by **31 January 2006** develops strategies to improve the financial performance of the Food Services with a view to achieving a cost neutral outcome.

(Estimated recurrent savings: \$80,000 per annum)

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### **Recommendation 55:**

It is recommended that the Chief Executive Officer of the Institute reviews:

- (i) The number of Queensland Government plated motor vehicles with a view to rationalisation by **31 January 2006**; and
- (ii) On an annual basis, the home garaging arrangements to ensure an improved operational effectiveness can be demonstrated by **31 January 2006**.

(Estimated recurrent saving: \$25,000 per annum)

### **Recommendation 56:**

It is recommended that the Chief Executive Officer of the Institute:

- (i) Ensures that any future arrangements for research tenants on the Queensland Health Scientific Services campus is governed by a series of key principles **immediately**, i.e.:
  - The arrangement must be of mutual benefit to both parties;
  - In the case of the Institute, the benefits must include genuine joint projects (ie, of mutual benefit); real opportunities to enhance the professional development of the Institute scientists; and the development of opportunities for scientific advancement in areas of interest to the Institute;
  - The terms of the agreement must be transparent with all 'in-kind' costs identified and costed;
  - The arrangements must not detract from the Institute's service provision; and
  - The agreement must align with the Institute's core business and future vision.
- (ii) Undertakes renegotiations in consultation with Queensland Health stakeholders (including Public Health Services representatives), University sector stakeholders and the National Research Centre for Environmental Toxicology (EnTox) with a view to ensuring any ongoing Service Level Agreement in relation to EnTox is compliant with the abovementioned principles by **31 January 2006**.

### **Recommendation 57:**

It is recommended that the Chief Scientist of the Institute develops and implements governance arrangements for research and innovation at the Institute by **31 July 2006** including:

- The development of a strategic plan for research, to govern research priorities and the development of research partnerships;
- Equitable access to research opportunities for scientists across the campus;
- Access to administrative support for scientists in applying for, and managing, research grants;
- Maintenance of links to relevant academic and peer institutions on research issues, including strengthened links in the forensic sciences;
- Clear policies on costings for research applications; and
- Management of funding for all research projects.

(Estimated recurrent cost: \$500,000 per annum)

### **Recommendation 58:**

It is recommended that the Chief Scientist of the Institute include strategies to fully engage in the development of the proposed National Forensic Innovation Facility in the strategic plan for research by **31 July 2006**.

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### **Recommendation 59:**

It is recommended that the Chief Scientist of the Institute develop and implement by **31 July 2006**:

- (i) A competency based training program across all sciences in the Institute;
- (ii) A policy for the professional development of the Institute scientists incorporating guidelines for:
  - Attendance at local, national and international conferences and other scientific forums;
  - Undergraduate and graduate work placements within the Institute; and
  - Support for further academic advancement, in line with current Study and Research Assistance Scheme (SARAS) policies.
- (iii) A formal training and accreditation process for Institute scientists to give evidence in Court.

### **Recommendation 60:**

It is recommended that the Chief Executive Officer of the Institute:

- (i) Commission professional engineering advice to provide a strategic framework to prioritise and sequence the current and future infrastructure needs of the campus by **31 January 2006**;
- (ii) Cease the existing management proposals to house up to 57 scientists in office/administrative space on Level 1, Block 6 **immediately**;
- (iii) Refurbish the conference room and other nearby reception areas of Level 1, Block 6 as office space for up to 25 scientists from Forensic Biology by **31 January 2006**;
- (iv) Move Forensic Biology scientists from the main DNA laboratory on Level 1, Block 6 to the administration area created above and re-commission the freed up DNA laboratory space for DNA processing as required into the future by **31 January 2006**;
- (v) Re-locate administrative and student areas for EnTox from Level 2, Block 2 to temporary accommodation such as a demountable in the grounds of the campus to free up critical laboratory space by **31 January 2006** ;
- (vi) Move the Information Technology Support Unit on Level 2, Block 2 to an alternative location on the Kessels Road campus by **31 January 2006**;
- (vii) Refurbish the half floor vacated by the movement of the administrative and student clerical areas of EnTox and the Information Technology Support Unit as a laboratory for additional clandestine drug laboratory work and the Analytical Services Unit scientists, Queensland Police Services by **31 January 2006**;
- (viii) Establish a demountable laboratory adjacent to the Kessels Road Police Annex to address Workplace Health & Safety issues with the sampling of Clandestine Drug Laboratories by **31 January 2006**; and
- (ix) Construct an office for the Director of EnTox on Level 2, Block 3 by **31 January 2006**.

(Estimated non-recurrent costs for (ii) – (ix): \$2,427,000. Possible additional recurrent cost: \$1.2M per annum. Possible additional non-recurrent cost: \$5M)

### **Recommendation 61:**

It is recommended that the Chief Executive Officer of the Institute incorporates best practice strategies into the strategic planning processes for the next 3 – 5 years by **30 April 2006**.

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### **Recommendation 62:**

It is recommended that the Director-General of Queensland Health establish an Implementation Team to be based at the Kessels Road campus for up to 12 months **immediately** to:

- (i) Support the Chief Executive Officer of the Institute in implementing recommendations for which the Chief Executive Officer of the Institute is responsible;
- (ii) Proactively monitor the implementation of all recommendations;
- (iii) Co-ordinate all reporting on the Implementation Plan; and
- (iv) Communicate progress in the implementation of the Taskforce's recommendations to Institute staff and key stakeholders.

### **Recommendation 63:**

It is recommended that the Commissioner, Queensland Police Service **immediately**:

- (i) Appoint a senior officer to lead the implementation of the recommendations within the Queensland Police Service and provide reports to the Director of the Implementation Team; and
- (ii) Provide sufficient resourcing for the process of implementing the recommendations pertaining to the Queensland Police Service.

### **Recommendation 64:**

It is recommended that the Director-General, Justice and Attorney-General **immediately**:

- (i) Appoint a senior officer to lead the implementation of the recommendations within Department of Justice and Attorney-General and provide reports to the Director of the Implementation Team; and
- (ii) Provide sufficient resourcing for the process of implementing the recommendations pertaining to the Department of Justice and Attorney-General.

### **Recommendation 65:**

It is recommended that the Chief Executive Officer of the Institute:

- (i) Develop and implement a communication strategy to promote the full title of the Kessels Road campus to be known as the "Queensland Institute of Forensic and Scientific Services" with a short title of the "Institute" as deemed necessary by **31 January 2006**; and
- (ii) Re-visit the naming convention for the Kessels Road campus once Knowledge-Based Research and Business buildings are established by **31 December 2007**.

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## **2.0 TERMS OF REFERENCE**

### **2.1 Introduction**

The Minister for Health announced in Parliament on 22 March 2005, that a Ministerial Taskforce on the Role and Function of Forensic and Scientific Services in the Queensland Government would be established as a matter of urgency. Establishment of the Taskforce has been a Whole-of-Government response to address issues surrounding the demand for and provision of services from Forensic and Scientific Services in Queensland Health (QH) to the criminal justice system.

In recent times there has been an increasing level of scrutiny by the media covering the delays and backlogs relating to forensic and scientific services provided to the criminal justice system. This is evidenced by cases being delayed in some instances and cases being removed from court by the judiciary due to Queensland Health Scientific Service's (QHSS) inability to provide timely analysis. As a result there has been concern at a Whole-of-Government level regarding the Government's ability to maintain and sustain public confidence to deliver forensic and scientific services to the criminal justice system.

The Ministerial Taskforce undertook four areas of review, with a view to developing strategies and an implementation plan for consideration of the Ministerial Oversight Committee. The four areas of review were as follows:

- Full Organisational Review of Forensic and Scientific Services in QH, particularly in relation to services provided to the criminal justice system;
- Analysis and evaluation of the nature, type and quantum of current and future demand for services and technologies from Forensic and Scientific Services in QH by the Queensland Police Service (QPS);
- Analysis and evaluation of the legal and legislative requirements of the Court system for services provided by Forensic and Scientific Services in QH; and
- Analysis and evaluation of alternative models of service delivery for the provision of forensic and scientific services to the criminal justice system.

This report addresses the key findings and strategies for improvement applicable to all four areas of review.

### **2.2 Objectives**

The objectives of the Ministerial Taskforce on the role and Function of Forensic and Scientific Services in the Queensland Government were as follows:

- To examine the systems and processes of government between QPS, the forensic and scientific services provided by QH and the Justice system, in particular the Court System, with a view to developing strategies for improvement and enhancement to the services provided;
- To position Forensic and Scientific Services in Government to address current and future demands and technologies, particularly as it relates to the criminal justice system;
- To identify improvements in the systems, processes, legal and legislative requirements in QPS and the criminal justice system; and
- To assist the Queensland Government to maintain and sustain public confidence in its ability to deliver forensic and scientific services to, and within the criminal justice system.

A full copy of the approved Terms of Reference including governance arrangements for the Ministerial Taskforce is attached as Appendix 1. Also included as Appendices 2, 3, 4 and 5 are the approved Terms of Reference for each of the four areas of review.

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## 2.3 Methodology

The Taskforce has adopted a very consultative approach to information gathering and providing opportunities for key stakeholders to have input into the review process. Consistent with the approved proposals for each area of review it was determined that the broadest capture of information was most desirable in all instances with focus being given to areas where change and reform need to be made.

Information gathering and opportunities for input were provided but not limited to the mechanisms listed below:

- Group and individual meetings with staff and management from all levels at QHSS;
- Group and individual meetings with functional experts/groups in QPS and the Department of Justice and Attorney-General (DJAG);
- Examination of documentation, correspondence, submissions and publications applicable to the areas in question;
- Analysis of lifecycles and workflows from one agency of government to another and return (e.g. QPS to QH to QPS to DJAG);
- Formal invitation for submissions and input to 47 key stakeholders across Australia. Submissions have been received from 28 stakeholders (see Appendix 6 for details);
- Analysis of a large number of unsolicited submissions;
- Expert advice and input from the Institute of Environment Sciences and Research (ESR), New Zealand and the National Institute of Forensic Science (NIFS), Melbourne;
- Statewide visits to QH, DJAG and QPS staff in Cairns, Rockhampton, Gold Coast, Toowoomba, Mt Isa and the corporate office groups applicable to specialty areas;
- Interstate visits to South Australia, Victoria, the Australian Capital Territory and New South Wales;
- Internet searches, particularly in relation to the Forensic Science Service (FSS), United Kingdom and the Royal Canadian Mounted Police Service (RCMP);
- Facilitation of inter-agency meetings and discussions addressing systemic problems and strategies for resolution;
- Meetings/briefings with contractors and consultants currently engaged by QHSS; and
- Meetings with key stakeholders as required.

The Taskforce also provided briefings to the Ministerial Oversight Committee on a monthly basis with individual briefings being provided to Ministers and Directors-General throughout the review process.

Based on the above approach this report has been designed to only address the key issues and strategies to be resolved and implemented. It is not intended that referral and/or comment will be made on every aspect of the review process unless issues are identified that need change or improvement.

The Taskforce would like to acknowledge the co-operation of both management and staff of all organisations in the completion of this review. In particular the Taskforce wishes to commend those officers who have continued to discharge their day to day responsibilities whilst assisting the Taskforce with its many and varied requests for information.

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## **3.0 BACKGROUND**

### **3.1 Queensland Health Scientific Services**

QHSS is one of three operational areas of Queensland Health Pathology and Scientific Services (QHPSS), along with the Queensland Health Pathology Service and Biomedical Technology Services.

The Queensland Health Pathology Service is the principal provider of public sector pathology services in Queensland, providing a State-wide service, primarily to Queensland public hospitals, from 33 laboratories. Biomedical Technology Services provides services related to the purchase, maintenance and testing of medical and scientific equipment in QH.

QHSS is often incorrectly referred to as 'The John Tonge Centre' which is, in fact, only one building on the QHSS campus.

QHSS forms a relatively small part of QHPSS. QHSS has staffing of 290 out of a total QHPSS staffing of 1,760 (16%); and a 2004/05 budget of \$33.9M out of a total QHPSS budget of \$175.5M (19%).

QHSS is headed by a Director (DES2), who holds a joint appointment as Director of the National Research Centre for Environmental Toxicology (EnTox), which is co-located with QHSS. Following an Operational Audit of QHSS in 2002, a General Manager's position was established (also DES 2) on a temporary basis, reporting to the Director.

There are two main operational streams within QHSS each headed by a manager that reports to the General Manager, i.e.:

- Public Health Sciences, which undertakes analysis, investigations and research on matters of relevance to the public health, including environmental contaminants, food, nutrition, and water quality, and
- Forensic Sciences, which provides independent forensic testing in the areas of biology, chemistry, toxicology and forensic pathology.

These two operational streams have their genesis in two previously separate entities – the Government Chemical Laboratory and the Laboratory of Microbiology and Pathology.

A Manager, Business Support Services also reports to the General Manager. This work unit provides some, but not all, corporate services for QHSS.

Although the forensic pathologists within QHSS provide forensic services, the Chief Pathologist reports directly to the General Manager on operational matters, and reports to the Deputy Director of Anatomical Pathology (QHPSS) on professional matters.

All QHSS staff are located at the Kessels Road campus.

An organisational chart for QHSS is at Appendix 7. A description of the roles of the work units at QHSS is provided in Section 6.3.

### **3.2 Queensland Police Service**

QPS has forensic capability at both a regional and corporate level. Each region has Scenes of Crime Officers (SOCO's) who are responsible for attendance at crime scenes to collect evidence.

Responsibility for the strategic direction of scientific services within QPS lies with the Forensic Services Branch (FSB) within Operations Support Command.

QPS scientific officers are attached to scientific sections throughout the State where they carry out scientific testing and attend major crimes. In addition staff from the DNA and Forensic Sample Management Unit and the Coronial Support Section work closely with staff from QHSS.

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### **3.3 Department of Justice and Attorney-General**

A key function of DJAG is justice administration with the court system as its focus. DJAG also provides advice to the Attorney-General in the role as the State's first law officer and administers a large volume of legislation including legislation relating to the criminal law and the criminal justice system.

The Office of the Director of Public Prosecutions (DPP) is part of the Justice portfolio and is headed by the DPP who is an independent statutory officer appointed under the *Director of Public Prosecutions Act 1984*. The DPP, on behalf of the community, is responsible for prosecuting people charged with more serious criminal offences committed in Queensland.

There are two categories of criminal offence in Queensland, namely summary offences dealt with by a Magistrate in a Magistrates Court and indictable offences dealt with in the Supreme or District Court by a Judge and jury after committal by a Magistrate.

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## **4.0 LEADERSHIP AND GOVERNANCE**

### **4.1 Leadership**

#### **4.1.1 The Current Situation**

The Director of QHSS has a dual reporting arrangement with one set of responsibilities and accountabilities to the Executive Director, QHPSS (formerly State Manager, Pathology and Scientific Services) in QH, with the second to the governance arrangements established for EnTox which is part of the University sector. Having dual reporting arrangements is not uncommon in the health sector, particularly where research, teaching and a university presence form part of knowledge development and partnerships for the future.

However, it is apparent that this has not been a beneficial arrangement for QHSS in recent years as the current Director has devoted a significant majority of his time to EnTox. This has resulted in a shortfall in leading the current and future agenda for QHSS.

The Executive Director, QHPSS recognised these concerns some time ago and appointed another QHPSS staff member to act in the position of General Manager, QHSS. It was intended that the General Manager would fill the leadership and management gaps left by the Director while he continued to devote the majority of his time to EnTox. In addition, the General Manager was required to develop and implement a number of change management initiatives, particularly at a time when the take up and use of forensic sciences and technologies in the criminal justice system were 'exploding'.

The presence of both the General Manager's and Director's positions has blurred accountabilities and responsibilities, particularly where their roles overlapped. Staff across QHSS indicated they did not have an understanding of the differences between these positions which has caused further organisational confusion, ambiguity and distancing of management away from staff.

The Executive Director, QHPSS made arrangements for the joint appointment of the Director to be discontinued in June 2005, although this was extended to September 2005 due to the Taskforce's review.

QHSS has undergone a significant degree of change in recent years, with the introduction of new technology, changed organisational arrangements, and marked changes in customer demand. However, many QHSS staff have indicated that they felt they had not been adequately involved in change management processes. Change management within QHSS will be an important feature of future reforms.

The Taskforce believes that significant changes need to be made to the leadership and management approaches at QHSS to provide for a consolidated strategic focus into the future.

#### **4.1.2 Organisational Culture**

Culture and leadership capabilities usually are the factors that determine the effectiveness of the organisation's outputs. Culture is determined by the beliefs, behaviours, knowledge and information shared by the organisation. As a consequence, senior officers have a responsibility to ensure that the organisational environment stimulates the following:

- Teamwork;
- Flexibility to approaches and opinions;
- Openness to innovation and creativity;
- Ability to capitalise on opportunities;
- Tolerance of mistakes and management of risks;

- 
- Adaptability to changing circumstances;
  - Encouragement of diverse views; and
  - Effective knowledge management.

Feedback from a wide range of staff and management during the course of this review indicate that there is a marked scope for improvement in the above areas.

## 4.2 Governance

The Taskforce notes that successful organisations in both the public and private sectors have well established and mature corporate governance arrangements in place to provide vision, oversight, direction and co-ordination over the services provided by the business. Key elements that underpin these arrangements include but are not limited to the following:

- Strategic planning;
- Allocation and prioritisation of resources (ie human, physical and financial);
- Implementation of the strategic plan;
- Monitoring and reporting on the implementation of the strategic plan;
- Examination of the performance of the organisation in relation to the strategic plan; and
- Evaluation of the outcomes achieved against the strategic plan which also informs the next strategic planning cycle.

Successful organisations also establish various governance committees to oversight these issues to ensure strategic directions and priorities are incorporated into the mainstream activities of the organisation, to obtain organisational ownership and provide for regular management reporting and performance evaluation.

QHSS did not have well developed or mature corporate governance arrangements in place at the time of the Taskforce's review. Management of strategic issues has not flowed through to lower levels at the Kessels Road campus to the extent necessary to govern a complex and sophisticated entity such as QHSS.

Other governance arrangements arranged locally at QHSS are patchy and inconsistently developed and applied across the Kessels Road campus. Examples of this relate to but are not limited to performance management, business planning, financial management, risk management, quality, capital works and asset management.

The peak governance committees at QHSS are the Executive Management Committee and the Management Committee. An examination of minutes and agendas confirm there is overlap in the agendas and membership of these committees, as well as consistent non-attendance by certain members. Discussion and attention given to reports provided to these committees is superficial and no evidence could be provided to highlight that decisions were transparent and evidence-based. At present there is no strategic plan or business plan for QHSS to guide decision making, resource allocations or priority setting.

Various staff forums have been convened by senior management with the aim of providing general information to staff. Unfortunately, these forums have not achieved the outcomes desired.

Accordingly, improved governance arrangements at QHSS need to be established as a priority to ensure QHSS can become a strategy focused organisation commensurate with customer needs and requirements, and contemporary public administration. QHSS will need to develop and implement a corporate governance framework including executive committee structures which should as a minimum address the following:

- Strategic and business planning;
- Human resource management and workforce;
- Financial management;

- 
- Risk management;
  - Quality management;
  - Research;
  - Capital works and asset management; and
  - Performance management.

A communication strategy will also need to be developed and implemented to ensure staff at QHSS are aware of and receive ongoing information stemming from the introduction of the new corporate governance framework and executive committee structure.

## **4.3 Future Governance Model**

### **4.3.1 Introduction**

The Taskforce has examined in detail various options and models of service delivery, both national and international, for the provision of forensic and scientific services in the Queensland Government. These are briefly described in Section 17.

Outlined below is the preferred model and the broad governance systems that would be essential in establishing a new future for Forensic and Scientific Services in Queensland.

In the first instance there are a number of key drivers that influence the future of Forensic and Scientific Services in Queensland. In some instances these drivers are unique to Queensland due to history, the current circumstances and what is proposed into the future. These drivers or influences are in the main but not limited to the following:

- There is no one ideal model for the delivery of forensic and public health sciences;
- Best practice organisations in this area such as ESR in New Zealand and FSS in the UK are independent statutory entities that provide forensic and other related scientific services to government on a fee-for-service basis;
- It is unique to have forensic pathology, forensic chemistry, forensic toxicology and forensic biology in the one organisation co-located with public health sciences on the one campus, which provides benefits to clients and other government agencies;
- The Kessels Road campus is a valuable asset with great potential for expansion and growth into the future;
- On-site relationships which already exist with QPS and the university sector present a sound basis for further expansion and development of these relationships in the future;
- Additional organisations such as the Department of Primary Industries and Fisheries (DPI&F) and CSIRO are scheduled to move on site in the future as a result of the Knowledge-Based Research and Business Initiative (Boggo Road Redevelopment) (KBRB) bringing other food and animal sciences onto the campus with enhanced links to research and the university sector;
- A Queensland Tissue Bank serving the public and private health sectors is planned for development on the land adjacent to the current Kessels Road campus;
- The establishment of the above entities and the relevant sciences has the potential to create a significant science precinct for the Queensland Government, consistent with the Smart State Agenda. Shared infrastructure, economies of scale and the synergies that will flow from the cross fertilisation of skills and intellectual capital across the Kessels Road campus will open up a vast array of opportunities for the future; and
- There are no scientific or organisational reasons why QHSS needs to remain as a unit of QHPSS. The major focus of QHPSS has been on the hospital environment. Given the diversity of business at QHSS, and the different client base, there are insufficient synergies to justify maintaining a reporting relationship with QHPSS.

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In determining the appropriate organisational model for the future, the Taskforce recognises that forensic and scientific services are, and need to remain, core business for government. However, the Taskforce notes that the forensic sciences function of QHSS has no organisational alignment with QH (whose Mission is 'promoting a healthier Queensland').

Some stakeholders suggested that forensic sciences should be 'independent' of QPS or DJAG, due to a perceived potential conflict of interest. However, the Taskforce notes that high quality forensic services are already provided by QPS without concern. In Victoria, all forensic services are provided by the Police Service, and the Coroner under the Justice portfolio. The members of the judiciary consulted by the Taskforce indicated that organisational location was not a significant issue, with the expertise and integrity of the individual scientific witness being the key issue. The Taskforce endorses these comments.

#### **4.3.2 Phase I**

In view of the above, the Taskforce proposes that QHSS should progress through a phased approach to establish an entity to be known as the Queensland Institute of Forensic and Scientific Services (the Institute) led by a Chief Executive Officer (CEO). Phase I would involve the organisational excision of QHSS from QHPSS to create the Institute as a separate entity within QH. Based on the current organisational arrangements in QH (which are subject to change resulting from the Forster Review), it is proposed that the Institute should report directly to a Senior Executive as determined by the Director-General of Queensland Health.

To assist with the transition to an Institute model the Senior Executive Director, Resource Management (SED-RM) and the CEO of the Institute will facilitate the excision of the human, physical and financial resources from QHPSS to create the Institute. The excision will also need to address those resources that are located within the Office of the Executive Director, QHPSS. The consequence of the excision of resources will also have an impact on the role, function and level of positions located within the Office of the Executive Director, QHPSS. QH will need to review these roles and positions in light of the changes. The Taskforce is of the view that the Audit and Operational Review Unit (AORU) is well positioned to undertake this activity.

Also during this phase, the reforms proposed within this report need to be implemented to effectively position the Institute on a sound organisational footing that is strategy focused and where business is driven by customer needs and requirements. It is proposed that the management of the Institute examine the establishment of fee-for-service arrangements with customers to underpin the business priorities of the Institute. Government customers could hold budgets separate to the Institute and some services could be purchased on a commercial footing that is agreed by all parties. The level, depth and complexity associated with these commercial arrangements will be contingent on the arrangements agreed between the Institute and its customers and government policy directions at the time.

The Taskforce recognises that there could be implications for the criminal justice system in introducing fee-for-service arrangements which may need to be worked through. Care needs to be taken to ensure that decisions about whether to collect or test a sample are not made on the basis of budget allocation. This concern has been expressed by a range of stakeholders, including QPS, DJAG, DPP and Legal Aid Queensland (LAQ).

In Phase I the unsworn laboratory scientists from the Analytical Services Unit in the Forensic Services Branch of QPS would transfer to the Institute. This would involve five staff and associated resources, including some high cost scientific instruments, transferring once accommodation was made available at the Kessels Road campus. These scientists use similar analytical methods and technology to that of the Physical Evidence Team in Forensic Chemistry, QHSS. This amalgamation would provide benefits for resource utilisation, research and professional development.

Also during this phase a review would be undertaken to determine the most appropriate organisational arrangements and portfolio placement to best position the Institute to achieve the priorities for the Smart State Agenda. This could also encompass an examination of whether all or part of the Forensic Services Branch (sworn and unsworn staff) in QPS should physically move to co-locate on the Kessels Road campus.

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It is proposed that all of the above Phase I initiatives would need to be resolved within a 3 year timeframe.

#### **4.3.3 Phase II**

Subject to the outcomes of the review referred to in Section 4.3.2, the Institute would then progress to Phase II which could see it excised from QH to a broader scientific agenda within the Queensland Government. This could, for example, involve the Institute reporting to an alternative agency of Government that may have a series of Science Institutes. Without pre-empting the outcomes of the review, significant economies of scale, rationalisation of infrastructure and gathering of the scientific community together into related Institutes could also focus on planning, priority setting and investment in science and research for the Queensland Government.

The review would determine whether it was more appropriate for the Institute to be a unit of public administration under the auspices of a department or whether a statutory body model was more appropriate. This decision should be taken in the context of the strategic directions for science across government and not just in isolation for forensic and scientific services.

It is anticipated that Phase II would take two further years to complete after Phase I.

#### **4.3.4 Future Governance Council**

To ensure overarching governance of the Institute it is proposed that a Council be established in Phase I. The role of the Council could be to provide advice and guidance to the Institute Management Team, ensure inter-agency issues are addressed and provide oversight of the implementation of the approved recommendations of the Ministerial Taskforce Review. It is not proposed that the Council will play a management role in the Institute.

It is proposed that in the first phase, the hosting agency will be QH whose Director-General (or delegate) will be the Chair of the Council. In addition to the CEO of the Institute forming part of the Council, the Directors-General or Commissioner (or delegates) from the following agencies would be members of the Council:

- Queensland Health (Chair);
- Queensland Police Service;
- Department of Justice and Attorney-General;
- Department of the Premier and Cabinet (DPC); and
- Queensland Treasury.

The CEO of the Institute would also be a Council member.

#### **4.3.5 Challenges for the Future**

If the Institute is to progress as a fully functioning organisation capable of taking its place in the scientific community and function as a business, the following needs to occur:

- Resolve the negative cultural issues;
- “Draw a line in the sand” regarding the tensions between management and staff;
- Implement appropriate change management processes;
- Drive the business from a customers’ perspective;
- Introduce flexible organisational arrangements; and
- Ensure the Institute is guided by an agreed set of principles, i.e.:
  - Work collaboratively with customers and clients to achieve desired outcomes;
  - Mutual respect and trust – no surprises;
  - Work together to identify problems and find solutions;
  - Openly share all relevant information;

- Encourage innovation;
- Have bias for action;
- Assume responsibility for performance and development; and
- Commit time, resources and energy to make the Institute succeed.

**Recommendation 1:**

*It is recommended that the Director-General, Queensland Health:*

- (i) *Excises Queensland Health Scientific Services from Queensland Health Pathology and Scientific Services to create an Institute within Queensland Health to be known as the Queensland Institute of Forensic and Scientific Services **immediately**;*
- (ii) *Appoints a full time Chief Executive Officer for the Institute reporting to a Senior Executive as determined by the Director-General of Queensland Health **immediately**;*
- (iii) *Ensures appropriate resources from the Office of the Executive Director, Queensland Health Pathology and Scientific Services are transferred to the Institute by **31 January 2006**;*
- (iv) *Instructs the Audit and Operational Review Unit to commence an organisational review of the Office of the Executive Director, Queensland Health Pathology and Scientific Services to ensure the Office's remaining organisational arrangements are appropriate and functional as a consequence of (iii) by **31 January 2006**;*
- (v) *Establishes a Council of the Institute with the following members (or delegates) by **31 October 2005**;*
  - *Director-General, Queensland Health, Chair;*
  - *Commissioner, Queensland Police Service;*
  - *Director-General, Department of Justice and Attorney-General;*
  - *Director-General, Department of the Premier and Cabinet;*
  - *Under-Treasurer, Queensland Treasury; and*
  - *Chief Executive Officer of the Institute.*
- (vi) *Establishes the role of the Council by **31 October 2005** to:*
  - *Provide advice and guidance to the Institute Management Team;*
  - *Ensure inter-agency issues are addressed; and*
  - *Oversee the implementation of the Ministerial Taskforce's recommendations.*
- (vii) *In consultation with the Commissioner, Queensland Police Service, transfers the Physical Evidence Unit, Forensic Services Branch, Queensland Police Service, the incumbent staff and associated resources to the Institute by **31 July 2006**.*

**Recommendation 2:**

*It is recommended that the Chief Executive Officer of the Institute develops and implements:*

- (i) *A corporate governance framework including executive committee structures that addresses as a minimum the following by **30 April 2006**;*
  - *Strategic and business planning;*
  - *Human resource management and workforce;*
  - *Financial management;*
  - *Risk management;*
  - *Quality management;*

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- *Research;*
  - *Capital works and asset management; and*
  - *Performance management.*
- (ii) *A communication strategy to ensure that all staff at the Institute are aware of and receive ongoing information concerning the new corporate governance framework and Executive Committee structure by **30 April 2006**.*

***Recommendation 3:***

*It is recommended that the Director-General, Department of the Premier and Cabinet commissions a review to determine the most appropriate organisational arrangements and portfolio placement for the Institute having regard to the Government's strategic directions for scientific activities under the Smart State Agenda by **31 January 2007**.*

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## **5.0 ORGANISATIONAL STRUCTURE**

### **5.1 Analysis of Existing Organisational Structure**

With the future Institute model in mind and the transition arrangements that will apply over the next 3 to 5 years, it is apparent that the existing organisational structure (see Appendix 7) will not provide the versatility and flexibility necessary to meet customer/client needs. The existing hierarchical model of organisational design is inflexible and reinforces “more of the same” with a siloed approach to service delivery.

