LEGISLATIVE ASSEMBLY OF NEW SOUTH WALES

Public Accounts Committee

PROCUREMENT AND MANAGEMENT OF ICT SERVICES IN THE NSW PUBLIC SECTOR

LEGISLATIVE ASSEMBLY

PUBLIC ACCOUNTS COMMITTEE

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ICT SERVICES IN THE NSW PUBLIC SECTOR

REPORT 7/55 – MAY 2013

The motto of the coat of arms for the state of New South Wales is "Orta recens quam pura nites". It is written in Latin and means "newly risen, how brightly you shine".

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Terms of Reference

The Public Accounts Committee will inquire into and report on issues arising from reports by the Auditor-General on the procurement and management of Information and Communication Technology (ICT) by NSW government agencies. In doing so, the Committee will have regard to recent procurement reforms and the three major weaknesses identified by the Auditor-General as leading to failure in ICT project delivery and ongoing project management: deficient project management; poorly guided and managed system migration and data conversions; and poor contract management. The inquiry will focus on:

 i. Measures to improve ICT project and contract management in the public sector, in particular in relation to contract negotiation and on-going contract management;

 ii. The efficacy of central agency policies and strategies that guide ICT projects in the public sector;

 iii. The adequacy of risk management and corruption prevention strategies relating to ICT procurement and contract management;

 iv. Long-term planning to meet the ICT needs of the public sector and ensure the best value for money in the procurement of government ICT products and services; and

 v. Any other related matters.

Chair's Foreword

Information and Communication Technology (ICT) has become embedded in our daily lives, both at home and work. It is incumbent on any government to keep pace with this constantly-changing world, and provide effective services to the community.

The way ICT is procured and managed in the NSW public sector is undergoing rapid and fundamental change. Cloud based computing is being introduced as we move from purchasing assets to purchasing services. This transitional phase, guided by the implementation of the NSW ICT Strategy and recent procurement reforms, presents opportunities for the NSW government to improve service delivery and increase engagement with the community.

Concerns about the high costs and poor delivery of ICT projects have been expressed repeatedly by the Auditor General. Projects have run over time, with ever increasing budgets, whilst sometimes failing to deliver meaningful business benefits or improvements. While acknowledging that the governance of individual projects sits with the agencies, there is scope for a sharper focus from central government agencies to scrutinise and oversee ICT projects, particularly when projects are delayed. Such projects can be extremely expensive and run the risk of implementing out of date technology.

Moving to the new world of purchasing services potentially brings a number of benefits and cost savings. It should enable agencies to keep up to date with the latest technologies and allow flexible workplace options. However, storage of information in the cloud raised concerns for participants in the Committee's inquiry, particularly in relation to the security of personal information held. People must be confident that if they interact with government online their personal information will remain safe and secure.

Historically, agencies have entered into an annual funding cycle, submitting business cases for capital funding from Treasury, with some recurrent funding for ongoing maintenance and licensing. To support the shift to an 'as-a-service model' there needs to be changes to the way projects are funded. When purchasing a service, the initial capital outlay is reduced, with the main focus on the ongoing operational expenditure.

To ensure the success of reforms in this area, improved communication between the ICT industry and government agencies is essential. The new governance structure under the ICT Strategy, comprising the ICT Board, Procurement Board, Leadership Group, as well as industry advisory groups, should promote communication.

While many of the concerns raised during the inquiry and evident in the case studies examined by the Committee have been addressed through the ICT Strategy, some challenges remain for government. Training the existing workforce and recruiting suitably qualified people who have the right skills and competencies, particularly around procurement and contract management is fundamental. For this reason, improved take-up of the new capability framework must be prioritised.

On behalf of the Committee I thank those individuals and organisations who made submissions to the inquiry and gave evidence at the Committee's public hearings. The information gathered during the course of the inquiry was invaluable in formulating the report's final recommendations.