Human, physical and financial resources are not easily moved from one specialty area to another. As a result, there is limited career development and progression for scientists who reach a ceiling at a relatively low level unless they take on a management role with little or no science built into their day to day duties. However, the Taskforce notes that the recently introduced Conditional Advancement Scheme for the professional and technical streams enables QHSS staff to apply for advancement based on specified criteria.

Accordingly there is little cross fertilisation of skills and experience across QHSS, multi-skilling or freedom to move staff and skills to match shifting work priorities and demands. Scientists generally have also become removed from senior management for a variety of reasons (as stated earlier), and the current organisational design has reinforced this. At present there is a blurring of management and scientific roles which affects accountabilities and responsibilities for middle managers.

### **5.2 Proposed Organisational Structure**

To address the concerns raised above and to best position the Institute into the future, a revised organisational structure is proposed (see Appendix 8).

The CEO will need to be a leader with strong business and change management skills and experience. The occupant will need to be experienced at aligning organisational strategies to meet customer demands. In doing this, the person will need to mobilise change and ensure all staff understand and act in a manner that reflects the business priorities.

The CEO will need vision and the ability to capture the interest of customers and staff to establish the Institute as a preferred provider and employer for forensic and scientific services in Australia. This position will replace the positions of Director and General Manager.

It is intended that the position of Chief Scientist would be created at a Senior Executive level and require an incumbent with a highly respected career working in forensic and/or public health sciences. The person occupying this position would be required to fully represent all areas of science, even if they had specialist skills/experience in one area. The occupant must have the scientific acumen to represent the Queensland Government in various forums and be the respected scientific expert for the Institute.

The Chief Scientist would co-ordinate, lead and direct the research, quality, accreditation, training and scientific development needs of the Institute as well as provide the links to the university sector and to sciences more generally in and outside the Queensland Government.

The Director of Business Services is intended to provide strategic and tactical advice and support to the CEO and other executive members of the Institute in relation to business and corporate service issues. Transactional services would be provided by the Shared Service Provider – Corporate & Statewide (SSP – C&S) with contract management oversight and co-ordination forming a vital part of this position’s role. Key skills and acumen in managing the Institute for commercial partnerships now and into the future will be essential. Introduction of a business focus and proper pricing and costing initiatives in years one to three will be priorities. Customer relationships and co-ordination of performance management reporting, as well as accountability for

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capital/infrastructure planning and development, will be critical for this position. Other responsibilities will include business continuity planning, risk management, security, and facility management, particularly as other services are incorporated onto the site.

Under the proposed structure:

- Forensic Toxicology and Forensic Chemistry would be merged with one overall Manager;
- Investigative Chemistry, Inorganics and Organics in Public Health Sciences would be merged with one overall Manager; and
- Bacteriology and Virology in Public Health Sciences would be merged with one overall Manager.

Cross fertilisation of skills and better management of priorities would also be integral in these mergers.

Forensic Biology will be retained under a manager. The position of Chief Scientist, Forensic Biology will be abolished.

Forensic Pathology will be retained, however the Chief Pathologist/Manager, Forensic Pathology will be responsible for all the functions within Forensic Pathology.

All sciences and services in the Institute would be represented by seven senior managers who report directly to the CEO. The existing positions of Manager, Forensic Sciences and Manager, Public Health Sciences would be abolished in the new structure. Subject to the outcomes of the job evaluation process, each of the four laboratory management positions and the Director of Business Services could be at the Senior Officer level. The Chief Pathologist/Manager, Forensic Pathology is a medical position.

It is recognised that a sound relationship exists between Anatomical Pathologists in QHPSS and Forensic Pathologists. This professional relationship should continue under the Institute model and move into the future as a professional relationship only – not a reporting relationship. This is discussed further in Section 9.2.

It is proposed that an Executive Management Committee (EMC) made up of the seven senior managers and the CEO would meet regularly. The Executive Management Committee would lead the planning, strategy development, priority setting, resource allocation and performance monitoring agenda for the Institute.

Under the proposed structure, scientists can have an enhanced career progression to PO6 before moving into a management position. This raises the ceiling considerably for scientists who wish to progress as scientists and not managers. Scientists would become part of a more fluid team who would have the opportunity to move across the Institute according to organisational priorities and staff development needs. The Taskforce proposes that seed funding be provided to progress the strategy to allow a number of bench scientist positions to be upgraded. This would address perceptions of parity with equivalent positions in other government agencies. It is considered the cost of introducing this strategy would be approximately \$194,000 per annum.

The Taskforce recognises that there are limitations in the ability to move between some specialty areas. A range of competencies would be developed and position descriptions reviewed for each classification level.

This competency based progression strategy would enhance the already established Conditional Advancement Scheme for the professional and technical streams which allows for individual scientists to progress within that specialty area.

Inflexible staffing structures would be removed and the number and classification of positions would be determined based on work priorities, skills required, staff development needs, succession planning and fiscal limitations.

All staff within each functional area would report to their manager who will be accountable and responsible for achieving organisational priorities and strategies allocated to that functional area.

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The proposed organisational design is much flatter than the present model ensuring the CEO is in direct contact with each functional area.

The estimated additional cost of the proposed management structure is \$373,000. However, if any of the current Team Leaders are successful in obtaining a management position, the resultant savings are to be redirected to provide support to the Business Services area and the Chief Scientist.

***Recommendation 4:***

*It is recommended that the Chief Executive Officer of the Institute:*

- (i) Implements the new organisational structure as detailed in Appendix 8 **immediately**;*
- (ii) Establishes the Executive Management Committee comprising the Chief Executive Officer of the Institute and the seven senior managers by **31 October 2005**; and*
- (iii) Develops and implements the competency based progression strategy, including the review of position descriptions by **31 January 2007**.*

*(Estimated recurrent costs: \$567,000 per annum)*

## 6.0 BUSINESS PROCESSES AND BACKLOGS - OVERVIEW

### 6.1 Background

The provision of forensic services to the criminal justice system is shared between two agencies – QPS and QH.

While much of the QPS involvement is field-based through the collection of evidence from crime scenes and persons, QHSS is almost exclusively laboratory based. However each agency does have some specific roles in the other agency's principal domain.

### 6.2 Queensland Police Service

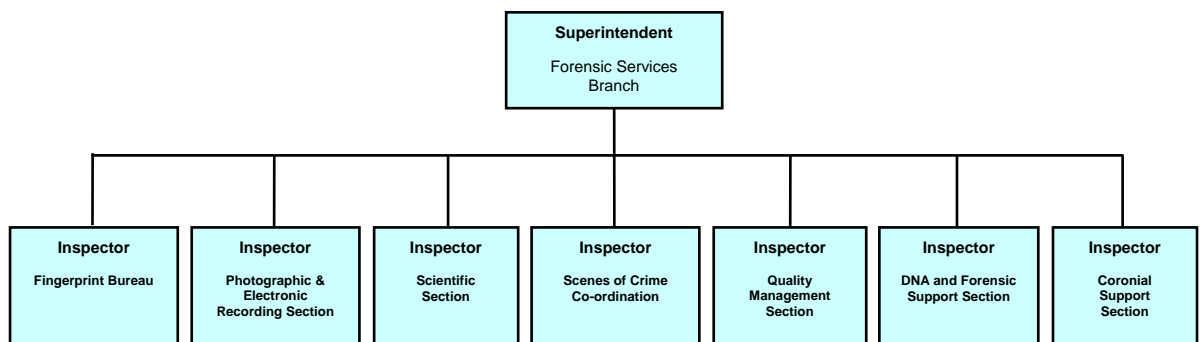
QPS's forensic capability can be categorised into three distinct groupings. The most significant in terms of numbers are Scenes of Crime Officers (SOCO's). They are police officers who have undertaken forensic training in accordance with the competencies outlined in the Diploma of Public Safety (Forensic Sciences). They are located in all regions throughout the State and their prime role is attendance at volume crime scenes to collect a range of forensic evidence including photographic, fingerprint and DNA evidence. They also do some presumptive testing (e.g. testing for the presence of blood).

There are also two classifications of scientists within QPS – sworn and unsworn. Most police scientists are located within the Forensic Services Branch (FSB), although they are becoming more prevalent across a number of regions. They are required to have a Bachelor of Science as a minimum qualification and are able to progress to the rank of sergeant upon completion of a Masters degree and the necessary competencies in police scientific examinations.

Police scientists attend the scenes of major crimes and are responsible for the collection of evidence. In addition, they do presumptive testing for the presence of substances such as blood or semen and analysis such as blood splatter patterns.

The final group are the unsworn scientists in the laboratories at Police Headquarters. Much of their work relates to the analysis of materials from fires, and chemical testing of a range of paints and other substances. This group has previously been discussed in Section 4.3.2.

The structure of FSB, QPS is as follows:



The Fingerprint Bureau performs numerous functions such as maintaining criminal records, identifying unknown deceased or amnesia victims, and processing fingerprint forms for civil purposes, including visa applications. One of the primary roles is the identification of latent fingerprints from crime scenes. In their own right, latent fingerprints can inextricably link a person to a crime scene or exhibit and, in many circumstances, provide the only positive identification

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evidence relating to a specific case. Through its database and the National Automated Fingerprint Identification System, the Bureau is able to provide a 24 hour turnaround to QPS investigative staff across the State.

The Photographic Section operates one of the most technically advanced laboratories in Australia. It provides a photographic, video and digital imaging service which includes photography, video, film processing and printing laboratory, COMFIT (Computer Facial Identification Techniques), Interactive Crime Scene Recording, digital imaging, offender photograph management and historical and public relations recording.

The Electronic Recording Section enhances audio recordings, enhances and prepares video evidence for investigative and prosecution purposes and provides authenticity analysis of recorded information. The workload of this section has increased significantly with the proliferation of Closed Circuit TV in public spaces.

The Scientific Section provides a range of specialist laboratory examinations, i.e.:

- The Ballistics Unit consists of three specialist areas of Bullet Recovery Room, Ballistics Examination Area and the Microscope Room. Activities include comparing bullets and cartridge cases, testing the function of firearms, estimating the distance between a discharged firearm and a target, certifying firearms and firearm components and reconstructing shooting incidents. There is a large exhibit room of weapons for comparison purposes.
- *Cannabis sativa* certification is carried out by appropriately qualified QPS scientists either at the scene, at police facilities or within the QPS laboratories.
- The Document Examination Unit is a specialist area within FSB. A large percentage of the work undertaken involves examining handwriting and signatures to determine whether or not a particular person wrote a specific piece of writing.
- The Analytical Services Unit is responsible for the examination and chemical testing of flammable fluids, chemical testing of flammable fluids, paint, polymers, glass and gun shot residue.

In addition to the scientific services, there are a number of sections within FSB which support the provision of forensic services, i.e.:

- The Quality Management Section is responsible for the development of forensic standards and procedures, manages training and proficiency testing and ensures compliance with the Forensic Quality Manual.
- The Coronial Support Section provides assistance, support and advice to the Coroner on coronial investigations, autopsies, Disaster Victim Identification (DVI) co-ordination and training issues for QPS staff.
- The DNA and Forensic Support Section liaise with QHSS in relation to the collection, prioritisation and destruction of DNA samples as well as the management of DNA results.

A permanent QPS DNA and Forensic Sample Management Unit is currently being established at QHSS. This unit has been staffed with temporary personnel over recent years and has provided considerable assistance in the prioritisation of casework, the recording and identification of samples in the backlog and a liaison role prior to the establishment of Forensic Sciences Liaison Unit (FSLU).

The Kessels Road Police Annex (KRPA) was built by QPS and is under the corporate governance of State Crime Operations Command. The facility has been designed to enable personnel from the Illicit Drug Investigation Team (ILIT) to store physical evidence from clandestine drug laboratories (clan labs). Case scientists from Forensic Chemistry (QHSS) are able to conduct initial examinations and sampling in the facility. The facility is staffed by QPS property officers.

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## **6.3 Queensland Health Scientific Services**

The QHSS campus currently has two distinct operational components – Forensic Sciences and Public Health Sciences. An indication of their workload and staffing over the past 3 years is shown in Appendix 9.

### **6.3.1 Forensic Biology**

Forensic Biology provides analytical DNA services to the criminal justice system and analyses approximately 25,000 DNA profiles each year to assist criminal and coronial investigations. Crime scene samples from major crimes (including homicides and sexual assaults) and from volume crimes (including unlawful entries and stolen vehicles) are submitted by police forensic officers and operational police for analysis and comparison to known suspects (on the recently established Queensland and National DNA database). Approximately 15,000 DNA person profiles are added to the database each year, with a total of approximately 61,000 profiles uploaded onto the National DNA database by 30 June 2005.

The main clients of Forensic Biology are QPS, the criminal justice system, including the Courts, DPP, LAQ, other defence counsel, and the coronial system.

### **6.3.2 Forensic Chemistry**

Forensic Chemistry provides services in illicit drug analysis, clan lab analysis and physical evidence examinations (including fibre, soil and explosives analysis).

The main clients of Forensic Chemistry are QPS and the criminal justice system, including the Courts, DPP, LAQ and other defence counsel.

### **6.3.3 Forensic Toxicology**

Forensic Toxicology provides services to confirm or eliminate the possibility that alcohol, drugs or poisons may have contributed to behavioural impairment, a criminal offence, accident or death. This includes analysis of drugs or alcohol in blood or urine in drink or drug driving matters.

The main clients of Forensic Toxicology are QPS, the criminal justice system, including the Courts, DPP, LAQ and other defence counsel, the coronial system, Corrective Services Department, Transport Department and Forensic Pathologists.

### **6.3.4 Forensic Pathology**

Forensic Pathology provides services on the cause and circumstances of deaths reported to a Coroner under the *Coroners Act 2003*. QHSS Pathologists perform approximately 1,200 – 1,300 coronial autopsies each year from deaths that occur in Brisbane and its surrounds as well as complex matters from other parts of the State.

Services include coronial autopsies, histology, forensic dentistry, forensic skeletal examinations, disaster victim identification, coronial and grief counselling, assistance with tissue donation, training of Pathology Registrars and advice on ethics and legislation related to autopsies.

The main clients of Forensic Pathology are the office of the State Coroner and other Coroners throughout the State, QPS and the criminal justice system, including the Courts, DPP, LAQ and other defence counsel.

### **6.3.5 Forensic Sciences Liaison Unit**

This Unit has recently been established to assist case scientists to enhance communication with the courts, investigating police and forensic officers to assist in establishing inter-case and intra-case priorities. The Unit has access to DJAG's QWIC (Queensland-Wide Interlinked Court) system to monitor court dates. Consequently scientists are able to appropriately allocate their time to casework rather than following up or receiving inquiries on the status of cases from police or court officers. This has been a productive initiative and has continued to enhance business processes and communication across Forensic Sciences, and with stakeholders such as police and the justice system.

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The Central Property Point is part of the FSLU structure and has also been established in recent times as a one stop shop to receive samples for Forensic Sciences. This has also been a productive initiative.

### **6.3.6 Public Health Sciences**

Public Health Sciences offers analytical, research, consultation and interpretative advice services in four main fields of expertise: health investigations, environmental contaminants, food and nutrition, and water quality. These services are provided across a range of disciplines including Bacteriology, Inorganic Chemistry, Investigative Chemistry, Organic Chemistry and Virology.

The operation of Public Health Sciences is quite separate from Forensic Sciences even though some aspects of the science and equipment used have similarities.

Various sections of this report focus on the business processes in the areas of Forensic Biology and Forensic Chemistry where the current backlog problem exists.

## **6.4 Backlog Project**

### **6.4.1 Background**

As part of the Government's 2004 election commitment, provision was made for an additional \$11M in new funding over 3 years from 2004/05 to 2006/07. This funding, under the auspice of the Backlog Project, was intended to clear the DNA profiling and crime scene samples backlog in QHSS over the impending 3 years.

The Project Proposal developed in April 2004 for the Backlog Project indicated the existing backlog in Forensic Biology would be eliminated by 30 June 2005. This was an unrealistic expectation given the lead time required to recruit and train staff, procure capital equipment, refurbish accommodation and undertake the analysis of a large backlog of samples. QHSS scientists have indicated that this estimation was done by the Office of the Executive Director, QHPSS without consultation with them. Data supplied by QHSS management indicates the backlog has increased significantly during 2004/5.

### **6.4.2 Backlog Definition**

The definition of the term "backlog" is unclear. Many of the statistics provided by QHSS relate to all current cases on hand at QHSS. Recent Ministerial Briefs refer to cases older than 3 months. The proposed selection of DNA backlog samples to be outsourced relates only to those samples pre-dating July 2004.

There is a lack of performance criteria in terms of a benchmarked time required to complete the process from receipt through initial testing procedures, testing leading to the identification of a DNA profile and the subsequent report required to be completed. A consultant has been contracted to undertake a business process review of Forensic Biology and Forensic Chemistry. This is called the Business Enhancement Project and should provide the basis for the development of performance data.

There are a number of options to define the term backlog. A backlog could refer to samples not started within a specified time frame from arrival at QHSS. However this could lead to a situation where the sample might proceed through the initial phase of the testing process only, and that any subsequent analysis might be delayed. Another option is for "backlog" to relate to the time taken to complete the entire process through to reporting. However, where the profile is not able to be linked to any suspect, no report is completed. The Taskforce believes that the definition of the term backlog should relate to the number of cases for which testing has not been completed within an agreed turnaround time. This turnaround time should be determined through consultation between QPS or other clients and QHSS.

The lack of a comprehensive Service Level Agreement (SLA) with the QPS has meant that these issues have not been addressed. Client expectations should be clearly incorporated in the development of any performance criteria for a SLA.

In recent times QHSS has been required to report to government on backlog numbers. While considerable data is collected through both the AusLab system and the QPS Forensic Register, it is

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difficult to accurately ascertain the true situation. The AusLab system has inconsistencies in the data, resulting in different statistics being produced on subsequent access to the same sets of data. Appendix 9 outlines the backlog within Forensic Biology over the last 3 years. Further discussion of the AusLab system is provided in Section 13.2.

Data recorded on AusLab categorises the workload as Cases Received, Cases Started, Cases Reported, Cases Not Required and Cases Outstanding. There is no reference to Cases Analysed where “no report is required”, i.e. where Police do not have a suspect. It is anticipated that this statistic would form a considerable part of the total workload. When questioned about the apparent increase in the backlog for person samples (a DNA sample taken from an arrested person, prisoner or consenting person under the authority of the *Police Powers and Responsibilities Act 2000*), the Chief Scientist, Forensic Biology advised that there was no backlog, as records on Auslab had not been updated due to a lack of administrative support.

The data on Auslab also indicates a significant backlog in Major Crime, with many cases more than 12 months old despite having been categorised as a high priority. When questioned by the Taskforce about this, management were unable to indicate whether this was a true backlog, whether there had been a failure to update records, whether Forensic Biology had conducted all relevant tests and were waiting for further information from police or whether the case could in fact be written off due to the offender having been prosecuted.

The Taskforce is of the view that the nature of the “real backlog” cannot be determined without the development of appropriate indicators which relate to process stages and a cleansing of the current data.

**Recommendation 5:**

*It is recommended that the Chief Executive Officer of the Institute:*

- (i) *Removes from the term “backlog” all cases where no further analysis or reporting requirements can be undertaken at that time by 31 October 2005;*
- (ii) *Defines the term “backlog” as being the number of cases not completed within a time agreed with the client by 31 October 2005; and*
- (iii) *Ensures that the systems are altered to ensure the appropriate reporting reflects the definitions determined for “backlog” by 31 January 2006.*

**6.4.3 Funding**

In 2004/5, \$5M was allocated to QH as part of a 3 year plan to address the backlog. QPS has been allocated \$3M in 2005/6 and 2006/7 to clear the DNA profiling and crime scene samples backlog. It has been verified through Queensland Treasury that the \$3M allocation to QPS is recurrent.

It is not clear whether the funding has been allocated for the purchase of DNA sampling only or whether it will also apply to the purchase of other forensic services relating to a crime scene, e.g. clan labs. It is also not clear whether the funding was provided for the purpose of addressing the backlog or funding of ongoing services. QHSS has taken the broader interpretation of addressing all crime scene samples required for the criminal justice system such as:

- Forensic biology analysis associated with Major Crime and Volume Crime DNA profiling; and
- Forensic chemistry analysis associated with illicit drugs and clan labs.

As at 30 June 2005, the \$5M Backlog Project funding has been expended as follows:

Labour	\$1,873,886
Non-labour	\$1,114,632
Capital	<u>\$10,000</u>
TOTAL:	\$2,998,518

The balance of funds has been rolled over to 2005/06 for outsourcing of DNA profiling (up to \$1.5M) and acquisition of automation equipment (\$500,000).

The staffing component of the backlog funding is made up of 43 positions spread across the areas of FSLU (10), Forensic Chemistry (6), Forensic Biology (22) and administrative support staff for Forensic Biology (4) and clan labs (1). A further recruitment process in 2005/6 will see additional operational staff appointed to perform the less technical duties within the Forensic Biology laboratory and thus free up scientists to progress the case load.

The Taskforce notes that the backlog funding has been instrumental in reducing turnaround times in the Illicit Drugs area to a level acceptable to clients. QHSS has also achieved this outcome in Forensic Toxicology.

While new appointees progressively commenced from September 2004, they have not been fully productive due to the training requirements. However output within Forensic Biology significantly increased in 2004/5 in the second half of the year as outlined in Table 1 below

**Table 1: Forensic Biology Output**

	<b>Jul/Dec 04</b>	<b>Jan/June 05</b>
Cases started	480	1,549
Cases reported	577	863

Source: AusLab data as per QHSS 2005 Budget Estimates Brief

Within the clan lab area, the output has decreased over the same period (Refer Table 2 below) due to the loss of experienced staff. The transfer of three Senior Forensic Chemists from the Illicit Drug team to the clan lab team recently and the recruitment of an additional chemist within a few months should have a positive impact on the backlog. In addition, Section 8 will discuss initiatives to address the clan lab problem.

**Table 2: Forensic Chemistry (Clan Lab) Output**

	<b>Jul/Dec 04</b>	<b>Jan/June 05</b>
Cases started	134	83
Cases reported	112	83

Source: AusLab data

The backlog funding expenditure has included enhancements to the AusLab system and the electronic links with QPS to support improved prioritisation of exhibits. Implementation of these enhancements is planned over the next 6-12 months.

The first of three IT development phases was implemented in June and will improve efficiency of the DNA person-to-scene and scene-to-scene linking processes with the National Criminal Investigation DNA Database (NCIDD). This release has also allowed earlier activation of inter-jurisdictional matching between WA and QLD, dating from 10 June 2005. Queensland and Western Australia are the first States to conduct inter-jurisdictional matching on the national database.

The second phase of software anticipated for activation in the near future will provide electronic image storage, allowing DNA processing efficiencies to be significantly improved by moving from a paper-based approach to electronic recording.

The final phase of software delivery anticipated in late 2005, will electronically link all current instruments in Forensic Biology, thus removing the majority of time consuming paper trails, rationalise several standalone databases in use, and overall markedly improve efficiency and effectiveness of the DNA processing area.

Work performance should also be enhanced by refurbishments which have been carried out within the DNA sampling area, the exhibit room and the work area of the Major Crime Team.

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While the management team at Kessels Road campus have identified the need for more laboratory space and the construction of new facilities, no strategic assessment has been conducted of laboratory needs on the campus into the future. This issue is further addressed in Section 16.

The Taskforce has identified that the ongoing \$3M per annum provided to QPS, will need to be applied to the ongoing funding of staff and consumables for forensic services which were initially funded in the \$5M allocated in 2004/5. The sufficiency of this funding is further discussed in Section 7.6.

As indicated in Section 4.3, an extensive body of work needs to be undertaken in the first 3 years to develop and implement fee-for-service arrangements where appropriate. At this stage it is not possible for QHSS and QPS to engage in a meaningful discussion around product costing or other fee-for-service arrangements.

In view of this, the \$3M should be incorporated into the Institute's base funding pending the development of proper fee-for-service arrangements. The funding should be used consistently with how it was applied in 2004/05 (i.e. for Forensic Chemistry, Forensic Biology and FSLU).

The Business Enhancement Project will result in the development of a costing model which will enable QPS and QHSS to determine the ability of QHSS to meet DNA demands within the allocated budget. It is important that an estimation of the cost of servicing current QPS demand is done as a matter of urgency once the costing model is developed.

**Recommendation 6:**

*It is recommended that the Commissioner, Queensland Police Service transfer the \$3M of recurrent election funding from the Queensland Police Service to the Institute for the periods 2005/06 and 2006/07 by 31 October 2005 pending the development of proper fee-for-service arrangements.*

**6.4.4 Prioritisation**

In determining what aspects of the backlog to address, QPS and QHSS have developed organisational units and processes to prioritise the workload. QPS has established the DNA and Forensic Sample Management Unit which is situated at the Kessels Road campus. This Unit administers DNA person samples, prioritises crime samples and works closely with FSLU across the Forensic Sciences. Unfortunately the resource levels of this Unit are not sufficient to review all outstanding cases with the emphasis being placed on new cases coming in. The Taskforce is of the view that additional resources for a short period would address this concern.

FSLU is staffed by QHSS staff and assists in the establishment of inter-case and intra-case priorities based on information from the Court system. A key driver for prioritisation is the Court date. Unfortunately this has meant that many cases prioritised as high by QPS (Major Crime) are not being addressed as quickly as the priority indicates due to low priority matters (Volume Crime) with a Court date being analysed first. In addition, case scientists often establish their own priorities within a case based on the likelihood of a successful outcome.

There appears to be little co-ordination between these Units and in some regard overlap exists. It is considered the role of each of these Units needs to be clearly defined to ensure they complement each other. Many QPS staff are unsure about who to contact in relation to outstanding cases.

While there has been progress made in addressing the number of DNA cases requiring testing, recent audits of samples held at QHSS by QPS staff from the DNA and Forensic Sample Management Unit have identified a significant number where testing is no longer required due to the arrest and conviction of offenders. No notification has been made by the arresting officer to QHSS of this fact and the sample remains in the backlog.

There is no comprehensive case management system whereby case scientists are actively involved in the determination of intra-case prioritisation for all forensic biology samples through liaison with police forensic officers and investigating officers, with clear guidelines for procedures and dispute resolution. A triage system is critical to forensic analysis for the purpose of prioritising cases and utilising limited resources. This view is confirmed in the NIFS Report (*Forensic Biology Automation and Future Developments – October 23 to November 15, 2004*) as well as being a feature in a number of Australian and overseas jurisdictions.

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There is also scope to enhance the role of the DNA and Forensic Sample Management Unit to expand case conferencing in the areas of all Major Crime (not just significant cases) and clan labs. This will ensure priorities are collaboratively determined and resources are efficiently utilised.

In developing priorities, there are a number of factors to consider including the seriousness of the crime, the date of the offence, whether there is a suspect and whether there is an impending court date. All jurisdictions have a prioritisation process though different jurisdictions approach the issue from different perspectives. Some jurisdictions only deal with the serious or Major Crime backlog leaving the Volume Crime backlog to increase; other jurisdictions have established a descending order of priority; while others concentrate on new cases and address the backlog when time permits.

The Taskforce believes that a review of all outstanding cases should be undertaken as a matter of urgency with a view to enhancing prioritisation and facilitating the destruction of samples that are no longer required. This will require a staff member in FSLU to work with the QPS DNA and Forensic Sample Management Unit to review cases and write off those cases not considered necessary. Part of this process will also involve the cleansing of all backlog data, consistent with the proposals in Section 6.4.2.

**Recommendation 7:**

*It is recommended that the Chief Executive Officer of the Institute and the Superintendent, Forensic Services Branch, Queensland Police Service:*

- (i) Review the role of the Forensic Sciences Liaison Unit and the DNA & Forensic Sample Management Unit to ensure they are complementary by 31 January 2006;*
- (ii) Expand the role of the DNA & Forensic Sample Management Unit and Forensic Sciences Liaison Unit to facilitate case conferences under clear guidelines with relevant parties on all major crime and clandestine laboratory cases by 31 January 2006; and*
- (iii) Ensure that the DNA and Forensic Sample Management Unit, in conjunction with the Forensic Sciences Liaison Unit, review all outstanding cases and cleanse all backlog data by 31 January 2006.*

**6.4.5 Automation**

Approximately \$500,000 from backlog funding has been set aside for the purchase of robotics, the automation of processes and the complete automation of the process relating to person samples.

Tenders have closed and are currently being assessed. Selection of a successful tenderer is anticipated in the latter part of 2005. Implementation of this technology in other jurisdictions has led to significant efficiencies, for example a reduction in staff from 450 to 110 in the DNA unit of FSS in the United Kingdom and significant increases in output over their non-automated laboratories.

The purchase of this equipment will not have an immediate effect due to the time required to validate the instruments, change the practices within the laboratory and train staff. The validation can take up to 12 months if the process is started anew, however according to expert sources, can be shortened to four to six weeks by utilising the validation experience of other jurisdictions. It is anticipated that implementation will be a special project with a scientist being taken off-line to manage the project. This will have a short term impact on productivity within Forensic Biology.

**Recommendation 8:**

*It is recommended that the Chief Executive Officer of the Institute ensures that when validating future equipment the validation work undertaken by other jurisdictions to introduce equipment and/or automation processes is utilised to minimise validation time whilst maintaining scientific accountability and integrity by 31 October 2005.*

**6.4.6 Outsourcing**

In May 2005, the Health Minister approved the release of DNA outsourcing tender documents. Approximately \$1.5M has been carried over from 2004/05 Backlog funding for the outsourcing.

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As well as being published in the national press, the tender documents were also released to 11 laboratories in Australia, New Zealand and Canada that expressed interest. The tender closed on 4 July 2005. It is not yet known whether any of the tenderers has the capacity to process all backlog samples within a 12 month period.

Following the close of the tender, an extensive evaluation process will be undertaken on the entire outsourcing process including chain-of-evidence, analysis and reporting. It is intended that an audit of the preferred tenderer's facility and processes will be conducted by the Evaluation Committee.

The assessment and prioritisation of actual case samples to be outsourced is currently being determined by QPS in conjunction with QHSS. Only Volume Crime samples will be outsourced and only cases prior to 1 July 2004 were to be considered. Many of the Volume Crime matters may be able to identify an offender but may not result in a prosecution due to the minor nature of the offence and the lapse of time since that offence. There was no strategy in place to deal with Volume Crime since July 2004. As a result of the intervention of the Taskforce, those samples have now been included in the outsourcing.

Implementation of the outsourcing of DNA profiling will have an impact on workflows within Forensic Biology. Sampling is required to be done as part of the selection of cases to be outsourced to address potential integrity and custody issues. In addition, where samples are returned from the successful tenderer indicating a positive result, QHSS scientists and administrative staff will be required to check and enter the result onto the national DNA database and also into AusLab. It will however, increase the overall number of cases able to be reported on to QPS. Additional results management work will be required to process any links from the database and to test evidence samples as required.

## **6.5 Backlog Project – Next Steps**

While the Backlog Project has not yet been successful in reducing the number of outstanding cases in all areas of Forensic Sciences, there has been a number of positive achievements which should assist in addressing the problem over the coming years.

There are a number of factors which will influence the number of cases outstanding:

- The resolution of the application of the \$3M funding provided to QPS in the 2005/06 budget;
- The sufficiency of the staffing increase;
- The effectiveness of QHSS management of outsourcing implications;
- The impact of automation, including the possible higher rate of positive samples;
- The benefits of the Business Enhancement Project;
- Enhanced performance management;
- An increase in samples forwarded by QPS due to improved response times;
- A decrease in crime due to the arrests based on DNA results; and
- Implementation of the recommendations within this report.

Each of these issues is dealt with in further detail, in relation to Forensic Chemistry (clan labs) and Forensic Biology, in Sections 7 and 8.

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## **7.0 FORENSIC BIOLOGY – ISSUES**

### **7.1 Background**

Forensic Biology receives crime scene samples, including swabs, clothing and other miscellaneous items as well as various samples from prisoners, suspects and volunteers for DNA analysis and comparisons.

The use and reliance on DNA within the criminal justice system has been steadily increasing since its introduction in the mid 1990's. The introduction of DNA analysis has been described as one of the greatest advancements in forensic science since the introduction of fingerprints over one hundred years ago.

In 1999, a comprehensive multi-agency business plan, outlining the establishment of a Queensland DNA database, was submitted to Government. Approval and expenditure was granted for the establishment of the database and funding was provided for the collection and analysis of person samples.

The Government allocated funding to QPS to purchase person sampling services from QHSS on a 'user pay' basis. Approximately 88,000 DNA person samples have been collected from prisoners, suspects and volunteers since the introduction of DNA legislation in 2000.

The CrimTrac Agency has established NCIDD to support matching of DNA samples between jurisdictions. At the time of this report, Queensland has loaded more than 61,000 DNA person samples and 5,000 DNA crime scene samples onto NCIDD and conducts intra-jurisdictional DNA linking in this environment.

In analysing the effectiveness of the operations of Forensic Biology, it is necessary to examine not only the processes, resourcing and systems at QHSS, but also the policies and processes at the crime scene and within QPS which lead to the delivery of samples to Forensic Biology.

### **7.2 Crime Scene - Sample Collection**

Crime scenes can be categorised as either Major Crime or Volume Crime. Major Crime generally involves serious injury or death. It also includes offences such as sexual offences or other offences requiring significant investigative resources. Volume Crime includes property crime, such as break and enter offences, unlawful use of motor vehicles and wilful damage offences.

In serious crime, detectives, SOCO's, fingerprint experts and scientific officers are called to the scene as well as the initial response officers. The investigating officer, in conjunction with SOCO's and scientific officers, will determine what samples will be collected from the crime scene. In many instances samples can number up to 100. Scientific officers will often conduct presumptive testing for blood, semen or other substances. QPS staff are attempting, wherever possible, to conduct a presumptive test and sub-sample rather than forward an entire exhibit to QHSS. Discussions are ongoing between QPS and QHSS to formalise this process.

Samples are packaged, sealed and bar-coded at the scene with a QHSS number before being transported by the scientific officer back to their office where further examination and presumptive testing may occur. Details of all samples are entered onto the Forensic Register and all samples within a case are given a Forensic Register number. In addition QPS forensic staff are required to enter details into a QPS Exhibit Register. This results in the same item having three separate numbers associated with it. Forensic staff have expressed concern about having to enter the same information on the Forensic Register and the Exhibit Register in designated QPS forensic property points.

In instances of Volume Crime, these are attended by first response officers and later by a SOCO. The SOCO, based on information forwarded by the initial response officer and from discussions

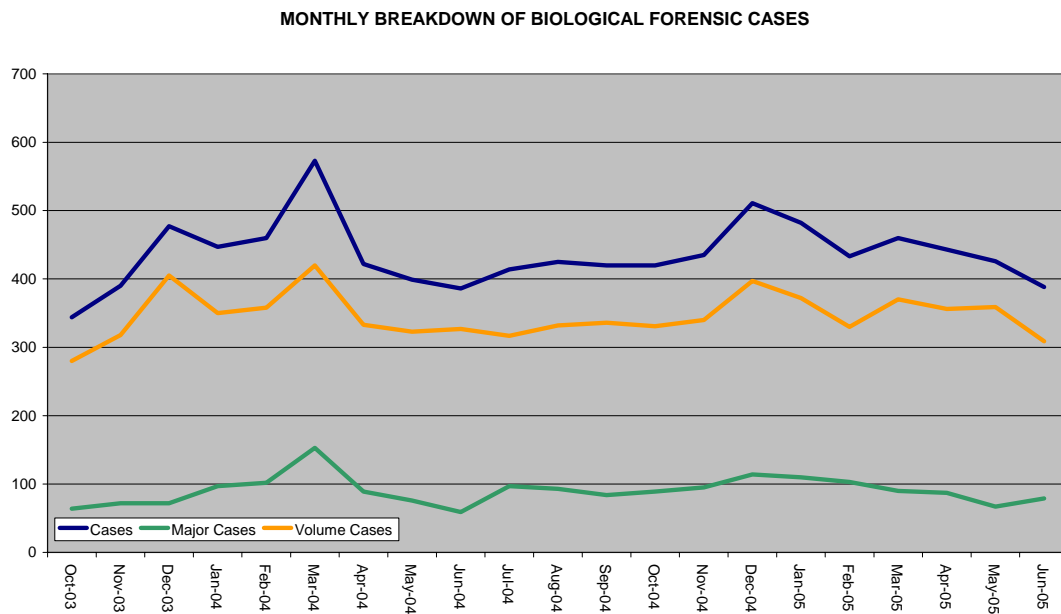
with the complainant, will generally check for fingerprint evidence and may take one or more samples for DNA testing. Often no forensic samples are taken from volume crime scenes.

The decision about whether to collect or lodge a sample at all or whether to send all of the samples collected is sometimes being done on an inconsistent basis. Since October 2003, 66% of Major Crime exhibits and 52% of volume crime exhibits collected by QPS staff have been forwarded to QHSS. This reflects both the triage process carried out by QPS forensic staff and the lengthy delays in receiving results.

There are concerns among a number of SOCO's, particularly inexperienced officers, that they may be challenged in Court by defence counsel for failing to have samples analysed. This concern has been exacerbated by a recent Appeal Case where a conviction was overturned after a DNA test was conducted post conviction which implicated another person. The possibility of challenge may lead to over-sampling at crime scenes.

It is not possible to accurately determine the variation between the number of exhibits collected by QPS staff and the number of cases/samples received by QHSS. Within QPS, "case" refers to a crime report while at QHSS "case" refers to a particular crime scene or person sample. There can be a number of QHSS cases associated with a single crime report. Terms such as "exhibit" and "sample" are also used interchangeably by agencies.

The number of DNA crime scene samples collected by forensic officers throughout Queensland has also been increasing in recent years, though it has been reasonably consistent in 2004/05 as illustrated by the graph below.



Source: Queensland Police Forensic Register

Of the exhibits forwarded, 52% in Major Crime and 75% in Volume Crime have been swabs. This has implications for both the cost of testing and the workload of scientists.

**Recommendation 9:**

*It is recommended that the Chief Executive Officer of the Institute in consultation with the Superintendent, Forensic Services Branch, Queensland Police Service develop standard terminology and statistical counting measures for forensic evidence by 31 July 2006.*

**Recommendation 10:**

*It is recommended that the Commissioner, Queensland Police Service reviews the requirement for forensic exhibits to be entered in an Exhibit Register within designated Queensland Police Service forensic property points **immediately**.*

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### 7.3 Sample Transportation

Major Crime samples are generally transported to the QHSS Central Property Point by a SOCO, the scientific officer or an investigating officer. This occurs as soon as possible and generally within a week of the incident. With volume crime samples, the timeframes applied are much more flexible and usually depend on the proximity to QHSS. QPS officers have indicated that on occasions, volume crime samples are not sent to QHSS at all due to the extensive delay in analysing the cases.

Outside the metropolitan area, samples are retained in local QPS Property Offices until either an officer is attending Brisbane for any reason, there is a scheduled exhibit transport to Brisbane (often at 6 – 8 weekly intervals and in extreme cases up to several months), or due to the large quantity of samples, a special transport trip is arranged. Ideally samples should be forwarded to QHSS as soon as possible after collection but no more than 30 days.

All samples are transferred by QPS staff. This has resulted in staff being occupied for many hours at QHSS lodging samples, as well as travel time and costs in transporting samples.

Delays in transporting items from Regional areas have a negative impact on workload management at QHSS particularly in relation to the timely prioritisation of cases.

There is concern from an evidentiary perspective about using commercial transport alternatives. However the Taskforce notes that police regularly accompany exhibits on commercial aircraft where the exhibit is lodged in the luggage compartment of the aircraft rather than in the direct possession of the officer.

Consultation with police and scientific staff in a number of other Australian jurisdictions revealed that there is currently widespread use of locked receptacles, and transportation by commercial operators, to deliver unescorted samples for forensic analysis. This methodology will result in the timely and safe transportation of DNA exhibits for analysis and will free up some QPS resources, in particular police officers' time.

#### ***Recommendation 11:***

*It is recommended that the Commissioner, Queensland Police Service:*

- (i) Ensures that forensic exhibits requiring analysis are transported to Queensland Health Scientific Services as soon as possible after collection but no more than 30 days by 30 April 2006; and*
- (ii) Introduces a system for transporting unescorted forensic samples through the use of locked receptacles and commercial transport where appropriate by 30 April 2006.*

### 7.4 Receipt/Destruction of Samples at Queensland Health Scientific Services

All samples (except clan labs) are delivered to the Central Property Point at QHSS. The recent establishment of this facility has improved efficiency as all forensic samples are now delivered to one location rather than separate laboratories around the campus.

While the achievements to date are acknowledged, there are further enhancements which need to be pursued. Those include standardisation of procedures between the laboratory groups and efficient destruction processes to eliminate the storage pressures for completed/unrequired samples.

Receipting procedures have been implemented at the Central Property Point based on historical practices for each laboratory group. Now this is centralised, all procedures (unless there is justification not to) need to be standardised to ensure efficiency is achieved.

Storage of completed/unrequired samples is becoming a concern due to delays in authorisation from QPS investigating officers to destroy samples. The DNA & Forensic Sample Management Unit is endeavouring to obtain authorisations, however their endeavours are not resolving the current storage problems. It is incumbent on the QPS investigating officer to assist in this matter. To achieve this, QPS will need to ensure the current policy relating to destruction of forensic exhibits is complied with.

**Recommendation 12:**

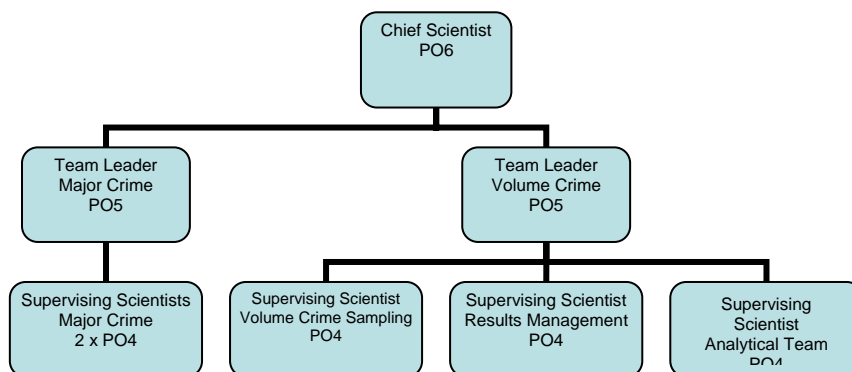
*It is recommended that the Chief Executive Officer of the Institute implements standardised procedures within the Central Property Point by 31 January 2006.*

**Recommendation 13:**

*It is recommended that the Commissioner, Queensland Police Service ensures compliance with existing policies in relation to the notification and subsequent destruction of forensic samples by 31 January 2006.*

**7.5 Workflow in Forensic Biology**

Forensic Biology presently has a team structure as follows:



Appendix 10 indicates the workflow for this area.

The above teams are at various stages of implementation of AusLab. Progress reports are provided to QPS through a twice daily download of information from AusLab to the Forensic Register. This information is then downloaded into CRISP (QPS crime reporting system) for the information of investigating officers who do not have access to the Forensic Register. Some of the terminology used by QHSS scientists is not clear to QPS staff, e.g. a positive result does not mean that a profile has been developed or a suspect linked to a crime scene, but that a sample capable of proceeding to profile development has been located.

At QHSS, there is a sampling team for Volume Crime. Where a sample is obtained, it is then forwarded to the Analytical Team for the development of a DNA profile which is then forwarded to the Results Management area for interpretation and loading on to the DNA database. The Analytical Team also processes the person samples. The person samples are being processed in real time, however there is a lag time of two to three months before results are provided back to QPS.

Person samples are undertaken on a fee-for-service basis through a MOU with QPS. In 2004/05 the revenue to QHSS from this service was approximately \$1.28M.

In the Major Crime area, many of the samples which have been presumptively tested by QPS scientists have the same presumptive tests repeated by QHSS scientists, thus risking the dilution of the sample and rendering it unusable for the development of a DNA profile. This duplication of effort also diverts QHSS scientists from other activities.

Staff work one shift per day and as a result, expensive equipment and laboratories are not fully utilised. An examination of workflow practices currently being carried out as part of the Business Enhancement Project will identify opportunities for efficiencies within the workplace to maximise use of existing space and resources. One of the possibilities is the implementation of double or staggered shifts. The Taskforce notes that some international best practice laboratories use double shifts and overtime as appropriate. Hence the Taskforce believes that this is a viable strategy for dealing with workloads.

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**Recommendation 14:**

*It is recommended that the Chief Executive Officer of the Institute develops and implements a data dictionary of scientific terminology for use by Queensland Police Service staff to enable the ready interpretation of outcomes and results downloaded from AusLab to the Forensic Register by 31 July 2006.*

**Recommendation 15:**

*It is recommended that the Chief Executive Officer of the Institute and the Superintendent, Forensic Services Branch, Queensland Police Service develop and implement protocols to minimise the duplication of presumptive testing by 31 January 2006.*

## **7.6 Future Funding Needs**

The Taskforce has endeavoured to assess the sufficiency of the current resource levels within Forensic Biology. As part of this task, management was asked to provide information on current funding and staffing levels, and to indicate what was necessary to cope with the incoming workload.

The response provided by management indicated a current base budget of \$3.3M for 2004/05 plus a further \$2.3M from backlog funding, giving a total budget of \$5.6M.

In relation to the recurrent funding required to meet ongoing work, QHSS management initially indicated that they needed a total of \$7M (i.e. additional funding of \$1.4M) but subsequently increased the estimate to \$8.4M (i.e. additional funds of \$2.8M). Estimates of the additional staff required ranged from 15 (10 technicians and 3 scientists) to 23 (8 technicians, 12 scientists) plus a senior scientist and administrative support.

Within the limitations of the data available, estimates undertaken by the Taskforce indicate that up to \$2M in additional recurrent funding would be required to meet current service delivery demands if productivity levels were to remain static (i.e. a total recurrent budget of \$7.6M). However, given the expected improvements in productivity from the additional staff, once fully trained, business process improvements, and the introduction of automation, the Taskforce is reluctant to endorse this level of resourcing.

In view of pressing service demands, the Taskforce proposes an additional \$1M be allocated to recurrent funding levels immediately, with further funding being subject to the development of a cost model based on the business process review outcomes.

The Taskforce also requested QHSS management to provide information on the resourcing implications of outsourcing Volume Crime cases, including initial sub-sampling by QHSS, analysis by the outsourcing firm, and results management by QHSS. QHSS management indicated that the funding of \$1.5M carried over from 2004/5 would be insufficient to process the outsourced samples, and that funding of \$2.1M was required to process 10,000 samples, including an additional 19 staff in QHSS (i.e. additional funds \$0.6M). When questioned by the Taskforce, management was unable to indicate how the 10,000 samples was estimated, and subsequently revised this to 20,000 samples. The most recent estimates provided by management is a total funding requirement of \$4.07M for all stages of the outsourcing process. This represents an additional non-recurrent funding requirement of \$2.57M.

Based on advice from the DNA & Forensic Sample Management Unit, the Taskforce estimates that up to 15,000 samples are expected to be analysed. Based on this number of samples, the Taskforce estimates additional funding of up to \$1.3M will be required for the outsourced analysis, and staffing and consumables in QHSS, based on productivity data provided by QHSS management. This results in total funding for the outsourcing of Volume Crime samples of \$2.8M.

In addition the Taskforce has identified that there are approximately 14,000 backlog samples in the Major Crime area. There is currently no strategy in place or funding available to deal with this backlog and the Taskforce was advised that QHSS required an additional \$4.8M to address it. However QHSS management subsequently revised this figure to approximately \$2M. Within the limitations of the data available, the Taskforce estimates that addressing this backlog could cost up to \$1.7M.

In addition, the Taskforce believes that further funding to address the Volume Crime and Major Crime backlog should be conditional upon the prioritisation of all samples and the cleansing of backlog data (refer Section 6.4.4) and the subsequent development of a complete outsourcing strategy. To ensure the progress of the outsourcing arrangements the Taskforce proposes that \$1M be provided to QHSS immediately.

The implementation of the above proposals for additional funding and staff to meet incoming work and backlogs could result in the employment of 30 to 40 additional staff in Forensic Biology, albeit many on a temporary basis to deal with the backlog. It is not possible to determine the appropriate mix of staffing disciplines until both the outsourcing strategy and business process review are completed. The increased staffing will place further pressure on existing facilities and require an urgent assessment of the introduction of staggered and/or double shifts.

Subject to the rate of incoming work remaining static, the above funding should see the DNA backlog eliminated by mid-2007, consistent with the Government's election commitment to eliminate the backlog in 3 years.

The table below illustrates the current and proposed funding needs of Forensic Biology:

**Table 3: Proposed Funding for Forensic Biology**

	<b>2005/06 Recurrent</b>	<b>2005/06 Non-Recurrent</b>	<b>2006/07 Recurrent</b>	<b>2006/07 Non-Recurrent</b>
Current Base Funding	\$3.3M	-	\$3.3M	-
Backlog allocation	\$2.3M	\$1.5M	\$2.3M	-
Proposed additional permanent staff & consumables	\$1.0M	-	(up to) \$2.0M <sup>1</sup>	-
Proposed additional temporary staff & consumables	-	\$1.0M	-	(up to) \$2.0M <sup>2</sup>
<b>Total Funding</b>	<b>\$6.6M</b>	<b>\$2.5M</b>	<b>(up to) \$7.6M</b>	<b>(up to) \$2.0M</b>

Source: Ministerial Taskforce

1. The provision of the additional \$1M in recurrent funding (over and above the \$1M recurrent funding provided from 2005/06 on) is contingent on the outcome of the business process review and subsequent funding proposal.
2. The provision of this funding of up to \$2M (additional to the \$1M provided in 2005/06) is contingent on the prioritisation of samples, the cleansing of backlog data and subsequent funding proposal.

**Recommendation 16:**

*It is recommended that the Chief Executive Officer of the Institute:*

- Immediately recruit additional staff in Forensic Biology to meet ongoing service demands by **31 October 2005**;  
(Estimated recurrent cost: \$1M)*
- Reassess the sufficiency of (i) above in light of a costing model for DNA processing currently being developed through the Business Enhancement Project by **31 January 2006**;*
- Subject to (ii) above recruit additional staff in Forensic Biology to meet ongoing service demands by **31 January 2006**;  
(Estimated recurrent cost: up to \$1M, additional to the \$1M recurrent funding provided from 2005/06)*

- 
- (iv) *Develop a comprehensive strategy for the processing of the volume crime and major crime backlog once the prioritisation of samples and data cleansing is completed (Recommendation 7(iii)) by 31 January 2006; and*

*(Estimated non-recurrent cost: \$1M in 2005/06, up to an additional \$2M in 2006/07)*

- (v) *Subject to the above recommendations, develop proposals for the introduction of staggered and/or double shifts by 31 January 2006.*

## **7.7 Information Management in Forensic Biology**

A range of data is collected on the various stages of a sample's progress through the testing process including Cases Received, Cases Started, Cases Reported and Cases Outstanding. Turnaround times are also kept but the data is an average time and fluctuates wildly depending upon whether resources are allocated to current cases, older cases, writing reports etc. There is no pattern and no real explanations for the variations. The Business Enhancement Project will identify key performance indicators which will inform the data collected.

The interim results provided to QPS are not the results of analysis but rather a progress report on whether a sample is proceeding for DNA profile development or is not capable of producing a profile. In addition, the categorisation of these progress reports as "results" means that they are peer-reviewed by another scientist in accordance with NATA requirements.

Much of the information entered onto AusLab is done by scientists rather than by administrative support staff. This and the lack of administration staff means that there are delays in data entry thus creating a situation where it is impossible to identify the current status of work activities, including backlogs. This matter is expected to be addressed through the Business Enhancement Project which will identify tasks being performed and the appropriate mix of staff to match those tasks.

In addition data is not reported in a format which indicates outputs or outcomes which can be used by management to report to government and/or to manage the business.

### ***Recommendation 17:***

*It is recommended that the Chief Executive Officer of the Institute:*

- (i) *Review the terminology used to describe milestones in the analysis process by 31 July 2006;*
- (ii) *Ensure administrative staff undertake data input into AusLab wherever this is deemed to be a more efficient and effective use of resources by 31 January 2006; and*
- (iii) *Ensure data collection and reporting supports government and management needs and priorities by 31 July 2006.*

## **7.8 Forensic Biology Structure**

The nature of the work undertaken by the Major Crime Team and the Volume Crime Team is similar. Both teams examine exhibits of swabs and other physical evidence. The Major Crime Team deals predominantly with crimes against the person whereas the Volume Crime Team deals with property crime.

There are clear advantages in amalgamating these teams allowing Volume Crime to be a training ground for movement to the major crime work. This would allow a more flexible use of resources to provide a higher level of service to QPS.

It is also acknowledged that the Business Enhancement Project is presently examining, among other matters, the tasks and workflows of this area. That process is expected to provide a thorough analysis of the ideal workflows and interrelationships necessary to achieve improved efficiencies. This includes an analysis of the employment of technicians within the laboratory and the skill sets necessary to address all aspects of the workflow. Consequently, any proposed changes to this area at this point may be premature and best left until the conclusion of that project. However, the Taskforce believes that QHSS management needs to address work allocation of this area as a matter of urgency.

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Any future work groups for Forensic Biology need to be consistent with the competency based progression strategy and fluid team approach outlined in Section 5.2.

**Recommendation 18:**

*It is recommended that the Chief Executive Officer of the Institute reviews the outcomes of the Business Enhancement Project and implements a new work group approach in Forensic Biology by 31 October 2005.*

**7.9 Forensic Biology Work Space**

Current laboratory workspace is inadequate for current needs if the laboratory was operating at best practice. While senior management has developed a number of options to enhance work space, this has not been done in a way which takes a strategic approach to the task.



Source: Ministerial Taskforce

The Taskforce has concerns about any plans which would involve the decommissioning of existing laboratory space (see photograph) into an administrative work area, and which fails to consider future needs as a result of possible growth in demand. Current planning processes have also failed to be cognisant of other strategies such as the introduction of staggered shifts and the potential for 24/7 operations in the future.

Strategic management of workspace has the potential to substantially improve output without a requirement for additional buildings to be constructed. This issue is further canvassed in Section 16 of this report.

## 8.0 FORENSIC CHEMISTRY (CLANDESTINE DRUG LABORATORIES) - ISSUES

### 8.1 What is a Clandestine Drug Laboratory

A clan lab is the commonly used term for the collection of apparatus and chemicals used to manufacture illicit drugs. The most commonly manufactured illicit drug is methylamphetamine (commonly known as 'speed'). The manufacture of methylamphetamine is a relatively simple process using precursors (i.e. pseudoephedrine) and other readily available chemicals. Methylamphetamine 'recipes' are readily available on the internet. Its ease of production is one of the key reasons for the rapid growth in this area of criminal activity.



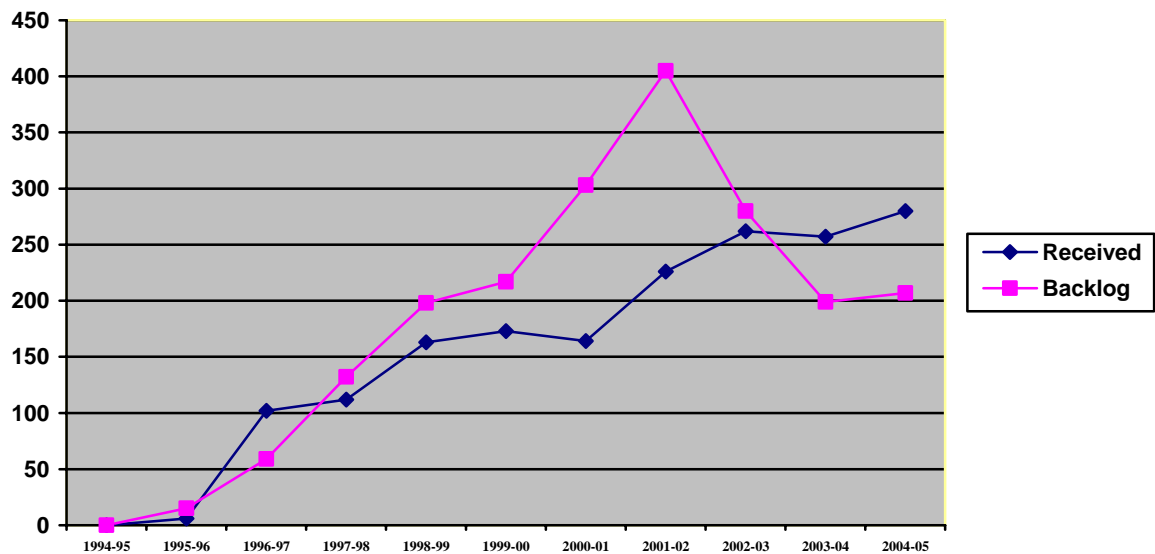
Source: Forensic Chemistry, QHSS

The vast majority of clan labs seized are inactive labs - commonly referred to as 'boxed labs', as the equipment and chemicals may be located in a box used to move the 'lab' to different locations to avoid detection.

There has been a substantial growth in the number of clan labs seized for testing by QHSS scientists over the past 10 years. Forensic activity data provided by QHSS indicate that *no* clan labs were received in 1994-95; 173 in 1999-2000; and 280 in 2004-05 – although there are indications that this has levelled off in recent years.

The essential issue facing QHSS is that the demand from the criminal justice system for the analysis of clan labs has been substantially greater than the capacity of QHSS to provide the service. This service gap has now been addressed in part by the provision of additional funding as part of the 2004 Election commitments, although the on-going capacity to meet demand cannot be guaranteed if the number of clan labs continues to increase in the future. In addition, the effect of this service gap over time is the accumulation of untested clan labs, which stood at 207 clan labs as at 30 June 2005. The graph below summarises the growth in the number of clan labs received and the accumulated number of untested laboratories.

## Clandestine Drug Laboratories Received:



Source: Data from QHSS

Note: A large number of clandestine drug laboratories were written off in 2001 – 02 and 2002 – 03.

The growth in methylamphetamine production is a national and international phenomenon. Within Australia, Queensland has by far the largest number of clan labs seized. Data provided to the Taskforce indicates that in 2004, clan labs seized in Queensland represented 55 percent of the national total.

There are a number of reasons put forward for the higher level of clan lab seizures in Queensland, although none of them are conclusive, i.e.:

- The Queensland ‘industry’ is seen as a ‘cottage industry’. It may be the case that a larger number of ‘smaller’ labs are seized in Queensland – whereas a smaller number of ‘larger’ labs are seized in other jurisdictions. This is perhaps supported by the fact that the original method of production was devised in Gympie;
- Proactive enforcement of clan lab offences by QPS in Queensland;
- The influence of organised crime in other jurisdictions on the supply and manufacture of illicit drugs, and
- Statistical anomalies, for example, under South Australian law ‘clan labs’ located without significant quantities of end-product (methylamphetamine) are not recorded as a clan lab and are destroyed by their environmental protection agency.