On a personal note, I want to thank my Committee colleagues, namely Geoff Lee, Bart Bassett, John Williams, Michael Daley and Greg Piper for the support and insight that they brought to the inquiry.

I would also like to thank the secretariat staff for their assistance in the conduct of this inquiry and in the preparation of the Committee's final report.

Jonathan O'Dea MP
Chair

Executive Summary

The Inquiry into Procurement and Management of ICT services in the NSW Public Sector was self-referred by the Public Accounts Committee on 23 August 2012. The inquiry was prompted by ongoing concerns raised by the Auditor-General regarding ICT project and contract management.

The Committee subsequently adopted formal Terms of Reference, which asked it to inquire into and report on issues arising from reports by the Auditor-General on the procurement and management of ICT by NSW government agencies, examining issues relating to the recent procurement reforms and the three weaknesses identified by the Auditor-General: deficient project management, poorly managed system migrations and poor contract management. The Terms of Reference also asked the Committee to consider the measures put in place to improve ICT project and contract management, the efficacy of central agency policies and strategies, the adequacy of risk management and corruption prevention and the long term planning to meet the needs of the public sector and ensure best value for money. The Terms of Reference are listed in full on page v.

The Committee then called for submissions to the Inquiry, and eventually received 22 formal submissions, from a variety of stakeholders. These included key government agencies such as the Department of Finance and Services and the Public Service Commission as well as stakeholders from the ICT industry, such as the Australian Information Industry Association. A number of submissions were also received from small and medium enterprises that had experiences of submitting tenders for government contracts and individuals with an interest in ICT procurement and project management.

The Committee held two briefing sessions in October and November 2012, where it received a briefing on the pertinent issues regarding the procurement and management of ICT from the NSW Auditor-General, the Independent Commission Against Corruption and the Department of Finance and Services.

As part of the formal part of the Inquiry the Committee also held two public hearings in November 2012 and March 2013, where it heard evidence from key stakeholders. The public hearings provided an opportunity to further explore some of the issues raised in submissions and to hear evidence from key stakeholders that had not made submissions. The Committee members were able to ask questions of stakeholders and hear of any concerns of stakeholders directly. A full list of witnesses who appeared before the Committee can be found at Appendix Three. Transcripts of the evidence provided are also available on the Committee's webpage.

This report has been organised in seven chapters and recognises that the Terms of Reference are inter-related. The report is therefore organised thematically, chapters two and three look at ICT project management and Chapter Four reviews the current NSW ICT Strategy. Chapter Five provides a detailed review of ICT procurement and includes contract management. Chapter Six details some of the key emerging technologies and innovations that effect the management of ICT in NSW public sector, with the final Chapter Seven considering ICT fraud, corruption and risk management. A detailed summary of the report is provided below.

Chapter One details the conduct of the Inquiry, including the terms of reference for the Inquiry, submissions, agency briefings and public hearings.

Chapter Two details the review of eight ICT projects that had been reported on in the Auditor-General's Reports to Parliament. The purpose of this chapter is to provide a brief case study of each of the projects, looking specifically at how the projects have been managed, the causes of project delays and the overspends. The Committee found that the projects were large complex projects that took a number of years to be completed with changing deliverables and modifications to scope. This chapter also reviews a current project that has successfully implemented a cloud based Enterprise Resource Planning SAP system.

Chapter Three examines in detail the issues raised in chapter two, regarding ICT project management. It includes consideration of issues relating to project governance and financial management, as well as a discussion on the use of project management offices and formal project methodologies. The Committee found that there is a need for tighter controls on project governance and improvements in financial management, particularly in the preparation of cost estimates and benefit realisation plans.

Chapter Four looks at the new NSW ICT Strategy that was launched in May 2012. The chapter does not comment on the content per se, but looks at whether the strategy addresses concerns raised by the Auditor-General. The Committee found that the strategy is an ambitious document with some excellent objectives and outcomes. However the Committee was concerned about the lack of references to project management in the strategy.