## 8.2 The Criminal Justice Process

For this section it is useful to outline the basic procedures for dealing with criminal charges. Police officers institute charges against a defendant. Simple or summary offences are heard before a Magistrate in the Magistrates Court. For more serious charges (indictable charges), generally a police prosecutor will present the evidence in a hearing in the Magistrates Court (a committal hearing). In the Brisbane Magistrates Court and Ipswich Magistrates Court a lawyer from DPP will do this work. The purpose of the committal is to determine if there is sufficient evidence for a trial to be heard before a judge and jury. It is also possible for some indictable offences to be heard by a Magistrate in certain circumstances.

If the Magistrate decides there is sufficient evidence, DPP will prepare the matter for trial. If further evidence is required for the trial, the DPP will ask the investigating police to obtain this. If the accused pleads not guilty, a Crown Prosecutor will present the case in a trial before a jury in the Supreme Court or District Court. The most serious charges are heard in the Supreme Court including indictable drug matters. The jury must be satisfied beyond reasonable doubt to find the accused guilty of the charges. If the accused pleads guilty, either before or at trial, the DPP will prepare the matter for sentence.

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## 8.3 Strategies to Address Clandestine Drug Laboratory Backlog

### 8.3.1 General

The Taskforce has identified a range of strategies to address the backlog and to better meet future demand. These strategies seek to meet the demands of the criminal justice system for timely and accurate testing of clan labs in the most efficient way possible.

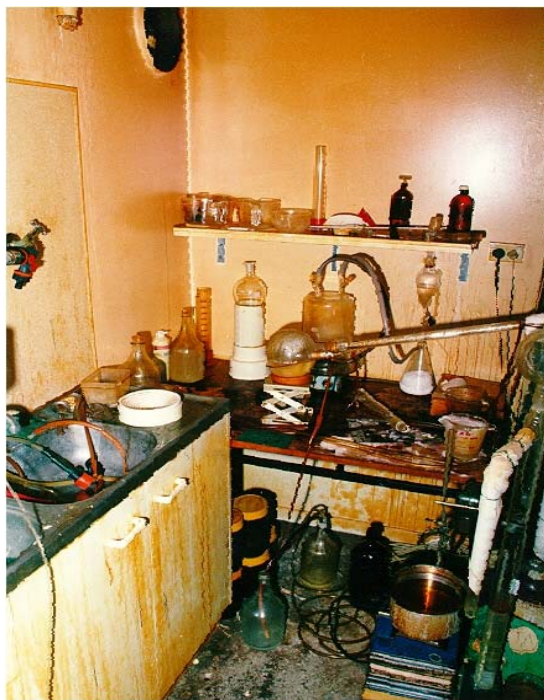
These strategies draw in part on options presented in a Draft Issues Paper prepared by a Working Group established in December 2004 by the Inter-Departmental Standing Committee on Forensic Sciences (IDSCFS). The Working Group comprised representatives from DPC, QH, DJAG, QPS, DPP and LAQ. It was initially intended that the Working Group would present its findings to Cabinet, but with the establishment of the Taskforce this work has been forwarded to the Taskforce for incorporation in its report. The Draft Issues Paper presented options to address this issue, however did not seek to analyse the options or reach any conclusions as to the way forward.

In summary the strategies identified by the Taskforce are:

- National initiatives to reduce access to pseudoephedrine;
- Reduce the amount of scientific analysis undertaken by QHSS for clan lab offences;
- Allow certain clan lab prosecutions to be heard summarily; and
- Make legislative amendments in relation to precursors and production offences.

### 8.3.2 National Initiatives to Reduce Access to Pseudoephedrine

Pseudoephedrine is the predominant precursor used in the manufacture of methylamphetamine. It is most commonly sourced (approximately 80%) from over-the-counter sales of pharmaceuticals from chemists (e.g. ‘Sudafed’, cold tablets, cough medicines). Pseudoephedrine is also sourced from thefts from chemists and pharmaceutical companies and, to a lesser extent, from illegal importation.



Source: Forensic Chemistry, QHSS

In response to the escalation of the diversion of over-the-counter pseudoephedrine-based pharmaceuticals, Queensland amended the *Health (Drugs and Poisons) Regulation 1996* in 2002 to require purchasers of S3 pseudoephedrine-based pharmaceuticals<sup>1</sup> to provide their name and address. Western Australia also made similar amendments. (These amendments coincided with a national initiative to reduce the pack-size of S3 pseudoephedrine-based pharmaceuticals). As a result of this initiative, clan lab manufacturers moved to source their pseudoephedrine supply from S3 products interstate, which were not subject to the same controls, or from S2 products in Queensland where the amount of the pseudoephedrine is less.

On the recommendation of the National Working Group on the Diversion of Precursor Chemicals, the National Drugs and Poisons Scheduling Committee (NDPSC) has recommended all pseudoephedrine-based pharmaceuticals be scheduled as S4 (requiring a

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<sup>1</sup>S3 pseudoephedrine-based pharmaceuticals are those where pseudoephedrine is the only active ingredient. S2 pharmaceuticals contain other active ingredients, with less quantity of pseudoephedrine.

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prescription), unless it contains less than 720mg of pseudoephedrine (in tablet or capsule form)<sup>2</sup>, and 800mg in liquid form – in which case they are to be scheduled to S3. This does not include the requirement to provide name and address.

It is proposed that these changes will be effective from 1 January 2006.

If these proposals are accepted by all Governments, it may result in significant changes in criminal activity in this area of illicit drugs, although the Taskforce believes this impact would be greater if all jurisdictions required name and address to be supplied. Although the precise nature of these impacts is not possible to predict, it may result in:

- An increase in the importation of pseudoephedrine (which may in turn lead to a more organised approach to methylamphetamine production in Queensland, resulting in fewer, but larger clan labs);
- Increased importation of methylamphetamine itself; and
- Substitution of other drugs (e.g. heroin, 'ecstasy').

In addition, a number of drug companies have begun marketing pharmaceuticals which have an alternative active ingredient to pseudoephedrine – phenylephrine. This active ingredient is not usable as a precursor for methylamphetamine production. Pseudoephedrine has already been taken off the market in other countries (e.g. the United Kingdom).

**Recommendation 19:**

*It is recommended that the Director-General of Queensland Health develops and progresses a paper which proposes that all jurisdictions require name and address to be supplied for the purchase of S3 pseudoephedrine-based pharmaceuticals for consideration by the Australian Health Ministers' Conference by 31 January 2006.*

### 8.3.3 Amount of Scientific Analysis



Source: Forensic Chemistry, QHSS

Over 95 percent of clan labs seized are inactive labs, comprising a range of items such as glassware (often containing chemical residues), precursors (such as pseudoephedrine), reagents (such as phosphoric acid) and by-products of the production process. Although it is difficult to generalise, an 'average' inactive lab may contain 30-50 such items. Historically, QHSS has tested a large number of these items to demonstrate the production of methylamphetamine, although in more recent times this has become more selective.

The overall objective of the analysis has been to determine:

- Which illicit drug has been manufactured;
- The actual method by which the illicit drug was made; and
- Where possible, how much illicit drug was made, or could be made (by estimating production from the amount of precursor material seized).

To date, the amount of testing undertaken has been determined by the scientists themselves with no significant 'case management' input from QPS or DPP.

While this approach may have been acceptable when the number of clan labs tested was small, the growth in the volume of seizures requires a fundamental re-assessment of this approach. The

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<sup>2</sup> For example, this would equate to 12 x 60mg tablets of 'Sudafed'.

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Taskforce notes that this should not be seen to reflect adversely on the work of the QHSS scientists to date – indeed they are seen as leading the nation in approaches to clan lab testing. What is required is a more targeted approach to the amount of scientific evidence required in each case to successfully prosecute an alleged offender.

Consultation and analysis by the Taskforce indicates that the level of testing undertaken by QHSS scientists can be significantly reduced. Indeed, most legal stakeholders consulted advocated for this to occur to streamline the court processes. QHSS scientists, prosecutors, defence lawyers and the courts have become more experienced in hearing evidence in relation to clan labs and, as such, are likely to be more receptive to a more targeted presentation of evidence.

The Taskforce proposes that a case management approach to the testing of clan labs be introduced aimed at minimising the amount of testing required to achieve an efficient resolution of the case. This will be reinforced by revised evidentiary provisions in the *Drugs Misuse Act 1986* (DMA) (refer Section 8.3.4 below). At the committal stage of a prosecution this may only involve, for example:

- A statement from a QHSS scientist that the equipment seized was capable of producing methylamphetamine;
- A ‘screening’ test to ascertain the presence of an illicit drug (e.g. methylamphetamine), or other key precursors or by-products of a production process; or
- No analysis where a person admits to the charge (DPP advise that alleged offenders plead guilty in approximately 90 percent of cases).

The above evidence would be presented to the court along with other evidence gathered by QPS (e.g. drug ‘recipes’, fingerprints).

It is however recognised that in major cases (e.g. where a large active lab is seized), a comprehensive analysis may be necessary in anticipation of the matter going before a jury. In addition, an estimate of the quantity of the illicit drug produced, or that could have been produced, may need to be provided to the Court for sentencing purposes. However, on many occasions this is merely estimated from the theoretical yield from the precursors seized.

QHSS scientists and QPS have advised that the previous extensive testing on clan labs has been used for intelligence purposes by QPS (e.g. to monitor trends in the types of precursors used). While the Taskforce acknowledges the value of this information, such intelligence could be gathered as part of separate arrangements between QPS and QHSS.

For the case management approach to work, QPS investigating officers and Police Prosecutors will need to be involved in assessing each case prior to any testing taking place. QPS has advised that this would be resourced through the QPS Forensic Liaison Unit. In addition, once civilian positions are established in the ILIT team, they can also participate in this process.

DPP advised that for them to assist in this role, substantial additional funding (in excess of \$0.5M) for Senior Crown Prosecutors would be required. The DPP also believe that the other reforms proposed by the Taskforce will have a substantial impact on the volume of clan lab testing, making any DPP involvement in case management of minor benefit. As such, it is not proposed that DPP be involved in the case management approach.

The effectiveness of case management should be reviewed after 6 months to ascertain its effectiveness in reducing clan lab testing. DPP will need to have an input into this review.

In conjunction with this, an amendment is proposed to the DMA to require the defence to state early in the prosecution process whether or not they will contest the fact that methylamphetamine has been produced with the seized equipment. For example, the DMA could require this advice to be provided 28 days following the service of a notice by QPS at the time charges are laid. For proceedings prosecuted by QPS this may require QPS prosecutors to introduce a committal mention process as is used for DPP prosecutions.

A similar concept to this applies under ss. 130 and 131 of the DMA, which requires a defendant to give notice at least 14 days before the hearing if certain evidence is to be challenged. The proposal could also be considered as an extension of the admission provisions of the Criminal Code (s. 644).

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The *Penalties and Sentences Act 1992* (ss.13 and 13A) provides that a guilty plea (and the timing of the plea), and co-operation with law enforcement authorities, are to be taken into account when sentencing a person. The DPP and LAQ believe this is a strong incentive for individuals charged with methylamphetamine production offences to consider their plea early in the prosecution process and, under the proposed amendments, not seek further testing.

The Taskforce also proposes amendments to the DMA to:

- Remove the requirement for scientific testing of sealed proprietary pharmaceuticals, unless challenged by the defence; and
- Clarify that a certificate is admissible as evidence of the identity of the drug even if it does not contain the actual quantity of the dangerous drug analysed. This will clarify that certificates without estimations of quantity can be admitted as evidence where appropriate. The Taskforce has been informed that such certificates are used at present where there is no objection and the proposal will formalise this arrangement.

**Recommendation 20:**

*It is recommended that the Chief Executive Officer of the Institute, in consultation with the Superintendent, Drug Squad, Queensland Police Service, introduce a case management approach to the analysis of clandestine drug laboratories for a 6 month trial by 31 January 2006.*

**Recommendation 21:**

*It is recommended that the Chief Executive Officer of the Institute, in consultation with the Superintendent, Drug Squad, Queensland Police Service and the Director of Public Prosecutions, review the effectiveness of the case management arrangements by 31 July 2006,*

**Recommendation 22:**

*It is recommended that the Director-General, Justice and Attorney-General progress amendments to the Drugs Misuse Act 1986 to:*

- Require the defence to state whether they will contest the fact that methylamphetamine had been produced with the seized equipment by 31 January 2006;*
- Insert an evidentiary aid to remove the requirement for scientific testing of sealed proprietary pharmaceuticals, unless challenged by the defence by 31 January 2006; and*
- Clarify that a certificate is admissible as evidence of the identity of the drug even if it does not contain the actual quantity of the dangerous drug analysed by 31 January 2006.*

**Recommendation 23:**

*It is recommended that the Commissioner, Queensland Police Service introduce a committal mention process for clandestine drug laboratory case, if this is necessary to effectively implement recommendation 22(i), by 31 January 2006.*

### **8.3.4 Summary Jurisdiction**

Prosecutions for the production of illicit drugs, such as methylamphetamine, are taken under s.8 of the DMA. When read in conjunction with Schedule 1 of the regulations under the DMA, the maximum penalties provided by this section in relation to methylamphetamine production are:

- 25 years if the production is in excess of 200g (s.8(a));
- 25 years if the production is in excess of 2g (but less than 200g) and the person cannot demonstrate they have a drug addiction (s.8(b)(ii));
- 20 years if the production is in excess of 2g (but less than 200g) and the person demonstrates they have a drug addiction (s.8(b)(i)); and
- 20 years if the production is under 2g or the prosecution cannot produce evidence that the amount produced was over 2g (s.8(c)).

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The Taskforce notes the inconsistency between Section 13 of the DMA which provides that a Magistrates Court can only impose 2 years imprisonment, whereas under the Criminal Code the maximum penalty a Magistrate can impose is 3 years imprisonment. This inconsistency may have resulted from an oversight when the Criminal Code was amended in 1997 to insert Chapter 58A, and should be rectified.

There was a strong view from legal and police stakeholders consulted during the review that more clan lab offences should be heard summarily on the basis that this would expedite proceedings without compromising justice or resulting in lesser sentences for offenders. Advice from the DPP and police prosecutors indicate that, at the lower end of sentences, penalties for persons found guilty of methylamphetamine production would be within the 3 year maximum range. An analysis of sentences from the Brisbane Supreme Court from 2002 to 2004 made by FSLU indicates that many defendants dealt with for producing dangerous drugs receive a sentence which could have been imposed by a Magistrate.

The discretion to hear matters summarily may impact on the amount of clan lab analysis undertaken at QHSS by requiring defendants to enter a plea at an early stage in proceedings (ie at the initial Magistrates hearing). As indicated above, an early guilty plea is taken into account in determining a person's sentence. The fact that offenders will be more quickly brought to justice will also act as a disincentive to further criminal activity. The Taskforce has been advised that the delays in the criminal justice system have meant that offenders on bail for extensive periods of time are re-offending while on bail.

There are however risks in attempting to hear matters more expeditiously at this point in time, given the backlog of work at QHSS.

There are three possible ways to enable matters to be heard summarily, i.e.:

- (a) Amend the DMA to enable offences under s.8 (Producing Dangerous Drugs) to be heard summarily;
  - (b) Amend the DMA to establish a specific offence for methylamphetamine production and enable such offences to be heard summarily; or
  - (c) Prosecute certain alleged offenders under the alternative offence of possessing implements for the purpose of manufacturing methylamphetamine (s.10 of the DMA).
- (a) Amend the DMA to enable production offences to be heard summarily**

Section 13 of the DMA provides that specified offences in the Act may be heard summarily where the offender is liable to a sentence of no more than 15 years. Other specified offences (which have maximum penalties over 15 years) are also able to be dealt with summarily. Due to the construction of s.8 (refer above), offences in relation to methylamphetamine production cannot be heard summarily.

Section 13 of the DMA could be amended in either of two ways to allow s.8 offences to be dealt with summarily, i.e.:

- Increase the matters that may be heard summarily to all offences with a maximum penalty of 20 years; or
- Specifically allow offences in relation to any illicit drug production (ie, all s.8 offences) to be heard summarily.

It should be noted that the first option (increasing the offences which may be heard summarily to a maximum of 20 years) would also impact on other offences, i.e. s.6 (*Supplying Dangerous Drugs*) and s.9 (*Possessing dangerous drugs*). Under the second option, the proposed change would also apply to the production of other Schedule 1 illicit drugs (e.g. heroin), although this very rarely occurs in practice.

The Taskforce has some concerns with the appropriateness of offences with such high maximum penalties (20-25 years) being heard summarily. However, the Taskforce notes that s.8A (Publishing or possessing instructions for producing dangerous drugs) has a maximum penalty of 25 years and may be dealt with summarily.

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**(b) Amend the DMA to establish a specific offence for methylamphetamine production, which could be heard summarily.**

As an alternative, the DMA could be amended to establish a specific offence for methylamphetamine production (or possession of ‘things’ for methylamphetamine production) and enable such offences to be heard summarily. This option was identified in the Draft Issues Paper prepared by the IDSCFS. This option has the effect of creating a more specific offence when a more general offence is already available. The only possible benefit of this approach is that it ‘quarantines’ methylamphetamine production from other illicit drugs.

**(c) Prosecute under s.10 of the DMA (‘Possessing Things’)**

Section 10 of the DMA establishes an offence for a person to possess anything (e.g. scientific equipment and precursors), for use in connection with a crime under the DMA (e.g. methylamphetamine production). When this section is read in conjunction with the Schedules in the regulation, the maximum penalty for possessing items for methylamphetamine production is 15 years.

The DPP has issued an amended Guideline on this matter under the *Director of Public Prosecutions Act 1984* (s.11). The Guidelines state that:

“Where the same criminal act could be charged either as a summary or an indictable offence, the summary offence should be preferred unless either-

- The conduct could not be adequately punished other than as an indictable offence having regard to:
  - The maximum penalty of the summary charge;
  - The circumstances of the offence; and
  - The antecedents of the offender; or
- There is some relevant connection between the commission of the offence and some other offence punishable on indictment, which would allow the two offences to be tried together.”

The schedule in the Guideline specifies the summary offence of possessing anything for use in connection with a crime (s.10) as an alternative offence to production of a dangerous drug (s.8).

However, in response to the release of these Guidelines, the Deputy Commissioner of QPS (Deputy Chief Executive (Operations)) issued a memo stating that a s.10 offence should be preferred where no other evidence is available (e.g. precursor chemicals, an illicit drug ‘recipe’, admissions by an offender). QPS advise that this rarely occurs.

In response to a request from the Taskforce, the Director of Public Prosecutions advised that the DPP was unaware of this, and that DPP prosecutors will return matters for summary prosecution if they fall within the guidelines.

***Recommendation 24:***

*It is recommended that the Director-General, Justice and Attorney-General:*

- (i) Progress amendments to the Drugs Misuse Act 1986 (Section 13) to increase the maximum penalty a Magistrate can impose to 3 years by 31 March 2006; and*
- (ii) Examine options for clandestine drug laboratory production offences to be heard summarily, in consultation with the Commissioner, Queensland Police Service and the Director-General, Queensland Health, and report to Cabinet on the outcomes by 31 January 2006.*

### **8.3.5 Reporting Requirements for Precursors**

The DMA (Part 5A) imposes conditions and controls upon suppliers of chemicals which, despite having legitimate uses, can also be used to manufacture illicit drugs (controlled substances). Part 5A requires suppliers of controlled substances to obtain proof of identity from purchasers, keep a

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register recording relevant transactions, report any loss or theft of controlled substances and allow inspection of their premises by environmental health officers. The purpose of the legislation is to allow police officers and environmental health officers to identify the purchasers of the controlled substances and to assist in tracing the supply of these chemicals.

Controlled substances are prescribed in Schedule 6 to the DMA, which currently lists 17 such items, including pseudoephedrine and hypophosphorous acid. (It should be noted that Part 5A applies only to pure pseudoephedrine and not drugs containing the substance (e.g. 'Sudafed'). The regulation of supply of such pharmacy proprietary lines is governed by the *Health (Drugs and Poisons) Regulation 1996*.)

The Taskforce proposes to significantly expand this list to bring it broadly into line with the national *Code of Practice for Supply Diversion into Illicit Drug Manufacture*. Under the voluntary Code of Practice, suppliers must only supply certain items (Category I) to an account customer while other items (Category II) require proof of identity to be provided.

Extending Part 5A to include both Category I and Category II items from the *Code of Practice*, would increase the items in Schedule 6 to approximately 90 items and would impose additional administrative burdens on commercial suppliers. As such, the Taskforce believes an extended list of controlled substances in Schedule 6 should be largely based on Category I items.

***Recommendation 25:***

*It is recommended that the Director-General, Justice and Attorney-General, in consultation with industry stakeholders, progress amendments to the Drugs Misuse Regulation 1987 to expand the items listed in Schedule 6 to bring it broadly into line with Category I of the Code of Practice for Supply Diversion into Illicit Drug Manufacture, plus other items from Category II as appropriate by 30 April 2006.*

### **8.3.6 Possession of Precursors and Production Charges**

The escalation of clan lab production necessitates a consideration of whether the offences in the DMA should be amended to more effectively deal with criminal activity in this area.

One particular concern is the development of a 'market' for persons who supply clan lab operators with chemicals and equipment, but who do not themselves actually manufacture the final illicit drug. For example, 'pseudo-runners' are engaged by clan lab operators to purchase pseudoephedrine-based pharmaceuticals from chemists throughout Queensland and Australia. Persons are also 'specialising' in parts of the production process, e.g. making reagent mixtures such as hypophosphorous acid or extracting the pseudoephedrine from pharmaceutical products.

While the extended definition of 'production' in the DMA (i.e. the inclusion of 'acts preparatory to production') may cover these activities, it is often difficult to prosecute the 'pseudo-runners' or persons engaged in precursor production, as mere possession of large quantities of these products may not of itself be sufficient to prove an offence. Establishing a more targeted criminal offence for such matters would enable police to better deal with this type of criminal activity.

It has also been suggested to the Taskforce that the possession of certain items should be 'deemed' to be production of an illicit drug. For example, a person found in possession of a specified precursor and a specified reagent could be 'deemed' to be an offence under s.8 of the DMA.

In assessing this issue, the Taskforce considered the experience of two other Australian jurisdictions which have recently incorporated 'precursor' legislation into their statutes dealing with dangerous drugs, Western Australia and the Northern Territory, and a Bill recently introduced into the Commonwealth Parliament. Details of the legislation are in Appendix 11.

The approach taken in the Western Australia legislation is to make it an offence to possess certain prescribed items without lawful excuse. There are exceptions to this offence to safeguard legitimate users of the chemicals and equipment, for example doctors and veterinarians. There is no reversal of the onus of proof, with the Crown still bearing the onus of proving the offence beyond reasonable doubt.

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In the Northern Territory, there are several offences criminalising possession of precursors and equipment which may be used to manufacture or produce dangerous drugs. Several offences contain 'deeming' provisions, so that the possession of the relevant items is deemed to be for the criminal purpose without requiring proof by the prosecution. Effectively, persons in possession of common household items like calcium and iodine are deemed to have such items for the illegal purpose of producing illicit drugs, unless the defendant proves otherwise.

The Taskforce also notes the introduction into the Commonwealth House of Representatives of the *Law and Justice Legislation Amendment (Serious Drug Offences and Other Measures) Bill 2005*. The Bill creates new federal offences for illicit dealings in precursor chemicals for the purpose of manufacturing illicit drugs. The Bill uses the term 'pre-trafficking' to describe this criminal behaviour. The Bill contains several evidentiary provisions to assist the prosecution to prove the elements of commercial purpose and intention to manufacture an illicit drug. The Taskforce also notes the Bill has been referred to the Senate Legal and Constitutional Legislation Committee to be reported on by 9 August 2005.

The Taskforce broadly considers the approach of the Western Australian legislation to be appropriate, however, also believes that evidentiary requirements supporting the dangerous drug production offence should be strengthened.

The Taskforce considers the possession of certain items such as precursors without lawful excuse should be an offence. This will create an offence for possessing precursors by 'pseudo-runners' and others who support methylamphetamine production without being involved in the actual production. In some cases, the offence of possessing precursors may only apply above a specified quantity to avoid criminalising legitimate uses. The precursors and other chemicals will be prescribed under regulation modelled on the items in Category I in the national Code of Practice.

In addition, the DMA could be amended to provide that, for evidentiary purposes, the seizure of certain combinations of precursors, reagents, apparatus or end-product (i.e. methylamphetamine) would be conclusive evidence that production of methylamphetamine had occurred, or was intended, unless evidence is presented to the contrary. A similar evidentiary concept is found in s.129 (1)(c) of the DMA in relation to the possession of dangerous drugs by occupiers of premises.

The relevant combinations of precursors, reagents, apparatus and end-product will be prescribed under regulation. For example, this could apply to a seized lab with pseudoephedrine precursors and hypophosphorous acid (a commonly-used reagent); or a reaction vessel containing traces of methylamphetamine.

The Taskforce acknowledges that care will need to be taken to ensure that the combinations of items prescribed would not impact on legitimate activities. However, with the experience of the QHSS scientists in testing clan labs, this could be readily achieved. The Taskforce also acknowledges that other evidence would be needed to connect the alleged offender with the clan lab (e.g. fingerprints).

If this approach was not considered acceptable to government, a separate offence could be established in the DMA providing that the seizure of certain combinations of precursors, reagents, apparatus or end-product was in itself an offence, with a maximum penalty of 25 years imprisonment.

This proposal has the potential to significantly reduce the level of clan lab testing undertaken at QHSS.

***Recommendation 26:***

*It is recommended that the Director-General, Justice and Attorney-General:*

- (i) *Progress amendments to the Drugs Misuse Act 1986 by 31 March 2006 and Drugs Misuse Regulation 1987 by 30 April 2006 to establish an indictable offence for the possession of precursors, and other chemicals, for the production of an illicit drug, with the precursors and other chemicals being prescribed under regulation modelled on the items in Category 1 in the national Code of Practice; and*

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- (ii) *Progress amendments to the Drugs Misuse Act 1986 by 31 March 2006 and Drugs Misuse Regulation 1987 by 30 April 2006 so that the seizure of certain combinations of precursors, reagents, apparatus or end-product would be conclusive evidence that production of methylamphetamine had occurred, or was intended, unless evidence is presented to the contrary, or that the possession of such items would be an offence, with a maximum penalty of 25 years imprisonment.*

### **8.3.7 Outsourcing**

Based on current staffing and workload, it has been estimated that the existing backlog of 207 cases will be cleared by early 2008. This is based on the status quo of no changes to current incoming workloads or practices.

Consideration has been given to outsourcing clan lab analysis for which there are possibly three sources. However, the capacity of those sources to complete the task has not been verified at this point. If any advantage is to be gained by outsourcing, then it is considered the entire exhibit would need to be sent, as the major portion of the analysis is related to description, assessment and extraction.

The advantages of outsourcing include:

- The elimination of current pressures on scientific staff;
- The reduced need for further scientific staff and laboratory facilities; and
- A greater capacity to meet court requirements.

The disadvantages of outsourcing include:

- Significant costs;
- Possible jeopardising of continuity of evidence if entire exhibit is transported to external body;
- Legal aspects of moving illicit drugs across State jurisdictions;
- Health and safety risks associated with transportation of toxic waste material over long distance; and
- The quality and timelines of the external analysis.

On this basis, outsourcing of clan lab analysis does not appear a viable option.

### **8.3.8 Process Re-engineering**

Given outsourcing is not a preferred option, it has been suggested that additional scientific staff will be required to address the existing backlog of cases. The Taskforce is of the view that the proposed reforms detailed above will greatly assist with addressing the demands presently facing this area. Provided those reforms are supported and implemented expeditiously then the quantum of work in the future will reduce.

In addition the Business Enhancement Project being conducted in this area is expected to introduce a number of enhancements to practices resulting in a more efficient process. These changes should be introduced and closely monitored to assess the impact.

## **8.4 Forensic Scientists Attending Illicit Drug Sites**

The QPS procedure when an illicit clan lab is discovered is to call the Illicit Laboratory Investigation Team (ILIT) which is based in Brisbane. That team consists of 11 sworn police officers who are specially trained to recover the laboratories and transport them back to the KRPA at Kessels Road campus where they are transferred to QHSS for scientific analysis. In addition, QPS propose to recruit four additional administrative staff in late 2005 to assist ILIT with documentation and other processes. These administrative staff are expected to increase to 12 by 2007/08.

These laboratories are classified as toxic waste material under Environmental Health and Safety guidelines.

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Recently there has been a national impetus through the Intergovernmental Committee on Drugs to develop best practice guidelines in clandestine drug laboratory training and investigation techniques in accordance with safe work practices. The working group of that Committee has developed a draft Model National Response Plan which at the time of the Taskforce's review remains in draft form and yet to be finalised by the relevant State jurisdictions.

These draft guidelines state:

“Each jurisdiction must ensure that both specialist clandestine drug laboratory investigators and forensic chemists are available for immediate consultation and deployment at all times. Such capability must include both 24 hour telephone consultation and an “on call” immediate response capability.”

At present, attendance of a QHSS scientist at a clan lab site is discretionary on the part of ILIT. Generally, all Category A laboratories (those in production cooking) and those which contain unknown chemicals require a scientist to attend. In 2004/05 there were 36 sites (15%) where QHSS scientists attended. There is a high risk to personnel (including QPS personnel) associated with this work due to chemical hazards, namely explosive substances, flammable gas, non-flammable compressed gas, poisonous gas, flammable liquids, flammable solids, spontaneously combustible substances, substances that are dangerous when wet, oxidising substances, organic peroxides, poisons, radioactive substances and corrosives. There have already been instances of personal injury associated with illicit drug laboratories.

The Taskforce has been advised that the intent of the draft guidelines is for a forensic scientist to attend all (or at least most) sites. In the interests of workplace health and safety, the Taskforce supports the attendance of a forensic scientist at the majority of seized clan lab sites. It is considered there may be some situations where a scientist is not required and protocols will need to be developed to clarify those situations.

The consequences of this proposal will be the need for additional forensic scientists to be available. The options are to:

- Attach the scientist/s to the ILIT team in QPS; or
- Attach the scientist/s to the QHSS laboratory team.

It is considered the latter option is the preferred model as the scientist can be part of a larger pool of scientists available for rotation to cover leave, etc and also achieve professional development among peers to allow sharing of knowledge and experiences. These scientists will need to be on call 24/7 and have access to suitably equipped motor vehicles.

While it is difficult to predict the quantum of sites requiring a scientist, it is considered in the interim a minimum of two scientists will be necessary to meet demands. This will need to be closely monitored.

The estimated annual cost of this proposal is \$205,000.

The additional advantage of having a forensic scientist attend on-site is to enhance processes such as documentation and sub-sampling of exhibits.

**Recommendation 27:**

*It is recommended that the Chief Executive Officer of the Institute, in consultation with Superintendent, Drug Squad, Queensland Police Service:*

- (i) *Establish a team of two forensic scientist positions specialising in clandestine drug laboratory analysis to be on-call at all times to attend call-outs from the Queensland Police Service Illicit Laboratory Investigation Team by 31 July 2006; and*
- (ii) *Develop protocols to clarify which clandestine drug laboratory situations will require a forensic scientist attendance by 31 July 2006.*

*(Estimated recurrent cost: \$205,000 per annum)*

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## 8.5 Destruction of Clandestine Drug Laboratories

At present, almost all seized clan labs are stored at the KRPA, Kessels Road campus and destroyed in bulk at regular intervals (quarterly) by a contractor. The cost of this destruction is borne by the QPS and in 2004/05 the cost was \$15,823. The cost of bulk destruction is considered more cost effective than destruction on-site for each individual laboratory which could be in the order of \$1,000 - \$1,500 per destruction by a qualified contractor.

Consequently, it is considered all laboratory seizures should continue to be destroyed in bulk from the KRPA.

## 8.6 Workplace Health and Safety

The scientific analysis of clan labs presently entails taking selected components of the seized laboratory into an open laboratory environment alongside numerous other scientists. This practice is in breach of workplace, health and safety guidelines and exposes staff to the serious risk from unknown substances. There have been past experiences of toxic gases leaking into the laboratory space requiring its shut down until properly ventilated. While the proposed changes of having a scientist attend most illicit drug sites with ILIT may reduce the volume of exhibits needing to be sub-sampled at the laboratory, it does not eliminate these risks.

To remedy this, a dedicated sub-sampling area away from the general laboratory needs to be constructed, thus reducing the risk of further incidents. This method is considered best practice and has been adopted in other jurisdictions. It is considered a demountable laboratory suitably equipped and spacious enough to accommodate five laboratory benches can be located adjacent to the KRPA. This matter is further addressed in Section 16.

The additional benefit of this facility is that it could serve a dual purpose in meeting the needs as a triaging facility for CBR samples in the event of an emergency (refer Section 11).

## 8.7 Overtime

The attendance of a scientist at clan lab sites at present and under the extended arrangements outlined in Section 8.4 will demand senior and experienced scientists probably at the PO4 level and above. Under present industrial arrangements, officers at level PO4 and above are not entitled to the payment of overtime but alternatively are eligible for time-off-in-lieu. These industrial conditions have proved unsatisfactory in this situation as the high volume of work and limited staffing do not allow the accrued time to be taken.

As an interim arrangement, the Director-General has approved in-principle the payment of overtime to these scientists for a period of 6 months.

At least until the current backlog of work has been cleared, it is considered QHSS scientists attending clan lab sites should be paid overtime. This situation is likely to continue for at least 12 months at which time this arrangement can be further reviewed.

### **Recommendation 28:**

*It is recommended that the Director-General, Queensland Health, in consultation with the Director-General, Department of Industrial Relations, extend the current interim arrangements for payment of overtime to scientists PO4 level and above who are attending illicit clandestine drug laboratory sites **immediately**.*

### **Recommendation 29:**

*It is recommended that the Chief Executive Officer of the Institute review these arrangements when the backlog of work is reduced by **31 January 2007**.*

## 8.8 Forecast Elimination of Clandestine Drug Laboratory Backlog

As indicated in Section 6.4, the Backlog Funding Project is being used to fund four additional clan lab scientists, with three of these commencing work in May this year and a further scientist in August/September 2005.

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The scientists commencing work analysing clan labs will not work at full productivity immediately, as it can take up to 12 months for the necessary 'in-house' training to be completed. In fact, the need for experienced scientists to undertake the training reduces their productivity also.

The commencement of these staff will have an immediate impact on the time it will take to analyse incoming clan lab work. QHSS has recently been advising courts that the testing of clan labs will take 2 – 2 ½ years. With the commencement of the new scientists, this period is now approximately 12 months. This is a tangible benefit of the government's Backlog Funding.

It is however, difficult to precisely estimate the time it will take to eliminate the accumulated backlog. There are a number of variables in estimating this time-frame, particularly:

- Future trends in the number of clan labs seized;
- The impacts of the reforms proposed by the Taskforce;
- The impacts of the national reforms in relation to pseudoephedrine access;
- The impact of the business process review initiatives currently being investigated;
- Future workforce issues, such as any loss of key scientists; and
- The unreliability of QHSS data.

The Taskforce, in consultation with QHSS managers, has produced a variety of forecasts projecting when the accumulated backlog might be eliminated based on the different levels of resources provided (refer Appendix 12). With current resourcing and no increase in the number of clan labs seized, the forecast indicates that the backlog would be cleared by early 2008.

Given the government's desire to resolve this issue in the short term, the Taskforce proposes that two additional staff be funded to work on the backlog. These staff could commence work once the former laboratory in Level 2, Block 2 is reverted to a laboratory (refer Section 16) although, as indicated above, a lead-in time for training will be required. The classification of these staff will be determined after the completion of the Business Enhancement Project which should identify the appropriate mix of scientists and technicians. With the additional staff and assuming no significant increase in cases, it is forecast that the backlog would be eliminated by mid-2007, consistent with the Government's election commitment to eliminate the backlog in 3 years. However, given the variables referred to above, this will need to be closely monitored. If this estimated time-frame is not acceptable, then further resourcing over and above these two positions would be required.

The estimated recurrent cost based on two additional experienced scientists (PO3) including on-costs would be \$133,000 per annum.

***Recommendation 30:***

*It is recommended that the Chief Executive Officer of the Institute employ two additional staff in Forensic Chemistry to analyse clandestine drug laboratories by 31 January 2006.*

*(Estimated recurrent cost: \$133,000 per annum)*

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## 9.0 FORENSIC PATHOLOGY / CORONIAL ISSUES

### 9.1 Background

The *Coroners Act 2003* was introduced to update the then *Coroners Act 1958* and to reform the coronial system which was seen as fragmented and providing insufficient support and information for bereaved families. The 2003 Act provided for the appointment of a State Coroner to co-ordinate the coronial system in Queensland and contained provisions to modernise the coronial jurisdiction in this State.

Principally the *Coroners Act 2003* provides a system for the oversight of deaths which require a further explanation because of the circumstances in which they occur. Although the State Coroner has a key co-ordinating role, all Queensland Magistrates are able to act as Coroners, and coronial services are provided throughout Queensland.

From interviews with stakeholders it is apparent that the introduction of the *Coroners Act 2003* has been instrumental in achieving improved coronial services to the Queensland community.

The Service Level Agreement (SLA) between the State Coroner and QHPSS provides for reporting deadlines for the various services provided to the State Coroner. The SLA, which expires on 31 December 2005, was the initial SLA between the two parties. While QHSS has generally met the reporting deadlines, there is scope in the revised SLA to revisit some of these deadlines to provide a more timely service to the State Coroner, especially in complex toxicology and DNA-based identification cases.

### 9.2 Coronial Autopsies

Coronial autopsies are undertaken in Queensland by:

- Forensic pathologists<sup>3</sup> and forensic pathology registrars within QHSS;
- Anatomical pathologists within QHPSS;
- Private pathologists with recognised expertise in autopsy pathology; and
- Government Medical Officers – mainly general practitioners.

There are approximately 3,000 coronial autopsies undertaken each year, of which approximately 1,200 – 1,300 are undertaken at the John Tonge Centre, QHSS.

The establishment of a State Coroner under the *Coroners Act 2003* provided an excellent opportunity to take a State-wide approach to the provision of autopsy services to the coronial system. A key part of this was the development of Guidelines under the Act (s.14) as to the type of doctors who are authorised to conduct particular types of autopsies. In essence, more complex autopsies (e.g. complex homicides, multiple fatalities, deaths in custody) are to be undertaken by Forensic Pathologists or, in selected cases, by other specialist pathologists; while more straightforward autopsies (e.g. external examinations) are to be undertaken by non-specialist Government Medical Officers. Approximately 75 percent of coronial autopsies are undertaken by specialist pathologists. Work is on-going between the State Coroner, the Chief Pathologist (QHSS) and the Clinical Forensic Medical Unit (which is responsible for the Government Medical Office service) to progressively enhance the quality of autopsies State-wide.

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<sup>3</sup> Pathologists are specialist medical practitioners, with forensic pathology being the pathology specialty specialising in autopsy pathology. Anatomical pathologists undergo some training in autopsy pathology.

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Mortuary services (which in part support the coronial system) are provided by staff in QHSS (at the John Tonge Centre), and QHPSS and Health Service Districts in other parts of the State.

In May 2004, a Working Group chaired by the Chief Pathologist prepared an internal report on the development of a 'Single State-wide Autopsy Service'. The purpose of this paper was to improve the standard and consistency of autopsy, mortuary and associated services (e.g. counselling) throughout the State, including to the State Coroner. QHSS management advised that the report was not further progressed due to resource constraints.

Based on the Taskforce's consultation and analysis on this issue, the Taskforce supports in-principle the concept of a single State-wide autopsy service, particularly as it will enable the improvement of autopsy services to the coronial system. The Taskforce notes that the concept of a single State-wide autopsy service does not suggest a single organisational structure for pathologists and others undertaking autopsies, but rather a consistent State-wide approach to autopsy practice; improved and consistent standards for the provision of mortuary services; improved use of information systems; and the improvement of State-wide counselling services. The model proposed recognises the on-going role of the GMO service in the coronial system.

The issues in the Report of particular interest to the Taskforce are:

- Professional relationships between forensic pathologists and QHPSS pathologists;
- Organisational responsibility for mortuary staff;
- Consistent and improved autopsy and mortuary practices; and
- Consistent and improved information system support.

### **9.2.1 Professional Relationships Between Forensic and Other Pathologists**

For the reasons outlined in Section 4.3, it is proposed that the QHSS Pathologists and coronial support functions (mortuary, histology, counselling) will be part of the new Institute. In making this recommendation, the Taskforce emphasises that the separation of QHSS from QHPSS should not be allowed to detract from the on-going development of a State-wide approach to autopsy and associated services. In particular:

- The Forensic Pathologists at QHSS should maintain their professional links with the QHPSS pathologists;
- The current Right of Private Practice Arrangements for Pathologists should continue;
- QH should continue to provide co-ordinated registrar training to Forensic Pathology registrars in anatomical and forensic pathology; and
- The State-wide co-ordination of relieving arrangements for pathologists (who undertake autopsies) should continue and be strengthened.

### **9.2.2 Organisational Responsibility for Mortuary Staff**

Outside of QHSS, staffing of mortuaries is provided by QHPSS and Health Service Districts in different locations, with the maintenance of hospital mortuaries being the responsibility of Health Service Districts. QHPSS operates all metropolitan hospital mortuaries.

It is widely acknowledged that mortuary services, and mortuary staff, are often given a lower priority within Health Service Districts given the pressing health service delivery needs. Mortuary attendants (outside of QHSS) have been seen as an extension of the 'wardsman' function (now referred to as operational support staff) rather than a specialised service, and facilities have often not kept pace with developing mortuary standards.

The Taskforce believes that the quality of mortuary services to pathologists and others undertaking coronial autopsies would be significantly enhanced if all mortuary staff (outside of QHSS) were managed by QHPSS. However, this may not be practical in the short-term in relation to all autopsies, and could apply for example to mortuaries where QHPSS pathologists are located and other mortuaries where internal autopsies are undertaken. (External autopsies may be undertaken at various degrees of frequency in other mortuaries).

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However, the Taskforce acknowledges that the issue of reporting arrangements for mortuary staff across QH goes beyond the Taskforce's Terms of Reference and that most hospital mortuaries are merely used for body storage. In view of this, the Taskforce proposes that the Director-General of QH review the reporting arrangements for non-metropolitan hospital mortuary staff with a view to providing an improved service to the coronial system.

### 9.2.3 Consistent Mortuary Policies, Practices and Standards

The Working Group Report concluded that mortuaries and autopsy services need common standards and consistent management and quality systems, to ensure the delivery of a professional service including:

- Consistent autopsy practices and procedures throughout QH mortuaries;
- Appropriately skilled staff with consistent training procedures;
- Appropriate workplace health and safety procedures (e.g. use of personal protective equipment, infection control);
- Appropriate mortuary access and security, and facilities for the observation of autopsies and viewings;
- External and internal audits against State and national standards; and
- Agreed QH mortuary building standards and policies to guide upgrades and new mortuary construction (e.g. storage capacity, families' facilities).

The development of standards for autopsy practice would include forensic dentistry practices.

The Working Group also supported the multi-skilling of mortuary staff, which would facilitate cover for leave and major disasters, and consistent Employment Assistance Service (EAS) support and stress counselling.

The Taskforce proposes that the Chief Pathologist/Manager of Forensic Pathology be given responsibility and accountability for the development and monitoring of mortuary policies, practices and standards.

### 9.2.4 Information System Support

In relation to information system support for autopsies, the Taskforce notes that the AusLab system is not used uniformly by persons undertaking autopsies. An earlier audit of body handling in public hospital mortuaries recognised that inadequate documentation of lodging and release of bodies poses a significant risk to QH. Universal availability and use of AusLab in QHPSS-operated and QHSS-operated mortuaries was seen by the Working Group as a prerequisite for establishing a single autopsy service. The Taskforce agrees with this conclusion. This may necessitate the State Coroner issuing such a requirement to private (non-QH) providers.

#### ***Recommendation 31:***

*It is recommended that the Director-General, Queensland Health:*

- Ensures arrangements continue for Forensic Pathologists at the Institute to maintain their professional links with the Queensland Health Pathology and Scientific Services pathologists by 31 January 2006;*
- Ensures the continuation of the current Right of Private Practice Arrangements for Forensic Pathologists by 31 January 2006;*
- Ensures the co-ordination of training for Forensic Pathology Registrars in Anatomical and Forensic Pathology by 31 January 2006;*
- Ensures the State-wide co-ordination of relief for pathologists who undertake coronial autopsies by 31 January 2006;*
- Reviews the reporting arrangements for non-metropolitan hospital mortuary staff with a view to providing an improved service to the coronial system by 31 July 2006; and*

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- (vi) *In consultation with the State Coroner, ensures that all persons undertaking autopsies in Queensland Health facilities enter the autopsy results in the AusLab system by 31 January 2006.*

**Recommendation 32:**

*It is recommended that the Chief Pathologist/Manager, Forensic Pathology develop standards for autopsy and mortuary services in Queensland Health facilities by 31 July 2006, including:*

- *Consistent autopsy practices and procedures;*
- *Consistent training for mortuary staff;*
- *Appropriate workplace health and safety procedures;*
- *Appropriate mortuary access and security, and facilities for the observation of autopsies and viewings;*
- *Mortuary building standards and policies to guide upgrades and new mortuary construction;*
- *Arrangements to cover for leave and major disasters; and*
- *Consistent Employment Assistance Service (EAS) support and stress counselling for mortuary staff.*

### **9.3 Coronial Anatomical Specimens**

During a post mortem examination, tissue specimens including organs, organ samples, blood and other bodily fluids are removed for further testing or examination. In recent times, the removal of whole organs has become much less frequent, with this now occurring in less than 5% of autopsies. In lieu of this, small slices are used to prepare small wax blocks and microscopic slides. The slides are examined by the pathologist in finalising the autopsy report and are kept indefinitely (for forensic evidence in relation to the death and as reference material for similar cases in the future). Following the post mortem (but prior to the examination of retained tissue), the body is released to the family under a Coroner's authorisation, usually within a day or two after the body has been received at QHSS.

The *Coroners Act 2003* requires the blocks and slides known as specimen tissue to be kept indefinitely. The Taskforce acknowledges that these specimen tissues need to be retained for a significant period of time because of the potential for legal issues to arise and also as reference material for similar cases. However, the Taskforce believes that there needs to be a finite date when a decision is required to be made about disposal so that storage requirements are manageable.

**Recommendation 33:**

*It is recommended that the Director-General, Justice and Attorney-General in consultation with the Chief Executive Officer of the Institute review the period of retention for specimen tissue and amend the Coroners Act 2003 accordingly by 30 April 2006.*

### **9.4 Services Provided by Government Undertakers**

#### **9.4.1 Role of Government Undertaker**

Where a reportable death occurs, a government undertaker transports the body to the mortuary where the autopsy is to be conducted. DJAG enters into contracts with funeral directors to provide this service for an agreed fee. The contract requires the contractor to transport all bodies within certain geographical boundaries, primarily based on police districts. The contract also covers burial or cremation where this assistance is provided by the State.

The contract, which is currently being re-negotiated with contractors by DJAG, provides an opportunity to improve the service being offered and ensure appropriate standards are maintained. A new Government Undertakers contract will commence on 1 December 2005 for a period of 3 years with a further 2 year option.

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The Taskforce has been informed of various issues in relation to the service currently being provided including arrangements for cleaning of the body of a deceased person prior to a viewing for identification purposes and avenues for dealing with complaints in relation to contractors.

#### **9.4.2 Preparation of Body**

The Coronial Support Unit at QHSS is permanently staffed by four police officers whose normal hours of duty extend from Monday to Saturday. During normal office hours a police officer attached to the Coronial Support Unit will prepare the body, including cleaning the face by wiping away blood and wheeling the body into the viewing room prior to viewing by the relatives.

After hours, a general duties police officer who accompanies the body will be present at the mortuary to complete the necessary paperwork to obtain the Coroner's authorisation, prepare the report for the Coroner, take photographs, and where necessary, attend the autopsy itself. On these occasions the preparation function will be performed by this police officer.

The Taskforce has been advised that police officers receive some rudimentary information about this task however, not all police officers are adequately skilled or comfortable undertaking these tasks. The Taskforce believes that preparation of the body prior to an identification viewing is not a role which should be expected to be performed by a general duties police officer. The alternatives are for a member of the mortuary staff to perform this role (including being on call for after hours requirements) or for this service to be undertaken by a government undertaker.

The Taskforce has been advised that the principal difficulty with mortuary staff being on call to perform this task is the delay that would occur waiting for the attendant to arrive at the mortuary and then for the body to be prepared. This delay could extend into some hours, dependent on the distance the mortuary attendant lives from the facility. The delay is not desirable for the waiting relative or other person who is to perform the identification.

The primary role of government undertakers under the standard contract is to transport the body of the deceased person to the mortuary. The Taskforce believes the preparation of the body for viewings is a necessary service and the most appropriate person to perform this role is a government undertaker.

The Taskforce notes that s.18(2) of the *Coroners Act 2003* requires that a person who is involved in taking a body to a mortuary (where the death may be reportable to a coroner) must comply with any direction of a police officer. This enables a general duties police officer to direct a government undertaker to prepare a body for viewing for identification purposes if necessary.

#### ***Recommendation 34:***

*It is recommended that the Commissioner, Queensland Police Service issue formal advice to police officers that general duties police officers are authorised under the Coroners Act 2003 to direct a government undertaker to prepare a body for viewing for identification if necessary by 31 October 2005.*

#### **9.4.3 Complaints Procedure**

The current Government Undertaker contract requires contractors to preserve the dignity of the body by appropriate coverings and screenings, to maintain the highest standards of business, professional and personal conduct and to be sensitive to the needs and wishes of bereaved persons and act in accordance with acceptable community standards. The Taskforce has been informed that it is intended for similar obligations to be included in the new contract. Mortuary staff at QHSS sought advice as to where any concerns with contractors' practices should be directed.

The Taskforce was informed by DJAG that complaints about inappropriate standards of behaviour under the contract are investigated by that department and that this is where any complaints should be directed. The Taskforce notes that DJAG produces a brochure on coronial procedures which police officers currently provide to bereaved families. It is intended by DJAG that this brochure will be also supplied to government undertakers to provide to bereaved families. This brochure should be amended to ensure that the complaints mechanism is included.

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**Recommendation 35:**

*It is recommended that the Registrar of the State Coroner ensures information about the complaints mechanism in relation to government undertakers is included in its coronial information brochures when re-printed by **31 October 2005**.*

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## 10.0 QUALITY

In 2003 and 2004, QHPSS was successful in winning a Queensland Gold Award for Quality in their category – Large Organisations – Not for Profit. In 2004 the organisation competed in the National program and won a National Gold Award for Quality.

The laboratories at QHSS have National Association of Testing Authorities (NATA) accreditation to the internationally recognised standard, ISO/IEC 17025, “*General requirements for the competency of testing and calibration laboratories*”. The Forensic Accreditation covers the disciplines of forensic chemistry/criminalists, forensic biology, forensic toxicology and parentage testing.

In May 2005, NATA conducted an independent audit. An *Interim Report on Reassessment (Forensic Biology, Parentage Testing)* has been given to QHSS for comment on the findings. The report indicates that the laboratory, in general, has demonstrated an adequate level of compliance with NATA requirements. However, it recommends that a follow-up reassessment be done in 12 months time when all of the issues raised have been satisfactorily addressed.

In March 2005, an independent technical audit of the QHSS Forensic Biology laboratory was conducted by ESR with the report being provided for comment in May 2005. The audit used the standards developed by the DNA Advisory Board (DAB) in the United States as the template for this technical audit as they are internationally recognised as a benchmark for good forensic biology practice. However there are some differences between the DAB Standards and those for NATA. The audit team included representatives from NIFS as well as officers from ESR.

In response to the findings of this audit, QHSS has provided comments highlighting various initiatives and changes to procedures that are being actioned to ensure compliance.

Staff have raised a number of issues relating to work practices in the forensic science laboratories. For example, some staff felt that management had an emphasis on quantity not quality, particularly in the Forensic Biology laboratory. Some staff believe that certain processes have led to an increased rework rate which has led to unnecessary increases in costs. A number of staff believe that individual scientists’ and technical officers’ processes need to be audited regularly so that improvements can be made.

The lack of promptness in validating equipment has caused concerns among staff. This issue has been dealt with as part of the review by ESR.

A majority of staff have stated that the quality of training could be improved.

A number of staff have also stated that some Standing Operating Procedures (SOP) in Forensic Biology are out-dated. The pressure of backlogs has meant that there has been little time available to update these SOP’s.

The use of Opportunity for Quality Improvement process (OQI) has been an important part of the quality review process to ensure that practices continue to improve. Even though there is an SOP stating that all “must report system breakdowns and errors as OQI’s” so that lessons can be learnt, a majority of staff feel that management does not actively encourage the use of OQI’s. There are a number of OQI’s that have not been finalised in a timely manner.

The Taskforce notes that the existing Quality Team covers State-wide QHPSS. Because of the magnitude of the quality issues at QHSS and the proposed excision from QHPSS (see Section 4.3) the Taskforce believes that there is a need for a dedicated Quality Management function under the proposed Chief Scientist role.

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**Recommendation 36:**

*It is recommended that the Chief Executive Officer of the Institute:*

- (i) Addresses the shortfalls as highlighted in the existing audit and evaluation reports by **30 April 2006**;*
- (ii) Establishes a dedicated Quality Management function within the responsibilities for the Chief Scientist of the Institute by **30 April 2006**;*
- (iii) Ensures Opportunity for Quality Improvement processes are completed in a timely manner by appropriate officers by **30 April 2006**; and*
- (iv) Ensures all Standard Operating Procedures are regularly updated by **31 July 2006**.*

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## **11.0 CHEMICAL, BIOLOGICAL OR RADIOLOGICAL EMERGENCIES**

QHSS is a critical part of the Government's preparedness for a chemical, biological or radiological (CBR) emergency. QHSS plays a key role in the identification of CBR substances for:

- Emergency services as first responders;
- Police with forensic investigations;
- QH to assist with the treatment of victims; and
- The community more generally in providing information on any CBR emergencies.

QHSS scientists have itemised a prioritised list of equipment, staffing, training and structural changes to enhance QHSS's CBR emergency response capability. This includes facilities and equipment to reduce workplace, health and safety exposures, which are major risks to QHSS scientists in the event of a CBR emergency. A separate 'triaging' facility is proposed to enable substances of unknown risks to be sampled and to undergo initial testing outside of the main building fabric.

This facility could be incorporated into the proposed sub-sampling facility for clan lab testing identified in Section 8.6 or separately established in an existing area of Block 1, Ground Level. In either case, specialised equipment would be necessary at an estimated cost of \$161,000.

***Recommendation 37:***

*It is recommended that the Chief Executive Officer of the Institute:*

- (i) *Establishes a triaging facility for a Chemical, Biological or Radiological emergency by 31 January 2006;*
- (ii) *Provides essential equipment for the triaging function by 31 January 2006; and*  
*(Estimated non-recurrent cost: \$161,000)*

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## 12.0 PERFORMANCE MEASUREMENT

Typically, performance can be measured in terms of financial performance and operational performance. In terms of financial performance, budget integrity has been achieved over the past 5 years which is further addressed in Section 14.4. In the area of operational performance no clear benchmarks are available to measure QHSS performance.

A summary of the workload and staffing for the relevant areas of Forensic Sciences and Public Health Sciences over the past 3 years is shown in Appendix 9. Staffing numbers do not include Team Leaders where they are primarily in a management role, administrative support staff or technical staff except in the case of Forensic Biology.

The Taskforce has identified that QHSS has limited documentation, methodology and policies on issues such as:

- Targeted analysis turnaround time;
- Benchmarked throughput per analyst; and
- True cost per test.

Indeed, the Taskforce has been constrained in its ability to analyse current performance and project future QHSS performance due to the inadequacy of data.

Some management have a broad understanding of the throughput of their areas of responsibility, however day to day decision making as well as future resource allocation needs to be better informed by performance data analysis. Although there are limited agreed performance benchmarks on a national basis, there has been no attempt (until recently) to develop local benchmarks to assist in decision making. The Business Enhancement Project is expected to deliver benchmarks and assist with this deficiency.

It appears most work groups operate within their defined area with only limited sharing of expertise or resources. Resources should be shared to meet peak workloads and at the same time provide an opportunity to multi-skill staff. It is acknowledged that resource sharing may not be applicable to all areas, however there are avenues where this can be pursued. There is a wealth of expertise on this campus which appears to be under-utilised for meeting peak demands, research, problem sharing and training.

Some areas within QHSS have an emphasis on revenue generation which in 2004/05 was \$4.8M. In 2000, a MOU with QPS was introduced for forensic person sampling using DNA technology. This MOU has generated \$1.2M revenue in 2004/05. It is reported that all fee-for-service work is provided on a cost neutral basis, however there is no evidence that these costings are full cost recovery and that they comply with the Government's *Full Cost Pricing Policy*.

The Taskforce considers QHSS should be focused in the first instance on its core business and ensure resource allocation is aimed at sharing expertise and resources across all work groups (i.e. both Forensic and Public Health) to meet the demands on its core business where possible. It is therefore critical that strategic planning is clear about what is core business. There is also a need to ensure appropriate research and development is incorporated in the work program to maintain a leading edge. Having maximised that potential, and only then, should non-core business be considered. At that point and within the framework of competitive neutrality, consideration needs to be given to:

- The capacity to pursue non-core business;
- The benefits to be gained from pursuing non-core business such as public health needs, skills development and professional reputation; and
- The financial benefits.

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With regard to the costing of services, a costing and benchmarking team within the Office of the Executive Director, QHPSS is presently analysing costs within QHSS to establish costs for each service. While the results of this analysis are important for monitoring the cost effectiveness of services, it is also critical to ensure the commercial side of the business is managed within government policies including full cost recovery.

***Recommendation 38:***

*It is recommended that the Chief Executive Officer of the Institute:*

- (i) Develops and implements a performance reporting system for the Institute by **31 January 2006**;*
- (ii) Develops criteria consistent with organisational goals and objectives for non-core business by **31 July 2006**; and*
- (iii) Ensures the costing analysis of all laboratory services at the Institute is finalised by **31 July 2006**.*

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## 13.0 EXTERNAL RELATIONS AND COMMUNICATION

### 13.1 Client Relationships

The principal clients of Forensic Sciences are QPS, DPP and the State Coroner. Services are also provided to other clients, such as the Department of Corrective Services and the Environmental Protection Agency, on a fee-for-service basis.

The principal client of Public Health Sciences is Public Health Services within QH. Public Health Sciences undertakes scientific analysis, investigations and research of relevance to public health, including testing water quality (e.g. for blue-green algae), environmental contaminants (e.g. air quality), food quality and safety, and chemical analysis (e.g. 'white powder' incidents). Public Health Sciences also has a large number of fee-for-service clients, both in the private and public sector.

QHSS has sound relationships with local universities although the relationships are stronger for Public Health Sciences than for Forensic Sciences (refer Section 15).

The Taskforce notes that the QHPSS Policy on "Customer Satisfaction" (*Quality Program Policy Manual*) states that:

"QHPSS should have in place effective and efficient processes for collecting, analysing, and using customer-related information for improving the performance of the organisation. Customer-related information may be available from a number of internal and external sources, and may be written or verbal, active or passive.

The measurement and evaluation process should be planned and should consider matters such as conformity to requirements, meeting customer needs and expectations, price and delivery of products and services, and assessment of future needs."