Chapter Five examines all aspects of ICT procurement, reviewing the current procurement reforms and their impact as well as tendering, contract management and contracting frameworks. The relationship between NSW government and small and medium enterprises (SMEs) is explored. The Committee acknowledges the importance of SMEs to the NSW economy and considers the introduction of the Small and Medium Enterprises Policy Framework and the ICT Services Scheme as positive developments. The chapter also looks at skills and capability regarding procurement and contract management. The Committee recognises that there is a shortage of skilled procurement professionals. Having suitably trained staff is vital to ensure the successful implementation of the procurement reforms. The take up of the existing NSW Capability Framework has been poor and the Committee found that it will be important to have a workable framework that is mandatory across the whole sector. Finally, this chapter looks at improvements that could be made to publishing information about ICT projects, thereby making the process more transparent.

Chapter Six explores some of the new technologies that are having an impact on ICT in the NSW public sector. This is a time of rapid change in ICT and governments need to keep pace with the change. The Committee found that the adoption of cloud based systems and the service orientated marketplace will result in savings in cost and time, although information security should be paramount in all cloud based projects. The chapter also considers issues regarding cyber-security and the management of cyber-attacks. The Committee found that government agencies should have the opportunity to report cyber-attacks, utilising the existing reporting framework set out in the Digital Information Security Policy.

Finally, Chapter Seven addresses concerns about ICT fraud and corruption and how risk is managed. The extent of the problem is hard to determine as most fraud remains undetected. This chapter considers some of the causes of fraud and sets out what actions can be taken to ensure that prevention strategies are put in place. Repeat issues raised by the Auditor-General are a concern and the Committee has resolved to seek information about agencies' responses to the repeat recommendations made in the Auditor-General's Financial Audit Reports to Parliament during 2012. The Committee also found that recommendations made by both the

Auditor-General and Independent Commission Against Corruption have not been implemented.

In total, the Committee has made 41 recommendations. These recommendations reflect the structure of the report, with a number of recommendations in each of the subject areas. These include project and contract management, project governance, ICT procurement, information security, improvements in reporting and transparency of major ICT projects, implementing a revised capability framework that includes ICT skills, improving the skills and knowledge of project sponsors and implementing recommendations made by the Auditor-General and ICAC.

Two key areas that have come out of the Inquiry are the oversight of ICT projects and the funding of as-a-service projects. The Committee found that the development of a funding model that reflects the pay as you go nature of purchasing a service is important to support agencies undertaking this new form of procurement.

The evidence suggests that there are gaps in the oversight of ICT and in particular major ICT projects. This has led to high profile project failures reported in the media. There is genuine concern about the cost of these projects and the potential waste of public money as projects fail to deliver expected outcomes. The report recommends that there needs to be a centralised mechanism to scrutinise the implementation of policy and procedures regarding ICT project management. This scrutiny has been implemented by the Department of Finance and Services in regards to the new Digital Information Security Policy. The report recommends that a similar level of scrutiny be implemented to improve the standard of ICT project management across the NSW Public Sector and make the process more transparent and accountable.

The report also looked at changes that are occurring as ICT moves into a service orientated environment, where services are procured from cloud computing service providers. This is a fundamental shift in the way ICT will be managed now and into the future. Special care must be taken regarding the security of information located in the cloud. The Committee acknowledges that work is already underway regarding the funding of cloud based projects, but found that comprehensive guidelines and training are need to ensure that the government is able to maximise the benefits that can be gained from a new purchasing model to support the payment of service contracts.

List of Recommendations

That the NSW Government adopts as best practice, shorter, more iterative projects with timeframes of no more than two to three years.

That NSW Procurement and the Department of Finance and Services review all existing projects that have been running for over four years and request the agencies prepare detailed action plans regarding outstanding deliverables and time lines for completing the project.

That the Department of Finance and Services sponsor regular seminars across government where knowledge gained by agencies can be presented as case studies, including key lessons learned from ICT projects.

That the Department of Finance and Services implement a project management framework to be applied sector wide and make its use mandatory.