The General Manager advised that QHSS has not undertaken client surveys for a number of years. The Taskforce was unable to locate any QHSS-wide client surveys, although surveys have been undertaken for particular work areas (e.g. Virology, Library).

QHPSS holds an Annual General Meeting (AGM) each year with its senior executives. The theme of the 2004 AGM was 'Client Focus'. A range of potential initiatives to improve client services were identified. As a result of the AGM, a draft Feasibility Report on a QHPSS Client Survey/Feedback Framework was developed (June 2004). The draft document noted that QHPSS does not have a co-ordinated approach to client surveys/feedback and that there is no direct link with strategic planning priorities and initiatives. The draft Framework recommends:

- Guidelines be developed for conducting client surveys/feedback;
- A register be established of all client survey / feedback processes;
- A schedule be developed for obtaining client feedback to coincide with organisational events, such as the AGM and the review of the strategic plan;
- A framework be established for approving, implementing and evaluating actions taken as a result of client surveys/feedback; and
- A 'toolkit' is developed for undertaking client survey / feedback processes.

The Feasibility Report's recommendations are yet to be endorsed within QHPSS.

QHSS has indicated that it has the following SLA's / MOU's in place:

- SLA with the Office of State Coroner (2 February 2005). The SLA deals with issues such as the quality of autopsies, information exchange, availability of forensic pathologists, coronial

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counselling and turnaround times. The Agreement expires on 31 December 2005;

- MOU with QPS in relation to the testing of person samples which is done on a fee-for-service basis. The Taskforce notes that it has expired but the service continues;
- MOU with QPS in relation to the possession and disposal of dangerous drugs under the authority of the *Drugs Misuse Act 1986*; and
- MOU with DJAG to allow electronic access to the QWIC system which provides read only access to Court listings.

QHSS also advise that work is underway to develop a comprehensive MOU with QPS on all DNA and crime scene samples provided to QHSS. It is considered this document should be expanded to include all services provided to QPS which includes those for pathology, toxicology and chemistry.

Public Health Sciences advise that they approach strategic client relationships with Public Health Services (QH) through personal contact and formal meetings. The formal meetings include the Public Health Collaborative Forum, which meets at least once a year at which all public health clients attend; and the Food Safety Advisory Committee, which meets once or twice a year where services are analysed and planned.

The Inter-Departmental Standing Committee for Forensic Sciences (IDSCFS) was established in 1996 in response to concerns raised by Forensic Sciences for greater inter-agency collaboration in dealing with common issues such as increasing workloads, the impact of new technology, inefficiencies in the (then) coronial system and poor inter-agency communication. The IDSCFS comprises representatives of QH (Chair), DJAG, the DPP, QPS, the State Coroner and LAQ. The IDSCFS meets approximately quarterly.

Overall, the Taskforce believes there are positive client relationships with the key clients of QPS, the DPP, the State Coroner and Public Health Services in QH. Although QHSS would benefit from a more formalised approach to client surveys/feedback (as proposed by the Draft Framework referred to above), the mechanisms in place appear to be having a beneficial impact on client relations.

The Taskforce notes that, in relation to Forensic Sciences, there is a general view from clients and stakeholders that the issues now facing QHSS in relation to backlogs and service demand/supply need to be addressed on a Whole-of-Government basis, and are not merely seen as a failure of QHSS to provide a client service. The Taskforce believes that this collaborative approach to the issues is a tangible benefit from the establishment of the IDSCFS. However, it should have played a much stronger leadership role in addressing the issues facing forensic services across government. The role of the IDSCFS will be superseded by the proposed Council for the Institute (see Section 4.3).

***Recommendation 39:***

*It is recommended that the Chief Executive Officer of the Institute develops a single Memorandum of Understanding with Queensland Police Service which incorporates all services provided by the Institute by 31 January 2006.*

***Recommendation 40:***

*It is recommended that the Director-General of Queensland Health abolishes the Inter-Departmental Standing Committee for Forensic Sciences **immediately**.*

## **13.2 Information Systems**

### **13.2.1 Integrated Justice Information Strategy**

To support the delivery of forensic sciences to the criminal justice system there is a need for information sharing across a number of agencies including QPS, QH and DJAG. Those information systems which are integral to the process are depicted in Appendix 13.

Sharing of information across agencies associated with the criminal justice system has been recognised as a priority. The Integrated Justice Information Strategy (IJIS) was initiated in 2002 by the Law and Justice CEO's Committee which is responsible for developing policies that coordinate

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the operations of the criminal justice system. That Committee comprises representative from DJAG (Chair), QPS, Department of Corrective Services, Department of Communities, DPC and Queensland Treasury. There is an IJIS Steering Committee chaired by DJAG that reports to the CEO's Committee. The IJIS program is a Whole-of-Government initiative charged with planning and implementing integrated justice solutions to deliver improved inter-agency information integration and sharing. Implementation is planned over a number of phases until 2007/08. The Taskforce has been advised that QH's forensic scientific function is not currently within scope of IJIS, but that this matter will be considered later this year.

The Taskforce believes that QH's forensic sciences function needs to be within the scope of IJIS and that QH should be represented on the Steering Committee in view of the information sharing required with forensic sciences.

### **13.2.2 AusLab**

The primary laboratory information system supporting QHSS is AusLab. This is a State-wide laboratory information management system that was initially developed in the hospital pathology environment and has in recent times been implemented into the Forensic Science and Public Health Science environments. There has been widespread concern expressed by QHSS staff with the way in which AusLab was implemented, including a lack of consultation surrounding the introduction of the system.

There are varying degrees of acceptance and use of AusLab across the Forensic Science and Public Health Science areas. There is widespread concern that practitioners have lost functionality that they had in a previously developed in-house system. It is clear this system has not been developed for a forensic purpose. Those reluctant to embrace it claim that the system is not user friendly and that there are deficiencies or "bugs" leading to loss of data, inadequate audit trails, questionable evidence continuity, additional time demands and lack of financial controls. QHSS scientists have stated that when requests have been made to QHPSS to have the system altered to meet their needs, these requests have been given a low priority.

In addition the Taskforce has repeatedly sought statistical data from AusLab only to receive differing results on each occasion. Consequently, the Taskforce is unable to place any reliance on the data extracted. This could be a result of definitions or the manner in which data is captured. In either case, a validation process needs to occur to ensure reliable and meaningful data is always available. Concerns regarding the reliability and/or ambiguity of data have already been raised in Sections 6.4.2 and 7.6 above.

However, it is important to note that many personnel in Forensic Sciences are using the system for case management. AusLab is also used extensively by FSLU for communication and property receipt. Some areas of Public Health Sciences have not yet received access to the system.

AusLab has also been successfully interfaced with the QPS Polaris and Forensic Register systems to facilitate information exchange and results management, and to facilitate standard barcoding of evidence from the crime scene to the laboratory. The NIFS *Forensic Biology Automation and Future Developments* paper highlights the importance of an integrated laboratory information management system and acknowledges the Queensland model.

QH has made a significant investment in the AusLab system and staff concerns need to be examined to determine if AusLab is suitable for use in a Forensic and Public Health environment. If those concerns are valid, then they need to be addressed. If they are not valid then its continued development and roll-out should be supported.

Consequently, an independent review of the AusLab system needs to be undertaken to determine its suitability to a forensic and public health science environment. The estimated cost of this exercise would be \$100,000.

In relation to the AusLab system, an AusLab Support Unit is located within the Office of the Executive Director, QHPSS and located at Kessels Road campus. As this system is a corporate solution and rolled out across QHPSS and all Health Service Districts, consideration should be given to managing it through the Information Directorate of QH. This re-alignment would be consistent with the role of the Information Directorate to deliver corporate solutions.

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### 13.2.3 Notification of Court Dates

An essential piece of information for prioritising analysis of exhibits is the associated court date relevant to that exhibit. FSLU has the responsibility of accessing the DJAG QWIC system to identify those dates. The system does not provide an automatic notification of any changes which results in a time consuming task of searching each case on QWIC or telephoning QPS Investigating Officers/Prosecutors. It would be more efficient if the system could be enhanced to automatically report any changes to existing court dates for cases dependent on forensic analysis.

One way to achieve this would be for the QHSS staff (FSLU) to indicate in a dedicated field on QWIC at the time of receiving exhibits that court date advice is required. There are also some other enhancements which are desirable such as searching QWIC via the QPS CRISP number. It is estimated these enhancements could cost up to \$50,000. To date, discussions with DJAG staff have not been able to finally resolve these matters and further discussions need to occur in order to reach agreement on the way forward.

FSLU presently consists of nine staff but only five have access to QWIC. The four staff without access are reliant on others in the team to obtain information from QWIC for their cases, which is disruptive to work flow. The FSLU Co-ordinator has also requested their QWIC access be extended to the field of *File Summary (Bail/Custody option)*. This extension will enable a more informed decision when prioritising cases for analysis.

The Taskforce supports these requests in the interest of improved efficiency for prioritisation of cases.

#### **Recommendation 41:**

*It is recommended that the Director-General, Justice and Attorney-General:*

- (i) *Ensures the Institute's Forensic Sciences is within scope of the Integrated Justice Information Strategy Project by 31 October 2005;*
- (ii) *Ensures the Institute is represented on the Integrated Justice Information Strategy Steering Committee by 31 October 2005; and*
- (iii) *Provides Queensland-Wide Interlinked Courts System (QWIC) access to all staff members of the Forensic Sciences Liaison Unit excluding Central Property Officers by 31 October 2005.*

#### **Recommendation 42:**

*It is recommended that the Chief Executive Officer of the Institute:*

- (x) *Commissions an independent review of the AusLab system to determine its suitability to a forensic/public health sciences environment by 31 January 2006; and*
- (ii) *Negotiates with Department of Justice and Attorney-General appropriate enhancements to the Queensland-Wide Interlinked Courts System (QWIC) which will enable timely access to relevant information for prioritisation of forensic analysis by 31 January 2006.*

*(Estimated non-recurrent cost: \$150,000)*

#### **Recommendation 43:**

*It is recommended that the Director-General, Queensland Health gives consideration to realigning the management and ongoing responsibility of the AusLab System and Support Unit to the Information Directorate by 31 January 2006.*

### 13.3 Communication Protocol

There have been a number of important recent initiatives within the Forensic Sciences area aimed at improving communications. Of most significance have been the establishment of FSLU in late 2003 and the opening of the Central Property Point in July 2004. As indicated previously, FSLU's role is to provide the liaison link with QPS Investigating Officers thus minimising the need for scientific staff to be distracted from their primary role of laboratory analysis. Its role includes establishing:

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- The likelihood of further exhibits being received;
  - Details and circumstances of the case;
  - Custody status of the defendant;
  - Scheduled court date; and
  - Priority for analysis.

Forensic Sciences also advise that an Open Forum was held for clients in July 2004 and client training sessions were held in non-metropolitan locations in order to market the role of FSLU. Despite this effort to promote the role of FSLU, regional visits by the Taskforce confirm there is limited understanding of the existence and role of FSLU among QPS staff. It is considered further strategies need to be pursued to promote the role of FSLU among QPS staff.

The co-location of the QPS DNA & Forensic Sample Management Unit at QHSS is also seen as a major step in improving communication between QHSS and the QPS. As indicated previously, this Unit is primarily involved in the administration of person samples, the prioritisation of major crime scene cases for analysis and authorisation arrangements for eventual destruction of crime scene exhibits. There is a risk that the role of this Unit may overlap with that of FSLU. Consequently, it is imperative that protocols be established to clarify the role of each unit. This matter has been discussed in Section 6.4.4.

***Recommendation 44:***

*It is recommended that the Chief Executive Officer of the Institute in consultation with the Superintendent, Forensic Services Branch, Queensland Police Service ensures that communication protocols are developed between Queensland Police Service and the Institute by 31 January 2006.*

### **13.4 Strategic Communication – Queensland Police Service**

The process of collecting crime scene exhibits for DNA analysis commences with the QPS Investigating Officer and/or Forensic Officer. These exhibits are dispatched to Forensic Sciences for analysis. During the Taskforce's regional visits to QPS centres, comments were received about the lack of feedback on the quality of sampling and/or exhibits collected in addition to the probability of results expected from various categories of exhibits. There was also an expressed desire for feedback on emerging scientific techniques which may benefit crime scene evidence collection.

It is considered regular feedback needs to be provided from QHSS scientists to QPS personnel on relevant forensic trends and techniques. This could be via email, newsletters and attendance at half yearly forums/workshops. These workshops could also be used as partnering forums to discuss SLA's, performance management issues, staff exchange and development opportunities between agencies.

***Recommendation 45:***

*It is recommended that the Chief Executive Officer of the Institute in consultation with the Superintendent of Forensic Services Branch, Queensland Police Service establishes:*

- Information sharing/feedback processes relevant to forensic sciences and the collection of crime scene evidence by 30 April 2006;*
- Staff exchange and development opportunities by 30 April 2006; and*
- Partnering forums by 30 April 2006.*

### **13.5 Strategic Communication – Director of Public Prosecutions**

The Office of the DPP suggested that communication would be improved if there was dedicated administrative support in the office to liaise with QHSS about court matters including listing of trial and sentence dates. Improved communication, including matters which the defence had indicated would be pleas of guilty, could be expected to reduce the amount of unnecessary testing carried out. DPP indicated to the Taskforce that given the relatively small size of DPP, such a position could

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only be established if additional funding was provided. In addition, the position would only be able to liaise with QHSS on Brisbane and Ipswich court matters.

The Taskforce supports this approach and proposes a 12 month trial of the position be undertaken to validate the effectiveness of this role.

**Recommendation 46:**

*It is recommended that the Director of Public Prosecutions:*

- (i) *Establishes a court liaison function for the Brisbane and Ipswich courts to liaise with the Institute on court matters including listings of trial and sentence dates for a 12 month trial by 31 January 2006; and*
- (ii) *Subject to the outcome of the trial, continue the court liaison function as an ongoing role by 31 January 2007.*

*(Estimated recurrent cost: \$60,000 – recurrent funding subject to outcome of trial)*

### **13.6 Use of Video Conferencing and Teleconferencing in the Courts**

Forensic scientists, as expert witnesses, are often required to attend court to give testimony in their scientific field. This can involve spending time travelling to and from the court locality, including regional courts, as well as the time actually spent giving evidence. Over the past 3 years, on average, 112 witnesses from QHSS gave evidence in court each year with 68 (60%) giving evidence in person and 44 (40%) giving evidence by video/telephone. It is also evident that there is an increased use of video conferencing or teleconferencing in recent years.

DJAG has included audio visual technology in court buildings constructed within the last few years. The Taskforce was advised by DJAG that it is planned to gradually increase the availability of video conferencing and teleconferencing facilities in Queensland courts as budgetary pressures permit. As at the end of the 2004/05 financial year, DJAG had 23 video conferencing facilities at 15 sites either completed or under construction.

The provisions of the *Evidence Act 1977* allow forensic scientists to give their evidence using suitable facilities at the Kessels Road campus and without the need to attend the court in person. The use of such video conferencing or teleconferencing facilities will minimise the disruption to the forensic scientist's normal working day. There may also be savings in travelling and accommodation costs met by QPS.

For these provisions to apply, an application must be made by a party to the proceeding, including the prosecution. The Taskforce notes that the Court (Judge or Magistrate) has discretion whether to allow the application or not. The Taskforce was advised that in some instances the Court will not allow the application unless both parties agree even though the legislation does not require this. The Taskforce was also advised that there can be difficulties in giving evidence by telephone, including poor lines, making it difficult to hear the questions being asked. There may also be occasions where it is preferable for expert witnesses to give evidence in person because of the need to convey difficult concepts to a jury.

The Taskforce considers that the giving of evidence by visual or audio link should be encouraged wherever possible. The CEO should monitor and evaluate the way in which evidence is given to the courts to ensure that staff time is utilised efficiently.

In addition, the judiciary could be encouraged to make maximum use of audio and visual links. The legislation could be amended, if necessary, to make it clear that, although the submission of the parties should be considered in deciding if evidence should be given by audio or visual means, it is not necessary for the parties to agree.

The Taskforce was advised that QHSS currently has a mobile set of video-conferencing equipment which is able to be used in nine separate locations on campus. The Taskforce is of the view this equipment is adequate for current demand although a fit-for-purpose location would improve the presentation of evidence. The adequacy of this equipment should be monitored as the demand is expected to increase.

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**Recommendation 47:**

*It is recommended that the Director-General, Department of Justice and Attorney-General explore ways, including legislative amendment if necessary, to ensure that forensic evidence is only given in person if it is in the interests of justice by **31 January 2006**.*

**Recommendation 48:**

*It is recommended that the Chief Executive Officer of the Institute monitor and evaluate the demand on Institute staff to provide evidence to the Courts and the means by which it is provided by **31 July 2006**.*

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## 14.0 CORPORATE SERVICES

### 14.1 Impact of Shared Services

Prior to the introduction of the Shared Services Initiative (SSI), corporate services were provided to QHPSS via a combination of areas including corporate services from Corporate Office and services provided from the Kessels Road campus. In accordance with the Government's strategy of Aligning Services and Priorities, transactional functions were moved to the Shared Services Provider – Corporate & Statewide (SSP - C&S). However, through negotiation the local senior positions of HR Manager and Director of Finance were retained within QHPSS to provide a strategic level of expertise to QHPSS. One of the key principles of SSI is to develop partnering arrangements between the provider and purchaser of services. Unfortunately the relationship has not developed to a mature level for QHPSS and SSP - C&S.

Part of the problem relates to QHPSS not having a clear understanding of the roles and responsibilities of both parties. This problem has been exacerbated by the division of responsibilities of corporate services within QHPSS.

As part of the process to develop a mature partnering relationship between QHPSS and SSP - C&S, there needs to be resolution of the tension between the strategy to co-locate and rationalise in the SSP - C&S versus having an active presence on the Kessels Road campus. It is evident that having a presence at the Kessels Road campus on certain nominated days or part thereof each week will go a long way to addressing the issue.

To progress these issues a partnering forum or workshop with the key stakeholders present needs to occur as soon as possible. Under the new structure it will be the responsibility of the Institute and the Senior Executive Director – Resource Management to work as a team to deliver the outcomes required.

**Recommendation 49:**

*It is recommended that the Chief Executive Officer of the Institute and Senior Executive Director, Resource Management facilitate a series of workshops to develop a partnering relationship between Shared Service Provider – Corporate and Statewide and the Institute by 31 January 2006.*

### 14.2 Recruitment Practices

Consistent with Government policy, QH has developed and implemented robust recruitment policies and procedures. It is imperative that practices are transparent to engender confidence in management decisions.

Promotions/appointments that have occurred over the last few years have caused a high level of concern among staff. These concerns are having a detrimental impact on the morale of the organisation.

The Taskforce believes that recruitment practices need to be strengthened to ensure compliance and transparency.

Another issue is the temporary nature of the employment of 39 staff for the Backlog Project. This status is a result of the uncertainty of funding from the Backlog Project which initially was expected to be for 3 years only. Temporary employment under these circumstances is the usual practice when recurrent funding can not be guaranteed.

Short term recruitment is problematic as:

- The applicant pool can be limited as many potential applicants are hesitant to seek temporary employment;

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- Those employed on short term contracts invariably pursue alternative permanent opportunities as they arise;
  - It is a significant investment to recruit and train staff only to lose them to alternative employment; and
  - Commitment of temporary staff may not be as optimal as permanent staff.

The Taskforce has now confirmed that the Backlog Project funding of \$3M per annum is recurrent and has been allocated to QPS to purchase DNA profiling and crime scenes samples backlog from QHSS. As recommended in Section 6.4.3, it is proposed that this funding be transferred to QHSS's base funding pending the development of proper fee-for-service arrangements. As a result of this, the current arrangements of short term employment contracts can be re-visited with a view to appointing staff to permanent positions consistent with government policies.

**Recommendation 50:**

*It is recommended that the Chief Executive Officer of the Institute:*

- Ensures all recruitment practices are in accordance with corporate policies and procedures **immediately**; and*
- Reviews the arrangements for the temporary employment of staff in the Backlog Project with a view to appointing staff to permanent positions consistent with government policies by **31 October 2005**.*

### **14.3 Records Management**

As in many organisations, the retention and storage of records is a critical concern for this campus given the limited storage capacity available. While records management is a function of the SSP – C&S there needs to be some urgent attention to addressing current issues facing QHSS.

Those issues include:

- Clarification of the ownership of records to enable appropriate retention and records management procedures to be developed;
- Ensuring AusLab records comply with Information Standards for Records Management No. 40 & 41;
- Clarification of retention periods for a range of records and/or samples held within QHSS;
- Ongoing viability of RecFind V3.2 database given the Whole-of-Government EDRMS project; and
- The need to enhance the records management knowledge and capacity on campus.

To address the above issues, records management staff need to undertake a project to prepare the Kessels Road campus for the implementation of the Whole-of-Government EDRMS solution.

**Recommendation 51:**

*It is recommended that the Senior Executive Director, Resource Management ensures attention is given to the current issues facing the management of records held at Queensland Health Scientific Services with a view to preparing for the implementation of the Whole-of-Government EDRMS solution by **31 October 2005**.*

### **14.4 Financial Management**

The expenditure to budget performance for QHSS has been analysed for the past 5 years. In 2004/05, the overall result was an underspend of approximately \$2.36M which has been committed in rollover funding for outsourcing of Forensic Biology DNA sampling (\$1.5M), capital equipment for Forensic Biology (\$0.5M) and coronial equipment (\$0.4M). Overall this is considered a satisfactory position.

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The budget development process for QHSS is primarily centrally driven from the General Manager. The formulation of the budget has largely been historically based and there are conflicting views over the level of consultation and input to the budget process from middle management. There is no devolved cost centre management in QHSS.

The ongoing monitoring of budget performance has been problematic with inconsistent data being presented to management. There is not a good understanding of the financial position across all levels of management. This is largely a result of using independently generated Excel reports and not relying on the FAMMIS produced reports. Corporate systems such as FAMMIS should be the definitive reporting mechanism from which financial performance is reported and monitored thus avoiding any inconsistency and confusion. In addition, budget performance against these reports should form part of the agenda for regular management meetings.

While there have been reported inaccuracies in the labour costing to the various Cost Centres, efforts are being made to correct this. There are specific Decision Support System (DSS) reports which can be generated on a regular basis for Cost Centre managers to identify and correct any costing inaccuracies. These reports should form part of the monthly reporting to all Cost Centre managers.

There does not appear to be a good understanding of FAMMIS reports and the treatment of revenue in the financial reporting process. It is understood revenue targets based on historic and known commitments are included in budget allocations, however there is no feedback to Cost Centre managers on the revenue receipts. In the interest of completeness, revenue reports, albeit to Group/Team level, should be provided to Cost Centre managers in their monthly reports. This will enable those managers to understand the overall financial performance of their area.

In a devolved financial management framework, Cost Centre managers should be in a position to understand their performance and be accountable, which includes reporting back to Executive Management on such performance. This level of accountability and reporting does not occur.

***Recommendation 52:***

*It is recommended that the Chief Executive Officer of the Institute ensures:*

- (i) A devolved Cost Centre Financial Management system is introduced in the Institute by 31 January 2006;*
- (ii) Budget development is a consultative process with all managers to ensure budgets are understood and adequately allocated within available funding constraints by 31 January 2006;*
- (iii) Appropriate financial reports sourced from the Decision Support System (DSS) and/or FAMMIS are provided to managers on at least a monthly basis by 31 January 2006;*
- (iv) All managers are given adequate training to access and understand the abovementioned reports by 31 January 2006; and*
- (v) Budget performance is an agenda item for all monthly Executive meetings by 31 October 2005.*

## **14.5 Zero Base Budget**

The Taskforce has attempted to develop a zero base budget for QHSS calculated on current staffing levels. In the area of labour related costs, the Corporate Office budget template was applied to the staffing component provided by the Manager, HRM Services. In this calculation no provision has been made for relief/higher duties. This component, if fully applied across QHSS could amount to a further 1% of salaries or approximately \$350,000 which is over and above the calculation shown below.

In the area of non-labour related costs, there are no benchmarks or standards which can be applied to costing the services provided. As a result the non-labour costs for the period 1 January 2005 to 30 June 2005 has been doubled for an annual result and used for these calculations. It is considered the earlier 6 months to December 2004 may not be representative of full productivity as the additional Backlog staffing did not commence until at September 2004 at the earliest.

The result of the zero base exercise is therefore as follows:

Labour	\$21,855,175
Non-labour	<u>\$10,509,730</u>
TOTAL	\$32,364,905

The available funding for 2004/05 was \$33,948,706 made up of the QHSS operating budget of \$26,747,706 which includes revenue, Backlog funding of \$5M and Coronial funding of \$2,201,000. As the Backlog funding of \$5M reverts to \$3M in 2005/06 (allocated to QPS to purchase forensic services) and coronial funding reduces to \$1.5M (includes rollover of \$0.5M) then the potential available funding will be \$31,247,706.

Compared to the zero base calculation this result indicates a shortfall of \$1,467,199 which includes the difference of \$1,117,199 as well as the \$350,000 for relief/higher duties which was not included in the zero base calculation.

## 14.6 Workplace Health and Safety

There are presently two full time Workplace, Health and Safety officers employed for QHPSS and located at QHSS. The scope of their responsibilities is not clear to the incumbents, particularly as it relates to pathology laboratories across Health Service Districts. This function needs to be reviewed in the light of the proposed establishment of the Institute and the excision of functions and resources from the Office of the Executive Director, QHPSS.

A number of situations were brought to the attention of the Taskforce, bringing into question the priority and attention given by the current Executive Management Group to workplace health and safety issues. This includes the ongoing concern within Forensic Chemistry associated with the analysis and storage of unknown hazardous materials from clan labs. This matter has been addressed in Section 8 above.

In general, workplace, health and safety staff are attempting to deal with the issues. In order for these issues to be given appropriate attention by senior management, the Taskforce believes that the Workplace Health and Safety Committee should be chaired by the proposed Director, Business Services who will be required to provide monthly reports to the Executive Management Committee.

### **Recommendation 53:**

*It is recommended that the Chief Executive Officer of the Institute:*

- (i) *Establishes a dedicated workplace, health and safety function at the Institute by excising resources, in conjunction with Senior Executive Director, Resource Management, from Queensland Health Pathology and Scientific Services by 31 October 2005; and*
- (ii) *Ensures the Director Business Services takes day to day responsibility for workplace, health and safety issues for the Institute, chairs the Workplace Health and Safety Committee and provide monthly reports to the Executive Management Group by 30 April 2006;*

## 14.7 Food Services

A staff canteen is provided on the first floor of the facility which appears to be well supported. This canteen exists due to the lack of public facilities available within a reasonable distance. It is operated by in-house QHSS staff. A summary of its financial performance is as per Table 4 below.

**Table 4: Food Services Finance Report**

Year	Expenditure	Revenue	Profit/(Loss)
2004/05	\$333,846	\$212,001	(\$121,845)
2003/04	\$254,491	\$159,321	(\$95,170)

Source: FAMMIS Report provided by QHSS

This area is operating at a significant loss which is unacceptable. It is considered such services should desirably operate with a small profit margin to cover any future capital expenditure requirements or at worst on a cost neutral basis. It is acknowledged with a limited customer base that achieving these outcomes will be difficult, however the Taskforce believes that a number of options are available at this time to reduce this shortfall. For example, operating hours could be altered and/or staffing numbers matched more closely to customer demands.

To address the above, remedial strategies should be developed and implemented as soon as possible.

**Recommendation 54:**

*It is recommended that the Chief Executive Officer of the Institute by 31 January 2006 develops strategies to improve the financial performance of the Food Services with a view to achieving a cost neutral outcome.*

*(Estimated recurrent savings: \$80,000 per annum)*

**14.8 Motor Vehicles**

The current motor vehicle fleet managed by QHSS is made up of seven private plated vehicles (part of salary packages for Senior Officers) and 12 QG plated vehicles. An analysis of a sample of five of these QG vehicles over a period of 1 month is shown in Table 5 below.

**Table 5: Motor Vehicle Usage**

Vehicle	Total	Business	Comments
1	898 km	322 km (35%)	Average use 42 km per day
			Garaging 33 km per day
2	1,063 km	611 km (57%)	Average use 50 km per day
			Garaging 20 km per day
3	1,839 km	1310 km (28%)	Average use 87 km per day
			Garaging 60 km per day
4	705 km	411 km (58%)	Average use 33 km per day
			Garaging 24 km per day
5	947 km	91 km (10%)	Average use 45 km per day
			Garaging 38 km per day

Source: QHSS Management

It is the responsibility of management to ensure all resources are efficiently and effectively utilised. Given the results of the sample analysed, it is considered the utilisation rate of these vehicles is unsatisfactory and scope exists to rationalise the total fleet holding.

It is considered up to three vehicles may be eliminated resulting in a saving of approximately \$25,000 per annum.

In accordance with Policy 15090 *QH Vehicles – Management and Use* approval for the garaging of vehicles at private residences should not be given unless improved operational effectiveness for QH can be demonstrated. It is considered garaging privileges should be reviewed in accordance with this policy.

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**Recommendation 55:**

*It is recommended that the Chief Executive Officer of the Institute reviews:*

- (i) The number of Queensland Government plated motor vehicles with a view to rationalisation by **31 January 2006**; and*
- (ii) On an annual basis, the home garaging arrangements to ensure an improved operational effectiveness can be demonstrated by **31 January 2006**.*

*(Estimated recurrent saving: \$25,000 per annum)*

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## **15.0 RESEARCH AND DEVELOPMENT**

### **15.1 Background**

The form of research most relevant to QHSS is applied research (ie research applied to address a specific problem or issue) and method development (ie to develop new extraction and testing methodologies to provide enhanced client service). At the lower level, method development is not seen as research but part of client service.

QHSS has led the scientific community nationally and internationally in many areas, including:

- The development of methodologies for the testing of anthrax;
- Research into the development of a leptospirosis vaccine;
- The development of statistical methodologies for undertaking DNA testing (used in response to the Asian Tsunami);
- Extraction of DNA from degraded skeletal remains;
- Testing for residues in aircraft fuel tanks;
- Research into the transmission of bat-borne and mosquito-borne viruses (e.g. lissavirus, dengue fever);
- Developing methodologies for testing for viral and residue contaminants in blood and blood products;
- Participation in a national survey of air quality; and
- Development of methodologies to test for algal types.

A number of scientists' professional standing is such that they lecture or tutor in forensic and public health sciences in universities (e.g. Griffith, QUT).

QHSS staff are also involved in numerous forums with peer and research institutions, and other entities, at a local, State, national and international level.

The development of new methodologies is an essential part of providing an enhanced client service. QHSS are often faced with new and unique analytical demands, which require the development of new extraction and testing methodologies. Although this work is undertaken on an ongoing basis, many staff, particularly in Forensic Sciences, have expressed concern that they have inadequate time to write up the subsequent results. This denies the researcher, and QHSS, the opportunities that accrue from scientific publication and peer recognition. Bench research can also identify more efficient work practices and use of new technologies.

Some areas of QHSS have engaged PhD students to undertake specified research, although this has generally been limited in scope.

Public Health Sciences has an active research program in partnership with a range of public and private sector agencies. Many of these projects are part of externally-funded research projects or are undertaken on a fee-for-service basis. For Public Health Sciences, undertaking public health research is an integral part of their business.

QHSS has allocated a sum of \$100,000 per annum to support applications for research grants for public health research, in collaboration with other partners, usually universities. QHSS also provides 'in-kind' support to these research collaborations. Project proposals are assessed and monitored by the Research Management Advisory Group, which is comprised of representatives from QHSS and EnTox management. This Group also oversees projects undertaken by EnTox. There are approximately 120 active projects on the register equally divided between EnTox and

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Public Health Sciences. The Scientific Advisor in Public Health Sciences estimates that there are approximately 10 FTE staff undertaking research in Public Health Sciences, out of a staffing complement of 130.

In contrast, the workloads and lack of priority given to research in Forensic Sciences by senior management makes any research in the forensic area very limited.

QHPSS has recently progressed initiatives to improve the quality, co-ordination, prioritisation and organisational alignment of research within QHPSS. This included the establishment of a Research Co-ordination Unit reporting to the Executive Director, QHPSS (now the Co-ordination, Planning and Research Unit). A Research Issues Paper, Research Survey and Research Forum were progressed in early 2005.

The draft report of the Research Forum (March 2005) concluded that a research framework should be developed in the following areas:

- *Leadership and Direction*, e.g. explicit recognition that research is central to the core business of delivering evidence-based pathology and scientific services;
- *Identifying Research Priorities*, i.e. how to balance the needs of client groups, research interests and skills of staff, and commercial benefits for QHPSS to best provide value for QHPSS and the community;
- *Organisational Capacity*, including better understanding QHPSS's expertise and infrastructure, and strengthening links to external groups;
- *Access to Resources*, as service delivery takes precedence over research activities in the use, for example, of laboratory equipment; and
- *Administrative Support*, e.g. the establishment of an administrative support unit to provide advice and assistance in funding applications and managing research contracts.

The above research framework is yet to be operationalised within QHSS.

## **15.2 National Research Centre for Environmental Toxicology**

The National Research Centre for Environmental Toxicology (EnTox) is co-located with QHSS on the Kessels Road campus. The relationship between QHSS and EnTox is governed by two Agreements which, among other things, provides for free rental of space at QHSS, and financial contributions by QH (\$508 000 per annum), the University of Queensland, QUT and Griffith University.

Both agreements were to expire on 30 June 2005, but have now been extended for 12 months with the option to review the arrangements again by 31 December 2005. It is essential that the senior management of Public Health Services in Queensland Health be involved in these re-negotiations.

Under separate arrangements, QH funds the full salary of the Director of EnTox (joint Director of QHSS).

The Taskforce endorses strong partnering relationships between QHSS and research entities such as EnTox. However, such arrangements must be of mutual benefit to both agencies. In addition, QHSS must ensure that its core business of providing scientific and forensic services is not adversely affected by such relations.

There is a widespread view among QHSS scientists that QHSS receives little or no benefit from the co-location of EnTox with QHSS. Indeed many believe it has had a detrimental impact on QHSS services. QHSS management were unable to demonstrate to the Taskforce any substantive benefits to QHSS from EnTox's co-location with QHSS. Management acknowledged that very few QHSS scientists were actively undertaking research projects at EnTox.

The Taskforce notes with concern that EnTox PhD students are using some 400 square metres of former laboratory space for administrative purposes at a time when QHSS scientists are acutely short of dedicated laboratory space. This matter is discussed further in Section 16.2.

Any future arrangements for research tenants on the QHSS campus needs to be governed by a series of key principles, i.e.:

- The arrangement must be of mutual benefit to both parties;
- In the case of QHSS, the benefits must include genuine joint projects (ie of mutual benefit); real opportunities to enhance the professional development of QHSS scientists; and the development of opportunities for scientific advancement in areas of interest to QHSS;
- The terms of the Agreement must be transparent with all ‘in-kind’ matters identified and costed;
- The arrangements must not detract from the Institute’s service provision; and
- The Agreement must align with the Institute’s core business and future vision.

**Recommendation 56:**

*It is recommended that the Chief Executive Officer of the Institute:*

- (i) *Ensures that any future arrangements for research tenants on the Queensland Health Scientific Services campus is governed by a series of key principles **immediately**, i.e.:*
  - *The arrangement must be of mutual benefit to both parties;*
  - *In the case of the Institute, the benefits must include genuine joint projects (ie, of mutual benefit); real opportunities to enhance the professional development of the Institute scientists; and the development of opportunities for scientific advancement in areas of interest to the Institute;*
  - *The terms of the agreement must be transparent with all ‘in-kind’ costs identified and costed;*
  - *The arrangements must not detract from the Institute’s service provision; and*
  - *The agreement must align with the Institute’s core business and future vision.*
- (ii) *Undertakes renegotiations in consultation with Queensland Health stakeholders (including Public Health Services representatives), University sector stakeholders and the National Research Centre for Environmental Toxicology (EnTox) with a view to ensuring any ongoing Service Level Agreement in relation to EnTox is compliant with the abovementioned principles by **31 January 2006**.*

### **15.3 Governance Arrangements for Research and Innovation**

There are a number of essential pre-requisites for QHSS to prosper as a scientific campus, i.e.:

- Strong scientific leadership on campus;
- Capacity to attract and retain skilled scientists at all levels;
- Access to ‘state-of-the-art’ facilities and equipment;
- The opportunity for scientists to undertake and publish research; and
- Strong links to relevant academic and peer institutions.

QHSS needs to establish structures, systems and processes to achieve the above. Skilled scientists see scientific excellence, including access to research opportunities, as an essential part of a scientific career. The capacity to undertake method development and applied research is essential to ongoing improvements in client service.

The Taskforce supports the direction of the recent initiatives undertaken by QHPSS management to improve the governance arrangements for research as outlined above. Within the Kessels Road campus, these initiatives need to be led at a senior level for them to be implemented successfully.

There is generally a strong culture of staff commitment to their sciences. This culture remains despite the inadequacy of scientific and business leadership at senior management level. However, the Taskforce is seriously concerned that this lack of scientific leadership cannot continue, and that there is a serious risk, particularly in Forensic Sciences, that service provision will be adversely

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affected if stronger scientific leadership models are not put in place. This problem has been, and will continue to be exacerbated by the inability to attract and/or retain skilled scientists at all levels.

A number of issues relevant to scientific excellence are addressed elsewhere in this report (e.g. revised leadership models, staff recruitment and retention, strategic infrastructure). To fully develop as a scientific campus, QHSS needs to substantially enhance its governance arrangements for research and innovation. These arrangements need to include:

- The development of a strategic approach to research, which will in turn govern research priorities and the development of research partnerships;
- Equitable access to research opportunities for scientists across the campus;
- Access to administrative and contract management support for scientists in applying for, and managing, research grants;
- Maintenance of links to relevant academic and peer institutions on research issues, including strengthened links in the forensic sciences;
- Clear policies on costings for research applications; and
- Management of funding for all research projects.

The governance arrangements also need to strongly link research and innovation activities with staff attraction, development and retention including:

- Mechanisms for staff placements in research institutions;
- Mechanisms for scientific staff to publish research findings; and
- Encouragement to undertake further education in relevant areas.

The proposed position of Chief Scientist, supported by the Research Committee, will be responsible for the above matters.

However, at the current level of resourcing it is not possible to achieve the degree of research commitment which should be expected from the Institute. Consequently, additional funds should be made available to the proposed Chief Scientist, which together with the current funding available within Public Health Sciences should allow a realistic research program.

In practice the proposed Chief Scientist would then be able to allocate funding to units to allow staff to pursue approved research projects. That funding would then allow the release of the officer and enable backfilling for day to day work commitments to continue.

It is therefore considered an additional amount of \$500,000 p.a. needs to be provided which will ensure the appropriate level of research.

***Recommendation 57:***

*It is recommended that the Chief Scientist of the Institute develops and implements governance arrangements for research and innovation at the Institute by 31 July 2006 including:*

- (i) The development of a strategic plan for research, to govern research priorities and the development of research partnerships;*
- (ii) Equitable access to research opportunities for scientists across the campus;*
- (xi) Access to administrative support for scientists in applying for, and managing, research grants;*
- (iv) Maintenance of links to relevant academic and peer institutions on research issues, including strengthened links in the forensic sciences;*
- (v) Clear policies on costings for research applications; and*
- (vi) Management of funding for all research projects.*

*(Estimated recurrent cost: \$500,000 per annum)*

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## 15.4 National Forensic Innovation Facility

The issues faced by Forensic Sciences in their limited ability to undertake research is not unique to Queensland. A report prepared in 2001 for NIFS concluded that “... *forensic science in Australia barely has the resources to attend to core business* (i.e., casework investigation)” and that “... *strong and decisive action* (needs to be) *taken now to ensure the criminal justice system has access to the best available science*”. The paper recommended the establishment of a decentralised facility dedicated to forensic innovation at an estimated annual funding of \$4M to \$5M. The proposed National Forensic Innovation Facility is to be established in ‘nodes’ in various jurisdictions to reflect local expertise.

A Working Party, chaired by Associate Professor Dennis Burns, Griffith University, is co-ordinating Queensland’s input into this strategy.

In response, the Commonwealth funded a *Pilot Project* (Phase 1 - \$350,000; Phase 2 - \$320,000) in relation to the criminal use of explosives. A further round of applications for funding is currently underway.

The Commonwealth Government has indicated that any Commonwealth proposal to fund a National Forensic Innovation Facility would need to be matched by State/Territory funding.

To date, QHSS management has shown little interest in this initiative, with the Director’s focus being on environmental health issues.

The developments in this area provide an excellent opportunity for Queensland to strengthen its skill-base in key areas of forensic research. The proposal is strongly aligned with the Government’s Smart State vision, and the Taskforce’s recommendations to strengthen QHSS’s research capacity and links in the forensic sciences. Progressing this initiative is critical to achieving scientific excellence in the area of forensic sciences, and most particularly, in attracting, developing and retaining quality scientists in QHSS.

### ***Recommendation 58:***

*It is recommended that the Chief Scientist of the Institute include strategies to fully engage in the development of the proposed National Forensic Innovation Facility in the strategic plan for research by 31 July 2006.*

## 15.5 Professional Development

Ongoing professional development needs to play an integral part in management of the QHSS campus. However, the Taskforce found that many QHSS staff are concerned about the limited staff development and training available, especially in Forensic Sciences. Staff in Forensic Sciences have expressed strong concern with the perceived limited and arbitrary decision-making in regard to attendance at key national and international (held in Australia) Conferences. Scientific staff believe these conferences are an appropriate way of keeping their knowledge and skills up to date and provide networking opportunities with interstate peers.

In contrast, the Manager of Public Health Sciences advised the Taskforce that he allocates a set amount of \$10,000 per annum for each team for conference attendances.

Forensic managers advise that scientific training in forensics is invariably done ‘in-house’ by more experienced scientists. Given the recent influx of additional staff in Forensic Biology, a retired forensic scientist was engaged on a part-time basis to assist in the training of the new staff, including giving evidence in court. The Taskforce believes that there would be benefits from introducing a more formalised training and accreditation process for scientists providing evidence in Court.

QPS and DPP staff generally spoke positively of the Court work done by QHSS forensic scientists, especially those more experienced in Court work. However, both QPS and DPP believed there is scope to improve the standard of Court work for less experienced scientists. DPP is willing to assist in this training. The Taskforce believes this would also assist scientists in increasing their confidence to do Court work.

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For QHSS to grow as a scientific institution, it needs to identify and fully utilise the skills, knowledge and facilities on a campus-wide basis. This will promote staff being ‘multi-skilled’ in various areas, and enable equipment and other resources to be used to assist meeting peak demands.

The Taskforce acknowledges that there is some cross-campus sharing of expertise and equipment - for example, the public health science expertise in the Organics area is used to assist Forensic Sciences in certain residue testing (e.g. pesticides) and phycology (algae) in some forensic cases. Equipment is also utilised across campus in some instances.

The movement of staff across the campus is limited. Many staff and managers spoke highly of earlier arrangements where lower level staff would be ‘rotated’ to various areas as part of a career development strategy. Also, it was the previous practice for many forensic scientists to initially work in Public Health Sciences, where, among other things, they would be exposed to the legislative requirements of being a State Analyst. It is the general view of QHSS staff that these types of models have fallen away due to increased work pressures.

It is proposed that the new position of Chief Scientist will be responsible for the development of an overall policy on professional development, with decisions being devolved on a case-by-case basis.

As part of the Business Enhancement Project a capability matrix is being developed to identify the current skill levels across the various classifications in Forensic Biology. In addition the project has mapped the DNA process from receipt to report. This map will enable the development of the specific competencies required.

The Taskforce is supportive of this process continuing and encourages the use of the information to develop a competency acquisition program which will enable scientists and technicians to progress within their sciences. Another use of the data is to identify the skill gaps in the existing workforce which in turn cause “bottlenecks”, thus exacerbating the backlog issue. This would assist in the management of the workflow in the laboratory through the upskilling of identified staff in the required competencies.

## **15.6 Institute Training Model**

The Taskforce acknowledges that there are a range of models suitable for the delivery of training. However in a competency based model the most appropriate trainers are the skilled practitioners within the workplace.

The Taskforce believes that the Institute should adopt a Competency Based Training Framework based on Adult Learning Principles. This framework requires the following:

- Development of “on the job” competency training;
- Provision of mentoring;
- “On-the-job” assessment;
- Accreditation; and
- Post training support.

That is not to say that there is no requirement for a centralised co-ordination of training and professional development. The Taskforce believes that the proposed position of Chief Scientist would be responsible for ensuring that each discipline develops a competency-based training program.

Many staff also felt that they should be given support for further academic advancement (ie, Masters, PhD), and recognition of higher learning. The Taskforce believes that further academic studies should be encouraged and supported in line with current Study and Research Assistance Scheme (SARAS) policies.

Another strategy would include partnering with Universities to encourage Graduate and Undergraduate placements within the Institute. This will assist in progressing research projects and future recruitment and retention strategies.

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**Recommendation 59:**

*It is recommended that the Chief Scientist of the Institute develop and implement by 31 July 2006:*

- (i) A competency based training program across all sciences in the Institute;*
- (ii) A policy for the professional development of Institute scientists incorporating guidelines for:*
  - Attendance at local, national and international conferences and other scientific forums;*
  - Undergraduate and graduate work placements within the Institute; and*
  - Support for further academic advancement, in line with current Study and Research Assistance Scheme (SARAS) policies.*
- (iii) A formal training and accreditation process for Institute scientists to give evidence in Court.*

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## **16.0 STRATEGIC INFRASTRUCTURE**

### **16.1 Current Infrastructure Issues**

Within the Office of the Executive Director, QHPSS there is a position of Manager, Infrastructure and Projects. This position is responsible for capital works on all QHPSS facilities including the Kessels Road campus. An Asset Strategic Plan has been developed for QHPSS and a number of projects have been identified for this campus.

In addition the Kessels Road campus is participating in the Knowledge-Based Research and Business (KBRB) / Boggo Road Re-development.

A number of issues have been raised in relation to the overall facility infrastructure such as power supply, air conditioning, security and maintenance arrangements.

Due to previous power failures the management of QHSS approached Energex to incorporate the campus onto the nearby QEII Hospital power grid. This was unsuccessful.

In late 2003/04, Uninterrupted Power Supply (UPS) was established on campus with some computers, scientific instrumentation and security systems linked to the system. Management advised in the event of a power failure, the UPS will only support some of the relevant systems for up to 10 minutes, after which the generator will be required to support the critical functions on the campus. The current generator does not have the capacity to cope with these demands and consequently, the entire system could overload and close down in the event of such emergency.

The main powerboard is also considered to be a high risk to the laboratories as a failure to this ageing equipment could result in extended power outages for the campus.

Another area of concern relates to the campus air conditioning facilities. The water chillers were second hand when they were installed and they are starting to fail. The increased number of staff on campus and the thermal load of additional laboratory equipment have put the cooling towers at capacity.

Security at the campus is a significant issue, given the nature of the work undertaken in some areas of QHSS. There is a need to strengthen physical access points to the campus. It has also been brought to the Taskforce's attention that the refrigeration facility for DNA laboratories has recently failed. This facility has been experiencing problems since the building was commissioned and this recent failure now requires urgent assessment and rectification. Arrangements have been made to house these exhibits in refrigerated shipping containers on a temporary basis pending resolution of this matter.

The Taskforce notes that there has been a series of quotations, condition assessments and reports provided to senior management for consideration. No evidence could be sourced that indicates professional engineering advice had been sought to provide a strategic framework to prioritise and sequence the current and future infrastructure needs of the campus. This is considered to be essential given the highly technical and costly nature of the infrastructure identified and the need to determine whether it is more cost effective to delay some aspects until the proposed relocation of DPI&F and CSIRO as part of KBRB. See Section 16.3 for further details regarding KBRB.

The preliminary estimates for the upgrade and replacement of critical infrastructure indicate that costs could be up to \$5M. In addition, maintenance expenditure as a proportion of the current value of buildings and infrastructure (\$90M) needs to be progressively increased from 1% to 2.5% in line with the expectations placed on other QH facilities. This will require a progressive increase in maintenance funding of \$1.15M. These one-off and recurrent costs will form the basis of a separate funding submission after engineering advice is obtained as outlined above.

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## 16.2 Current Accommodation Issues

The current accommodation plan for the campus is illustrated in Appendix 14.

Given the significant increase in demand for Forensic Sciences in recent years, particularly for Forensic Chemistry and Forensic Biology, the current laboratories and support areas are at maximum capacity. Recent increases in staff to assist with the management of the backlogs in both these areas have been the main catalysts in creating this situation.

Previous sections of this report highlight a range of strategies to further address the backlogs and introduce efficiencies within the laboratories. However, there are a range of matters including workplace health and safety issues that require urgent attention. In view of this, and the ongoing need to bring additional staff into the laboratories for Forensic Chemistry and Forensic Biology, it is apparent that the existing laboratory capacity of these two areas needs to be expanded.

Discussions with management and an analysis of a recent submission on infrastructure issues indicates that the key options currently being considered by QHSS management are very expensive extensions to buildings or the construction of new buildings which will take some years to commission. Other strategies currently under consideration by management include the provision of office/administrative space in Block 6 for approximately 57 staff from Forensic Biology. The Taskforce does not support this approach as it decommissions one third of the existing Forensic Biology laboratory space and does not maximise the use of the existing building and its infrastructure. Implementation of this proposal would create further short term and medium term problems for Forensic Biology through a lack of laboratory capacity and versatility to meet current and future customer demands. The Taskforce believes that other options need to be considered in the first instance to address the space requirements while remaining within the existing building footprints. The options proposed by the Taskforce are as follows:

### **Forensic Biology – DNA**

#### **Phase 1:**

- The Taskforce proposes that an existing conference room and other nearby reception areas on Level 1, Block 6 be utilised for the provision of office space for scientists to use for report writing. If developed creatively this will allow for up to 25 scientists to be accommodated outside the main DNA laboratory. This may require some limited use of “hot desking” as scientists have indicated they need a mixture of laboratory and office access to complete their analytical and report writing tasks. This strategy will provide an opportunity to free up approximately one third of the existing laboratory space for more scientific throughput. The estimated cost of this refurbishment is \$200,000.
- The freeing up of the laboratory space therefore provides other opportunities to consider the employment of more scientists as the need for DNA analysis grows. This also allows for other improvements to be made to the laboratory. This cost is not considered significant and is expected to be accommodated through the operating budget for minor works. The Taskforce believes that this issue needs to be incorporated in the engineering advice (refer Section 16.1).

#### **Phase 2:**

- If the demand for DNA testing and analysis continued to increase, the Taskforce has been informed by architects that additional laboratory and office space, up to 1,050 square metres, can be constructed around the plant of Level 2, Block 6.

#### **Phase 3:**

- Further growth for not only Forensic Biology but other Forensic Sciences could be catered for by extending Block 6 to the West. This option should only be considered after all issues in Phases 1 and 2 are implemented and further demands are comprehensively analysed.

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## Forensic Chemistry – Clandestine Drug Laboratories

### Phase 1:

- Administrative and student clerical areas for EnTox need to be relocated from the current location (formally a science laboratory, Level 2, Block 2) to a demountable building on the campus. The estimated cost is \$150,000.
- QHPSS Information Technology staff currently located next to the administrative and student clerical areas for EnTox need to be re-located to another location within the existing buildings (space to be negotiated);
- Vacated areas from the above need to be refurbished as a laboratory for clan lab scientists and the Analytical Services Unit scientists from FSB, QPS. This laboratory could also be used for research projects and overflow laboratory space when not devoted to clan labs. The estimated cost of refurbishment is \$1,837,000;
- To address workplace health and safety issues with the sampling of clan labs (refer Section 8.6) the Taskforce proposes that a demountable sampling laboratory be located adjacent to the KRPA enabling the clan lab scientists to sample the seized clan labs outside of the main Forensic Chemistry laboratories. The estimated cost and fit out of this is \$200,000; and
- These solutions will provide sufficient bench space for the scientists who would be engaged to work on the clan lab backlog.

### Phase 2:

- Provision of building extensions to Block 2 (currently housing Forensic Chemistry) should only be given consideration after all issues in Phase 1 are implemented and future demands are comprehensively analysed.

### Other Accommodation Needs

- Given that the joint roles of Director, QHSS and Director, EnTox have recently been split by the Executive Director, QHPSS it is opportune to consider the location of the accommodation of the Director, EnTox. The Taskforce believes that the office for the Director of EnTox should be located on Level 2 Block 3 in close proximity to the EnTox scientists/students. The estimated cost is \$40,000.

## 16.3 Future Infrastructure Issues

Cabinet has decided that the Knowledge-Based Research and Business (KBRB) / Boggo Road Redevelopment (including Boggo Road and Cooper Plains Science precincts) would proceed. The proposal creates an opportunity to have a critical mass in research skills, facilities and infrastructure by:

- Providing greater collaboration and coordination between the State, Commonwealth and University scientists and researchers;
- Providing a focus for post-graduate research mentored by the best scientific talent; and
- Establishing the “Institute” as a centre of world class research and development facilities that enable efficient use of resources and infrastructure.

The activities to be relocated to the Kessels Road campus include:

- Food science research activities of DPI&F and CSIRO;
- DPI&F animal pathology laboratory; and
- CSIRO’s Entomology and associated insectaries, shade house and glass house development.

Current estimates confirm that gross floor requirements of DPI&F will be 7,888 square metres, and CSIRO will require 3,256 square metres. It is anticipated that the DPI&F capital costs will be \$43.3M and CSIRO will be \$17.3M, bringing it to a total of \$60.6M. However the Department of Public Works is currently investigating the infrastructure plan and costs.

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QH supports the relocation of these activities to the Kessels Road campus subject to there being no negative impact on QHSS and no additional funding requirements from QH. It is essential that the KBRB project meets all costs associated with road and site access, water, electricity and other issues associated with the Kessels Road campus. QH also expects to be reimbursed with market rent/lease from the new occupants at the Kessels Road campus.

The Department of State Development and Innovation (DSDI) is preparing a Whole-of-Government budget bid seeking funding for new facilities in the KBRB project. QH's component of the Whole-of-Government budget bid seeks funding for infrastructure to support the additional facilities to be collocated at Kessels Road as a part of an integrated campus. This new infrastructure is critical to the effective operation of current and new facilities. The funding will be used to upgrade existing services such as chilled water and power supply to support the existing campus facilities and also the proposed DPI&F and CSIRO laboratories.

**Recommendation 60:**

*It is recommended that the Chief Executive Officer of the Institute:*

- (i) *Commission professional engineering advice to provide a strategic framework to prioritise and sequence the current and future infrastructure needs of the campus by **31 January 2006**;*
  - (ii) *Cease the existing management proposals to house up to 57 scientists in office/administrative space on Level 1, Block 6 **immediately**;*
  - (iii) *Refurbish the conference room and other nearby reception areas of Level 1, Block 6 as office space for up to 25 scientists from Forensic Biology by **31 January 2006**;*
  - (xii) *Move Forensic Biology scientists from the main DNA laboratory on Level 1, Block 6 to the administration area created above and re-commission the freed up DNA laboratory space for DNA processing as required into the future by **31 January 2006**;*
  - (xiii) *Re-locate administrative and student areas for EnTox from Level 2, Block 2 to temporary accommodation such as a demountable in the grounds of the campus to free up critical laboratory space by **31 January 2006** ;*
  - (xiv) *Move the Information Technology Support Unit on Level 2, Block 2 to an alternative location on the Kessels Road campus by **31 January 2006***
  - (xv) *Refurbish the half floor vacated by the movement of the administrative and student clerical areas of EnTox and the Information Technology Support Unit as a laboratory for additional clandestine drug laboratory work and the Analytical Services Unit scientists, Queensland Police Services by **31 January 2006**;*
  - (xvi) *Establish a demountable laboratory adjacent to the Kessels Road Police Annex to address Workplace Health & Safety issues with the sampling of Clandestine Drug Laboratories by **31 January 2006**; and*
  - (xvii) *Construct an office for the Director of EnTox on Level 2, Block 3 by **31 January 2006**.*
- (Estimated non-recurrent cost: \$2,627,000)*

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## 17.0 ALTERNATIVE MODELS

### 17.1 Background

The Taskforce analysed a number of methods of delivery of forensic sciences using various techniques. As part of the analysis the Taskforce visited a number of interstate jurisdictions, conducted internet searches, and spoke to senior operators from ESR in New Zealand. The Taskforce discovered there is no one set method of service delivery.

### 17.2 Forensic and Scientific Service Delivery

Specific models have evolved according to resources, local requirements, efficiency, economy and degree of separation desired between investigators and scientific staff. Across the jurisdictions, there are varying staffing models depending on the governance arrangements in place.

Within Australia, each State and Territory has its own method of providing forensic sciences services. For example:

- *Queensland and New South Wales* have a mixed model governed by both Police and Health. The benefits are division of effort and specialisation, with placement of specialist staff in organisations able to support professional needs. However there is a need to have well-developed systems of communication and means to co-ordinate activities:
  - *Queensland* has forensic science services provided by two large agencies, QH and QPS, both with well defined areas of responsibilities. The laboratories in each agency have NATA accreditation; and
  - *New South Wales* has a Forensic Science Division within the NSW Police, some forensic science services are provided by Division of Analytical Laboratories (DAL), part of the NSW Department of Health and some are purchased from the National Measurement Institute (NMI).
- *South Australia* has Forensic Sciences South Australia (FSSA), part of the South Australian Department of Administrative and Information Services. FSSA provides forensic science and pathology services to the criminal justice system for the benefit of the South Australian community. Its primary clients are the South Australian Police and the Coroner, with the DPP being a key stakeholder as well. The relationship is based on partnership principles rather than purchaser/provider arrangements.
- Both *Victoria* and the *Australian Federal Police* have a Police governed model. This model allows for close liaison between scientists and investigators.
  - *Victoria* has the Victorian Institute of Forensic Medicine attached to the Coroner and the Forensic Services Department attached to the Police;
  - *Australian Federal Police (AFP)* has the Forensic and Technical Services area as part of its operation. Services are also purchased from NMI. AFP provides forensic science services to the ACT Police via a Service Level Agreement (SLA); and
- *Australian Capital Territory* uses the ACT Government Analytical Laboratory as well as purchasing services from AFP.

As indicated above, some jurisdictions have varying types of agreements in place. However there is no true fee for service model in place as cost and pricing models have not been fully developed.

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No individual model of service delivery provides the perfect answer. However all jurisdictions talked about the value of having a triage process implemented to enable more efficient practices and processes. Also each jurisdiction acknowledged the need to work with the University sector. Some have formal professional relationships to access highly technical equipment and conduct research to the benefit of both parties.

### **17.3 International Models of Service Delivery**

ESR is a New Zealand Government owned organisation operating as a Crown Institute in a commercial environment with an independent board of directors. ESR provides scientific services in environmental health as well as forensic science. It provides services in food safety, water quality, population and environmental health and communicable disease through its Environmental Health section. The focus is on how human and naturally occurring influences in the environment impact on the health and well-being of people.

ESR Forensic Science service covers all aspects of crime scene examination, forensic biology, physical evidence, illicit drugs, and toxicology, including blood and breath alcohol analysis. The ESR Forensic Scientists are available 24 hours a day for advice and attendance at crime scenes. ESR provides forensic science services to New Zealand Police under a 3 year contract.

The main benefit of this model allows for operations to be independent and for clearly defined management. However funding may be uncertain, scientists may distance themselves from investigation, becoming more committed to the science rather than the outcomes, and scientists and investigators may not develop common approaches to forensic sciences.