That the Department of Finance and Services establish a centralised mechanism to scrutinise the effectiveness of the framework, to ensure a consistent approach to project governance in NSW.

That the Department of Finance and Services and the Public Service Commission review and update project sponsor training and ensure that competencies required for effective project sponsorship are included in the revised capability framework.

That NSW Treasury and the Department of Finance and Services monitor and provide advice to agencies when cost underestimations impact on the financial management of ICT projects.

That the Department of Finance and Services and the Public Service Commission review the training currently available for the preparation of project cost estimates.

That the Department of Finance and Services implement the finance and performance reporting framework as soon as possible and consider ways to use the system to improve transparency and accountability.

That the Department of Finance and Services encourage agencies to complete Benefit Realisation Plans for all major ICT projects.

List of Abbreviations

AGIMO	Australian Government Information Management Office
AIIA	Australian Information Industry Association
AIPM	Australian Institute of Project Management
CAPEX	Capital Expenditure
CLMS	Contract Lifecycle Management System
CBA	Cost Benefit Analysis
CEA	Cost Effectiveness Analysis
DEC	Department of Education and Communities
DFS	Department of Finance and Services
DPC	Department of Premier and Cabinet
DRIVES	Driver and Vehicle Computer Service Project
ERP	Enterprise Resource Planning
GIPA	Government Information (Public Access) Act 2009
GLS	Government Licensing Service
ICAC	Independent Commission against Corruption
ICT	Information and Communications Technology
ITD	Information Technology Directorate
ITSL	Integrated Transit Solutions Limited
LMBR	Learning Management and Business Reform Project
NIST	National Institute of Standards and Technology
NSW T&I	NSW Trade and Investment
OIC	Office of the Information Commissioner
OPEX	Operating Expenditure
PMBOK	Project Management Body of Knowledge
PMO	Project Management Office
PSC	Public Service Commission
RMS	Roads and Maritime Services
SALM	Student Administration and Learning Management
SFIA	Skills for the Information Age
SME	Small and Medium Enterprise
VMO	Vendor Management Office

Chapter One – Conduct of the Inquiry

Call for Submissions

1.1   The Chair of the Public Accounts Committee issued a press release on 23 August 2012. The text of the advertisement is attached at Appendix 1.

1.2   The Committee publically called for submissions on any or all of the terms of reference through a display advertisement placed in the Sydney Moring Herald on Wednesday 12 September 2012.

1.3   Information, including the invitation to submit material to the Committee was also posted on the NSW Parliament website.

1.4   The closing date for submissions was 31 October 2012, but it was agreed to extend the submission period for interested parties who were unable to meet the original time-frame and who informed the Committee of their intention to lodge a submission prior to the original closing date.

1.5   Notified submissions continued to be received by the Committee up to 7 December 2012, with a total 22 submissions being received. All submissions received by the Committee, whether or not they arrived within the allocated time-frame, were considered in the preparation of the report.

1.6   Submissions were received from individuals, organisations, ICT companies and consultants and government departments. A full list of submissions received appears at Appendix 2.

Questions on Notice

1.7   Additional information and questions were requested by the Committee from the Auditor-General and the following government agencies:

- 14 December 2012 – Auditor-General re information security and disaster recovery processes in NSW public sector
- 21 December 2012 – Sydney Water re Field Resource Management and Maximo Consolidation Projects
- 9 January 2013 – Department of Attorney General and Justice re JusticeLink project
- 11 January 2013 – Department of Education and Communities re Learning Management and Business Reform (LMBR) Project
- 22 January 2013 – Auditor-General re financial reporting of the LMBR project
- 11 February 2013 – Department of Finance and Services re NSW Government Licensing Project
- 12 February 2013 – NSW Treasury re Gateway Review System for ICT projects

- 27 February 2013 – Department of Finance and Services re Pre-qualification scheme
- 15 March 2013 – Transport for NSW re T-card project

Briefings and Public Hearings

1.1   The Committee had a briefing from the Auditor-General on 18 October 2012.

1.2   The Committee held agency briefings on 26 October 2012, hearing evidence from five officers from the Department of Finance and Services and three officers from the Independent Commission Against Corruption.