In England and Wales, FSS provides forensic science services to the criminal justice system. FSS is recognised as an internationally renowned centre of excellence for casework, research, training and consultancy. It operates under a Management Board model. The major benefits of this model are the perceived independence and the ability to become a centre of excellence in forensic sciences. However the model does not have the financial security that being part of a large government department can provide.

The United States Federal Bureau of Investigation (FBI) has one of the largest and most comprehensive forensic laboratories in the world. All forensic services, including expert witness testimonies are given free of charge with some conditions applying. The FBI laboratories accept evidence related to all crimes under investigation by FBI Field Officers. It only analyses evidence related to violent crime investigations by State and local law enforcement agencies. It does not normally analyse evidence in cases involving property crime unless there is personal injury or intent to cause personal injury.

In Canada, the Royal Canadian Mounted Police (RCMP) provides forensic science services. There are six laboratories spread across Canada. The RCMP has a Case Receipt Unit which has case coordinators who are the main contact point between the investigator and the laboratory. They use a triage process. They also have an agreement with their customers that only two samples for each break and enter case will be lodged. They negotiate the minimum sample numbers for all other cases based on the case scenario.

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## 18.0 FUTURE TRENDS AND TECHNOLOGIES

There has been an ever increasing demand placed on forensic science laboratories over the last few years. Proactive policing through technology has now placed laboratories under considerable pressure to increase throughput, decrease backlogs and to be cost competitive. The emergence of DNA analysis as an important investigative tool and one which the broader criminal justice system now relies upon has further added to the increase in demand and expectation. Another factor is the increased public awareness of the value of forensic sciences to criminal investigations particularly in relation to DNA.

Given the significant impact that DNA technology has had on forensic biology, NIFS commissioned Chris Pearman (Forensic Sciences, SA) & John Scheffer (Victorian Police Forensic Services Department) to conduct a benchmarking and information round of visits to the United Kingdom, Canada and the United States of America. A report, *Forensic Biology Automation & Future Developments – October 23 to November 15 2004*, outlining their findings was presented to NIFS for consideration by the forensic science community.

This report identifies experiences and future trends among some of the leading international forensic laboratories in relation to DNA testing. It also presents a proposed model for laboratories to consider.

The report highlights the following as critical future trends:

- Integrated information management systems;
- Automation of laboratory processes;
- Triage protocols; and
- Use of a unique identifier or barcode.

An Integrated Information Management System is essential to ensure consistency of data between the Crime Scene Examiners, the Laboratory Scientist undertaking analyses and the Investigating Officer. The report notes that Queensland has made significant progress in this area.

Automation of forensic sciences laboratory processes is regarded as an essential part of the future. The report confirms that properly planned and validated automated processes provide laboratories with three advantages:

- Higher throughput;
- Increased efficiencies; and
- Reduced error rates.

Both the FSS and the RCMP have fully automated the analysis of crime scenes samples. QHSS has a project team progressing automation.

The report also highlighted the need to have the following prerequisites in place prior to automation:

- Process re-engineering to identify:
  - What is to be achieved through automation;
  - How automated systems will be used to achieve these outcomes; and
  - Impact on staff;
- Agreed triage protocol to minimise unnecessary testing of items;
- Creation of a unique identifier (barcode) at the crime scene which is carried throughout the entire process; and
- An integrated information management system linking the crime scene investigators and laboratories.

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Queensland is well placed for automation as it has implemented the use of a unique identifier (barcode), has an integrated management system, and is analysing the processes used in the forensic biology and forensic chemistry laboratories. However, further work needs to be done within the criminal justice system to develop an appropriate triage process.

The NIFS report highlights a proposed model which would include the above points as well as the following:

- Sample tracking integrated with automation instruments to maximise throughput and Quality Assurance processes;
- Audit trails to monitor activities;
- Management of client bases;
- Management of staff development; and
- Information technology staff who knew the business of the laboratory.

The report further highlights some best practice from FSS which is at the forefront of forensic science service delivery. Key learnings from FSS are:

- Continuously requesting additional staff as a solution for growing demand is not sustainable;
- Alternative options for service delivery need to be developed to streamline operations while utilising current staff in the most efficient and effective manner;
- Move to an automated system is essential but lead time to set up robotics can take up to 2 years. Automation provides:
  - High success rates;
  - Decrease in contamination and sample handling errors;
  - Increase in contamination detection;
  - Increase in throughput;
  - Decrease in turnaround time;
  - Insignificant operator variation; and
  - Decreased staff numbers resulting in reduced costs.
- Timeliness, quality and effective costings are drivers; and
- Staffing numbers were reduced from 450 to 110 staff in the DNA database team working a seven day rolling week. The team performs 35,000 – 40,000 criminal justice samples per month using an automated system. In comparison, the London Laboratory performs 8,000 – 9,000 per month using a manual system.

The Taskforce notes that QHSS has made progress towards the implementation of some elements of best practice strategies as highlighted above.

***Recommendation 61:***

*It is recommended that the Chief Executive Officer of the Institute incorporates best practice strategies into the strategic planning processes for the next 3 – 5 years by **30 April 2006**.*

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## **19.0 IMPLEMENTATION**

### **19.1 Governance Arrangements**

Given the Whole-of-Government nature of the Ministerial Taskforce, it is essential that key agencies continue to be involved in the implementation of the Taskforce's recommendations.

However, as with the Taskforce itself, the implementation process will be led by Queensland Health.

As outlined in Section 4, the implementation of the Taskforce's recommendations will be overseen by the Council for the Institute which will comprise the Directors-General of Queensland Health (Chair), the Department of the Premier and Cabinet and the Department of Justice and Attorney-General, the Commissioner for the Queensland Police Service, the Under-Treasurer, Queensland Treasury and the Chief Executive Officer of the Institute.

The Queensland Police Service and the Department of Justice and Attorney-General will each appoint a senior officer to lead the implementation of the recommendations within their agency and provide reports to the Director of the Implementation Team.

Each agency will be accountable and responsible for the implementation of recommendations pertaining to their agency including associated resourcing.

### **19.2 Implementation Team**

An Implementation Team will be established at the Kessels Road campus immediately after the reforms are announced. The Implementation Team will:

- Comprise officers with change management, human resource, financial and other relevant skills;
- Be in place for up to 12 months; and
- Be funded by Queensland Health.

The Director, Implementation Team will report to the Chief Executive Officer of the Institute. The role of the Implementation Team will be to:

- Support the CEO of the Institute in implementing recommendations for which the CEO of the Institute is responsible;
- Proactively monitor the implementation of all recommendations;
- Co-ordinate all reporting on the Implementation Plan; and
- Communicate progress in the implementation of the Taskforce's recommendations to Institute staff and key stakeholders

### **19.3 Reporting Arrangements**

The Implementation Team will report against the Implementation Plan (see Appendix 15) on a monthly basis to the Chief Executive Officer of the Institute and on a quarterly basis to Council members. Council members will brief their respective Ministers on key issues as needed.

In addition, the Minister for Health will provide an Information Paper to Cabinet on the implementation of the Taskforce's recommendations 6 months and 12 months after the establishment of the Implementation Team.

### **19.4 Communication**

Immediately after the reforms are announced, forums will be convened with Queensland Health Scientific Services staff to inform them of the reforms to Queensland Health Scientific Services.

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A meeting will be arranged with union representatives, and key stakeholder briefings will be held.

A media release will also be distributed at this time.

Regular newsletters and briefings of Institute staff will occur throughout the implementation process.

Queensland Health's Public Affairs Unit will be involved in the planning and, as necessary, the implementation of the communication strategy.

The Implementation Team will liaise with the Commissioner of the Queensland Police Service and the Director-General of the Department of Justice and Attorney-General in relation to a communications strategy within their agencies to ensure there is consistency across government.

## **19.5 Transition Issues**

The new senior management team of the Institute will progressively be put in place immediately after the Taskforce's recommendations are announced.

This will be led by the Chief Executive Officer of the Institute, who will be appointed for a period of 12 months. Given the specific issues identified by the Taskforce with Forensic Biology, an Acting Manager of Forensic Biology will also commence duties at this time. This position will also be advertised immediately.

The Chief Pathologist will continue in his position, but take on management of all mortuary, histology and coronial counselling, at this time. The four Laboratory Manager positions will be filled on an acting basis. The new positions of Chief Scientist and Director, Business Services need not commence immediately, but work will commence on finalising the duties of these positions, with a view to advertising them within 3 months.

### **Recommendation 62:**

*It is recommended that the Director-General of Queensland Health establish an Implementation Team to be based at the Kessels Road campus for up to 12 months **immediately** to:*

- (i) Support the Chief Executive Officer of the Institute in implementing recommendations for which the Chief Executive Officer of the Institute is responsible;*
- (ii) Proactively monitor the implementation of all recommendations;*
- (iii) Co-ordinate all reporting on the Implementation Plan; and*
- (iv) Communicate progress in the implementation of the Taskforce's recommendations to Institute staff and key stakeholders.*

### **Recommendation 63:**

*It is recommended that the Commissioner, Queensland Police Service **immediately**:*

- (i) Appoint a senior officer to lead the implementation of the recommendations within the Queensland Police Service and provide reports to the Director of the Implementation Team; and*
- (ii) Provide sufficient resourcing for the process of implementing the recommendations pertaining to the Queensland Police Service.*

### **Recommendation 64:**

*It is recommended that the Director-General, Justice and Attorney-General **immediately**:*

- (i) Appoint a senior officer to lead the implementation of the recommendations within Department of Justice and Attorney-General and provide reports to the Director of the Implementation Team; and*
- (ii) Provide sufficient resourcing for the process of implementing the recommendations pertaining to the Department of Justice and Attorney-General.*

## 19.6 Establishing the Institute “Brand-Name”

Consistent with the reforms contained in this report and the subsequent change management agenda to establish the Queensland Institute of Forensic and Scientific Services, it is viewed that the naming of the Kessels Road campus will be an important element of moving forward. Although symbolic in some respects, the new name will provide a tangible “line in the sand” for staff and external clients of the campus.

As previously indicated, the full title of the Kessels Road campus would be known as the Queensland Institute of Forensic and Scientific Services, with the short title being the “Institute”. The John Tonge Centre is a name that is only associated with Block 6 on the Kessels Road campus. However, it is inaccurately used by staff and clients when referring to the entire campus. The Taskforce believes that the John Tonge Centre title should remain for Block 6 and over time, as deemed necessary and appropriate, other buildings could also be named consistent with the Queensland Health asset naming policy. Each of the buildings (independent of their name) would be a part of the Institute which encompasses all buildings that are currently on the campus. This naming convention would need to be revisited once the KBRB buildings are established on campus and the review referred to in Section 4.3.2 is completed.

### **Recommendation 65:**

*It is recommended that the Chief Executive Officer of the Institute:*

- (i) *Develop and implement a communication strategy to promote the full title of the Kessels Road campus to be known as the “Queensland Institute of Forensic and Scientific Services” with a short title of the “Institute” as deemed necessary by 31 January 2006; and*
- (ii) *Re-visit the naming convention for the Kessels Road campus once Knowledge-Based Research and Business buildings are established by 31 December 2007.*

## 19.7 Funding Implications

Support for the allocation of additional funds to the proposed Institute is critical to the rollout of these recommendations. The funding implications resulting from this review require an additional \$2.4M recurrent and \$3.9M non-recurrent which is made up as follows:

Rec	Estimated Costs		Comments
	Recurrent	Non- Recurrent	
4	194,000		Competency-based progression strategy
4	373,000		Proposed management structure
16	1,000,000		Additional staff for ongoing work in Forensic Biology
16		1,000,000	Additional staff and consumables for outsourcing of DNA samples
27	205,000		Additional 2 scientists – clan lab site call-outs
30	133,000		Additional 2 staff – clan lab analysis
37		161,000	Additional equipment – CBR emergency triage facility
42		100,000	Review of AusLab
42		50,000	Enhancements to QWIC
46	60,000		DPP Court liaison – continuation of funding is dependent on the outcome of a 12 month trial
54	(80,000)		Savings from Food Services

55	(25,000)		Savings from motor vehicles
57	500,000		Governance arrangements for research
60		200,000	Professional engineering advice
60		200,000	Refurbishment of Block 6, Level 1 admin area
60		150,000	Provision of demountable office accommodation for EnTox
60		1,837,000	Refurbishment of Block 2, Level 2 to Chemistry lab
60		200,000	Provision of demountable for clan lab sampling
60		40,000	Refurbishment of office accommodation for Director, EnTox
	<b>\$2,360,000</b>	<b>\$3,938,000</b>	

Potential additional costs are itemised below:

<b>Rec</b>	<b>Recurrent</b>	<b>Non- Recurrent</b>	<b>Comments</b>
16	1,000,000		Additional staff and consumables for Forensic Biology for ongoing work, subject to outcome of Business Enhancement Project
16		2,000,000	Additional staff and consumables for outsourcing of DNA samples, subject to prioritisation of cases and data cleansing
60	1,150,000	5,000,000	Infrastructure and maintenance, subject to professional engineering assessment
	<b>\$2,150,000</b>	<b>\$7,000,000</b>	

The cost of the Implementation Team to be based at the Institute, estimated at \$400,000 will be borne by Queensland Health.

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## 20.0 GLOSSARY OF TERMS

<b>Active Clan Lab</b>	A Clandestine Drug Laboratory that is seized by police while in operation
<b>AFP</b>	Australian Federal Police
<b>AORU</b>	Audit and Operational Review Unit, Queensland Health
<b>AusLab</b>	A State-wide Queensland Health laboratory information system
<b>Boxed Lab</b>	An inactive clandestine drug laboratory, which an offender may keep in a box to move its contents to different locations to avoid detection
<b>CBRE</b>	Chemical, Biological or Radiological emergencies
<b>CEO</b>	Chief Executive Officer of the proposed Institute
<b>Charge Prep</b>	A Queensland Police Service information system that summarises briefs of evidence
<b>Clan Lab</b>	Clandestine Drug Laboratory – a collection of apparatus and chemicals used to make illicit drugs
<b>CMC</b>	Crime and Misconduct Commission
<b>ComFit</b>	Computer Facial Identification System – a system used by the Queensland Police Service to develop computer generated facial images of suspects
<b>CrimTrac</b>	An Australian Government Agency that provides systems to facilitate the sharing of information between police jurisdictions including DNA profiles
<b>CRISP</b>	A Queensland Police Service information system for crime reporting
<b>DAB</b>	DNA Advisory Board (United States), which has developed internationally-recognised standards for forensic biology
<b>DAL</b>	Division of Analytical Laboratories, NSW
<b>DJAG</b>	Department of Justice and Attorney-General
<b>DMA</b>	<i>Drugs Misuse Act 1986</i>
<b>DNA</b>	Deoxyribonucleic acid – a nucleic acid that carries the cell's genetic information
<b>DPC</b>	Department of the Premier and Cabinet
<b>DPI&amp;F</b>	Department of Primary Industries and Fisheries
<b>DPP</b>	Director of Public Prosecutions
<b>DSDI</b>	Department of State Development and Innovation
<b>DSS</b>	Decision Support System – a Queensland Health financial management system that interfaces with FAMMIS
<b>DVI</b>	Disaster Victim Identification

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<b>EDRMS</b>	Electronic Document and Records Management System
<b>EnTox</b>	National Research Centre for Environmental Toxicology, based at the Kessels Road campus
<b>ESR</b>	Institute of Environmental Sciences and Research (New Zealand)
<b>Exhibit Register</b>	Also known as the Property Register, are registers of exhibits/property maintained by QPS
<b>FAMMIS</b>	The Queensland Health financial and assets management system
<b>Forensic Biology</b>	A branch of forensic science that undertakes DNA and other biological analysis for the criminal justice system
<b>Forensic Officer</b>	Queensland Police officers who are authorised to perform crime scene, fingerprint and other forensic examinations
<b>Forensic Pathology</b>	A medical specialty specialising in autopsy (post-mortem) pathology, primarily to determine cause of death
<b>Forensic Register</b>	A Queensland Police Service case management information system that records forensic activities including evidence collected
<b>FSB</b>	Forensic Services Branch, Queensland Police Service
<b>FSLU</b>	Forensic Sciences Liaison Unit
<b>FSS</b>	Forensic Science Services (United Kingdom)
<b>FSSA</b>	Forensic Sciences, South Australia
<b>GMO</b>	Government Medical Officer - medical practitioners (usually general practitioners) engaged by the Queensland Government to provide forensic and other medical services
<b>Histology</b>	The science that studies the microscopic structure of tissues (e.g. from autopsies)
<b>IDSCFS</b>	Inter-Departmental Standing Committee on Forensic Sciences
<b>IJIS</b>	Integrated Justice Information System – a Whole-of-Government initiative to deliver efficiencies in the criminal justice system by improving inter-agency information integration and sharing
<b>ILIT</b>	Illicit Laboratory Investigation Team - the Queensland Police Service team responsible for attending clandestine drug laboratories and examining, recording and dismantling the laboratory
<b>Inorganic Chemistry</b>	The chemistry of compounds not containing carbon, e.g. minerals
<b>Institute</b>	The proposed Queensland Institute of Forensic and Scientific Services
<b>John Tonge Centre</b>	A building at the Kessels Road campus, in which Forensic Pathology and Forensic Biology are located
<b>KBRB project</b>	Knowledge-Based Research and Business / Boggo Road Redevelopment – the project involving the rationalisation of science precincts in the Queensland Government
<b>Kessels Road campus</b>	The location of Queensland Health Scientific Services and other tenants at 39 Kessels Road, Coopers Plains
<b>KRPA</b>	Kessels Road Police Annex - a Queensland Police Service facility at the Kessels Road campus for the receipt and storage of clandestine drug laboratories

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<b>Major Crime</b>	Crimes against the person e.g. assault, murder
<b>MDMA</b>	An illicit drug, commonly known as ‘ecstasy’
<b>Methylamphetamine</b>	An illicit drug, commonly known as ‘speed’
<b>MOU</b>	Memorandum of Understanding
<b>NATA</b>	National Association of Testing Authorities
<b>NCIDD</b>	National Criminal Investigation DNA Database - the national DNA database
<b>NDPSC</b>	National Drugs and Poisons Scheduling Committee
<b>NIFS</b>	National Institute of Forensic Science - a national body established by Police Ministers to promote the development of forensic science
<b>NMI</b>	National Measurement Institute, New South Wales
<b>OQI</b>	Opportunity for Quality Improvement - a QHPSS quality system to identify system improvements
<b>Organic Chemistry</b>	The chemistry of compounds containing carbon, e.g. biological substances
<b>Person Sample</b>	A DNA sample taken from an arrested person, prisoner or consenting person under the authority of the <i>Police Powers and Responsibilities Act 2000</i>
<b>Polaris</b>	A Queensland Police Service information system that records person (offender) details including records of the collection of DNA person samples
<b>Precursor</b>	A chemical substance from which another product is formed (e.g. pseudoephedrine is used as a precursor for methylamphetamine production)
<b>Presumptive Test</b>	A preliminary test to ascertain the presence of a biological substance (e.g. blood)
<b>Prosecution Index</b>	A Queensland Police Service information system to update investigating officers of progress on court cases
<b>Pseudoephedrine</b>	A pharmaceutical compound found in products such as ‘Sudafed’, used as a precursor for methylamphetamine production
<b>QH</b>	Queensland Health
<b>QHPSS</b>	Queensland Health Pathology and Scientific Services
<b>QHSS</b>	Queensland Health Scientific Services
<b>QPS</b>	Queensland Police Service
<b>QWIC</b>	Queensland-Wide Interlinked Courts System – a Department of Justice and Attorney-General information system for recording court matters
<b>RCMP</b>	Royal Canadian Mounted Police Service
<b>Results Management</b>	The processes involved after DNA profiles have been developed, including loading on to the DNA Database, checking links, value-adding with other forensic information and advising investigating officers
<b>S2 drug</b>	A pharmaceutical product that can only be purchased at a pharmacy

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<b>S3 drug</b>	A pharmaceutical product that can only be purchased at a pharmacy and provided by a pharmacist
<b>S4 drug</b>	A pharmaceutical product that can only be purchased on prescription
<b>SED-RM</b>	Senior Executive Director, Resource Management, Queensland Health
<b>SLA</b>	Service Level Agreement
<b>SOCO's</b>	Scenes of Crime Officers – Queensland Police Forensic Officers authorised to investigate crime scenes and record and collect forensic evidence
<b>SOP</b>	Standard Operating Procedure
<b>SSP</b>	Shared Service Provider
<b>SSP – C&amp;S</b>	Shared Service Provider – Corporate and Statewide, Queensland Health
<b>UPS</b>	Uninterrupted power supply
<b>Volume Crime</b>	Property-related crime, e.g. 'break-and-enters', motor vehicle theft

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## **21.0 APPENDICES**

- 1 Approved Terms of Reference – Overarching Proposal
- 2 Approved Terms of Reference – Review Proposal No 1
- 3 Approved Terms of Reference – Review Proposal No 2
- 4 Approved Terms of Reference – Review Proposal No 3
- 5 Approved Terms of Reference – Review Proposal No 4
- 6 Correspondence Inviting Submissions
- 7 Existing Organisational Structure - QHSS
- 8 Proposed Organisational Structure - QIFSS
- 9 Workload Activity and Staffing
- 10 Forensic Biology Workflow
- 11 Legislation From Other Jurisdictions
- 12 Clandestine Drug Laboratory Projections
- 13 Information Systems
- 14 Campus Accommodation Plan
- 15 Implementation Plan

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## 22.0 ADDENDUM

### SUPPLEMENTARY ISSUES

The additional issues and recommendations outlined below have been approved by Cabinet for public release.

#### 1.0 Case Disposal of Coronial Anatomical Specimens

With the introduction of the *Coroners Act 2003*, procedures for disposing of tissue retained at autopsy were introduced and are generally working well. However, a ruling by the Chief Magistrate in 1996 created delays in obtaining coronial approval for the disposal of tissue specimens removed at autopsy. As a result, since 1996 a backlog has developed in the disposal of the retained samples taken during autopsies. In 2001, autopsy practice changed so that the amount of tissue taken was greatly reduced.

As a consequence, QHSS is currently in possession of a large quantity of retained tissue which has been removed from bodies during post mortem examinations performed at the John Tonge Centre. Figures supplied by Forensic Pathology indicate that in late May 2005 there were 4,732 specimens of such tissue, some 900 of which are whole organs. This figure does not include specimens held by Forensic Toxicology (eg. blood, urine) or Forensic Biology (eg. blood).

The Taskforce has been advised that QHSS has recently put a process in place, with the State Coroner, to deal with the backlog of retained tissue. The Taskforce has been advised that the time frame for the project should see the production of a list of specimens for disposal by end-September 2005, although this time-frame cannot be confirmed until an assessment of all cases is made. The Taskforce notes the progress to date in dealing with the backlog of retained tissue and considers the backlog needs to be assessed and presented to the State Coroner for consideration by no later than 31 January 2006.

#### 2.0 Storage of Coronial Anatomical Specimens

The Taskforce also notes that some of the specimens (particularly the whole organs) are currently stored in a refrigerated shipping container located in a car park adjacent to Forensic Pathology. Although the container is screened and is relatively unobtrusively situated in close proximity to the building, the Taskforce considers the long-term storage of whole organs in such a facility could be criticised as inappropriate and insensitive to the feelings of bereaved families, and that a more suitable storage facility should be established for ongoing needs.

##### ***Recommendation A1:***

*It is recommended that the Chief Executive Officer of the Institute:*

- (i) Ensures the coronial anatomical specimens backlog is assessed and recommendations presented to the State Coroner for consideration by 31 January 2006; and*
- (ii) Ensures appropriate storage facilities are put in place for coronial anatomical specimens following the removal of the backlog by 31 January 2006.*

#### 3.0 Skeletal Remains of Recent Origin

The Taskforce has been advised that QHSS is in possession of approximately 140 cases of unidentified skeletal remains of recent origin (since the 1970's). In conjunction with the Missing Persons Unit of QPS, initial efforts were made to identify these remains using DNA technology. The Taskforce has also been advised that despite DNA samples having been obtained from family members of missing persons to see if a match can be obtained, the work necessary to provide a match has not been performed. The Taskforce considers this an unsatisfactory state of affairs given the distress this must cause to relatives of the missing persons. Efforts to identify the remains should be performed as a priority.

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**Recommendation A2:**

*It is recommended that the Chief Executive Officer of the Institute progresses the DNA examination of the recent skeletal remains by 30 April 2006.*

**4.0 Chemical, Biological or Radiological Emergencies**

QHSS is a critical part of the Government's preparedness for a chemical, biological or radiological (CBR) emergency. The Kessels Road campus has been identified by the Australian Government as critical infrastructure in relation to CBR preparedness.

QHSS scientists have expressed concern to the Taskforce that:

- QHSS has not been adequately considered in whole-of-government considerations – with the implicit expectation that they will be able to handle the scientific analysis in any CBR emergency situation;
- The detail of QHSS's expected role in a CBR emergency has not been clearly articulated; and
- In conjunction with the above, QHSS is not properly resourced to deal with a range of CBR emergencies.

QHSS scientists have itemised a prioritised list of equipment, staffing, training and structural changes to enhance QHSS's CBR emergency response capability, totalling \$7M. This amount includes the replacement of equipment which is fundamental to the core business of QHSS as well as special items that are unique to CBR emergencies. In view of the unclear role of QHSS with regards to CBR emergencies, funding for these items has not been forthcoming.

The Taskforce proposes that the Chief Executive Officer of the Institute in consultation with the Deputy Director-General (Governance), Department of the Premier and Cabinet, clarify the role of QHSS in responding to a CBR emergency. As a result of this, the Chief Executive Officer would need to identify the policy, procedure, resource and training implications to support this role. A further funding submission will be provided for consideration by the Director-General, Queensland Health once this role has been clarified and resourcing needs are known.

**Recommendation A3:**

*It is recommended that the Chief Executive Officer of the Institute in consultation with the Deputy Director-General (Governance) Department of the Premier and Cabinet clearly articulate the role of Queensland Health Scientific Services in responding to a chemical, biological or radiological emergency by 31 January 2006.*

**Recommendation A4:**

*It is recommended that the Chief Executive Officer of the Institute identifies the policy, procedure, resource and training implications to support the chemical, biological or radiological emergency role by 31 January 2006.*

**5.0 Workplace, Health and Safety**

Two particular situations brought to the attention of the Taskforce bring into question the priority and attention given by the current Executive Management Group to workplace health and safety issues.

Firstly, the ongoing maintenance of Biological Safety Cabinets and, in particular, the filters in the PC4 (Physical Containment, Level 4) laboratory were found to be deficient. This issue was a serious deficiency in maintenance, exposing staff and the community to significant risk. This matter did cause a closure of the laboratory. While this matter has now been resolved it took several months to be addressed. Based on the severity of this issue such delays are unacceptable.

Secondly, there have been ongoing concerns within Forensic Chemistry associated with the analysis and storage of unknown hazardous materials from clan labs. This matter has been addressed elsewhere in the Taskforce's Report.

In addition, the Taskforce has noted a disturbing odour emanating from the mortuary facility at certain times. Air flows circulating through the building result in odours causing very unpleasant

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working conditions for staff. The Taskforce proposes that management investigate this matter with a view to minimising staff's exposure.

**Recommendation A5:**

*It is recommended that the Chief Executive Officer of the Institute investigates and resolves airflow issues raised in relation to Block 6, Kessels Road campus by 31 January 2006.*

## **6.0 Infrastructure**

Security at the Kessels Road campus is a significant issue given the high risk work and research that is conducted within some of the laboratories. The Taskforce believes that individual access to specific areas needs to be reviewed to ensure only staff with justifiable reasons can enter each work area.

In recent years there have been two security audits conducted on campus by:

- The State Government Protective Security Services in 1999; and
- Amtac Professional Services 2003.

The initial review concentrated on physical security issues such as lighting, video cameras, fences and gates. The subsequent review, as well as addressing many of the same issues, also addressed the sufficiency and integrity of existing security keying systems. The software supporting the security system is no longer supported and management advise it is at high risk of failure.

Circulation of the second report was tightly controlled and the Taskforce was advised that the manager of the security function on campus has never seen the report. While many of the recommendations not requiring significant expenditure have been actioned, a large number of recommendations are outstanding. There has been no action at the Executive Management Committee level to progress the outstanding recommendations.

The second review also identified information classification and information management as issues of concern, given both the nature of the work conducted and the personal particulars of individuals and organisations with which the campus conducts business. There has been no action on this issue. This matter has also been identified in the Risk Register.

The above matters relating to security and other infrastructure needs at the campus will be addressed in the proposed commissioning of a professional engineer to prioritise and sequence the future needs of the campus.

Section 10 of the Taskforce's Report addresses the quality issues at QHSS, particularly in Forensic Biology. In May 2005, the National Association of Testing Authorities (NATA) conducted an audit which concluded that the Forensic Biology laboratory, in general, has demonstrated an adequate level of compliance with NATA requirements.

In March 2005, a further audit of the QHSS Forensic Biology Laboratory was conducted by the Institute of Environmental Sciences and Research (New Zealand). Although the audit again was generally favourable, it raised the issue of possible cross-contamination of DNA samples as a consequence of the open plan nature of the laboratory and some deficiencies in laboratory procedures. This clearly has ramifications for the criminal justice system and needs to be addressed as a priority.

**Recommendation A6:**

*It is recommended that the Chief Executive Officer of the Institute:*

- (i) Reviews individual access to specific areas of the campus to ensure only staff with justifiable reasons can enter each work area by 31 October 2005; and*
- (ii) Reviews information classification and information management issues to ensure appropriate safeguards are in place to protect confidential information by 30 April 2006.*
- (iii) Refurbishes the DNA laboratory areas to ensure that all contamination issues are resolved by 31 January 2006.*