1.3   The Committee held public hearings at Parliament House on 28 November 2012 and 18 March 2013. A full list of organisations and witnesses who appeared before the Committee appears at Appendix 3.

- At the 28 November 2012 hearing 19 witnesses were heard
- At the 18 March 2013 hearing 3 witnesses were heard

1.4   The Committee requested to hear evidence from the Department of Education and Communities regarding the management of the LMBR project and the Department of Roads and Maritime regarding the DRIVES project.

1.5   The Committee also heard evidence from industry stakeholders who had not made submissions to the inquiry. The Australian Institute of Project Management and the Australian Computer Society both gave evidence on 28 November 2012.

1.6   The Committee also heard from a panel of small and medium enterprises, representing five companies.

1.7   Two witnesses were heard *in-camera* at the hearing on 28 November 2012.

Chapter Two – Information and Communications Technology (ICT) Projects

2.1   The NSW public sector spends over $2.0 billion each year on information and communications technology (ICT) applications and services.[1] This chapter examines a number of ICT projects that have been undertaken in NSW over the past 13 years. Each case study will look into the financial, project and change management of projects that have been reported on by the Auditor-General in his reports to Parliament. The studies will also look at whether the projects delivered the expected functionality and benefits to the business. All of the projects reviewed are large complex projects that were delivered and implemented over a number of years with large budgets.

2.2   This chapter will also review the implementation of a cloud based SAP Enterprise Resource Planning (ERP) system by the Department of Trade and Investment. This project sought a software-as-a-service solution to support finance, procurement, HR and payroll functions for over 7000 users. [2]

Introduction

2.3   The Auditor-General has reported on a number of major ICT projects undertaken in NSW and made recommendations on improvements to project, contract and budgetary management. The particular projects reviewed by the Auditor-General, and considered in this chapter include:

- NSW Government Licensing Project – Department of Finance and Services
- JusticeLink – Department of Attorney General and Justice
- Learning Management and Business Reform – Department of Education and Communities
- Field Resources Management – Sydney Water Corporation
- Customer Management System – Sydney Water Corporation
- Maximo Consolidation Project – Sydney Water Corporation
- Driver and Vehicle Computer Service Project – Roads and Traffic Authority (now Roads and Maritime Services)
- T Card Project – Department of Transport (now Transport for NSW)

2.4   Mr Mike Ehwaz, NSW State Councillor, Australian Institute of Project Management, commented in his evidence to the Committee that generally big projects fail, not smaller projects:

> Most organisations do not go off the rails with their smaller projects. The have methodologies that work. Frequently they leap into a larger project and think they can just stretch everything and it will be fine, and Bob who ran the $1 million

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[1] NSW Auditor-General's Report to Parliament, Volume One 2012, p. 23

[2] http://itnews.com.au, accessed on 5 December 2012

project, is going to be fine on the $100 million project; we just need to give him more support.

And of course he is not fine. It is much more complex and the methodology, the risk approaches, the governance approaches and the status reporting all fail.   The Auditor-General frequently flags project failures: they are the large projects that fail, not the small ones.[3]

NSW GOVERNMENT LICENSING PROJECT (GLS) – DEPARTMENT OF FINANCE AND SERVICES (DFS)

2.5   The GLS project was intended to replace over 40 different licensing systems in approximately 20 different agencies with a single web based system. Commencing in 2001, it was expected to be fully implemented by 2005. The Auditor-General reported that the project aimed to 'achieve savings through replacing multiple existing (legacy) systems and through business process improvement.'[4]

2.6   The GLS has two broad functions: processing licence applications and renewals; and providing a facility to check licence credentials. DFS advised that to date in 2013, 38 separate licensing systems have been replaced. The system processes licence fees totalling approximately $170 million per annum.[5]

2.7   The Auditor-General reported on the extent of cost blowouts for the project in 2009:

In 2001 the project was expected to cost $63 million over four years and generate gross benefits of $132 million, giving a net benefit of $69 million. The project is now expected to cost $86 million over 12 years and have gross benefits of $105 million with net benefits of only $19 million.[6]

2.8   The Committee wrote to the Director General of DFS requesting an update on the progress of the project since the Auditor-General's report in 2009. DFS advised that the increase in costs and the decline in value reported by the Auditor-General was caused by delays. Issues have since been addressed and project performance and value have improved, although these figures have not been audited:

- The gross cost in total (inclusive of 2011/12 financial year) was $108.8 million, including capital and recurrent expenditure, as well as non-cash depreciation of $15.9 million

- The gross fees for services in total (inclusive of 2011/12 financial year) collected from the agencies was $13.6 million ($7.8 million), giving a net cost of service of $95.2 million

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[3] Mr Mike Kano, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 54

[4] Auditor-General's Report, Performance Audit, Government Licensing Project, October 2009, p. 2

[5] Answers to questions on notice, Department of Finance and Services, 13 February 2013, p. 2

[6] Answers to questions on notice, Department of Finance and Services, 13 February 2013, p. 3

- The gross benefits to the end of the 2011/12 financial year are estimated at $163 million

- The project has therefore delivered a net benefit of $67.8 million.[7]

2.9   DFS advised that the project encountered difficulties due to system complexities and organisational changes required to transition to a whole of government platform, and that the original timeframe underestimated the scope of reform required. The changes expanded the system from the expected two million licenses, to managing seven million.[8] DFS reported that the 'integration of data from legacy systems remains a significant challenge.'[9] However, DFS report that the adoption of an agile 'Dynamic Systems Development' methodology has resulted in the introduction of a controlled schedule for managing the ongoing implementation.[10]

2.10   The Auditor-General highlighted concerns about the project governance mechanisms set out in the original business case in 2001. These included the size of the project Steering Committee, a lack of definition around the decision making process and decisions being made outside of the governance structure.[11] DFS advised that under new governance arrangements, a decision support tool has been developed which ranks projects according to risk. The GLS is currently reporting under this system, which enables oversight by senior managers. DFS also advised that they are developing end of project reviews to capture lesson learned and a process for development of evaluation criteria at the project initiation stage.[12]

Committee Comments

2.11   This project is an example of complexity, involving multiple agencies and disparate legacy systems. The original business case in 2001 did not provide enough detail of the scope of the project, the risks involved, how change management would be addressed or how staff training would be delivered. The changes to business processes were not identified at the project initiation stage, leading to a lack of awareness regarding the costs and benefits that would be achieved. This remains an ongoing problem, but the Committee notes the use of a new dynamic systems development methodology that will help manage migrations from the legacy systems.

2.12   The Committee acknowledges that the recommendations made by the Auditor-General have resulted in changes to project governance, change management and project management. The introduction of end of project reviews to gain lessons learned from projects are important, although DFS have not indicated how these lessons will be shared with other agencies.

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[7] Answers to questions on notice, Department of Finance and Services, 13 February 2013, p. 3

[8] Answers to questions on notice, Department of Finance and Services, 13 February 2013, p. 2

[9] Answers to questions on notice, Department of Finance and Services, 13 February 2013, p. 5

[10] Answers to questions on notice, Department of Finance and Services, 13 February 2013, p. 4

[11] Answers to questions on notice, Department of Finance and Services, 13 February 2013, p. 4

[12] Answers to questions on notice, Department of Finance and Services, 13 February 2013, p. 5

JUSTICELINK – DEPARTMENT OF ATTORNEY GENERAL AND JUSTICE

2.13   The purpose of this project was to implement JusticeLink as a replacement for internal stand-alone computer systems, for the transfer of files and data between various courts. The data is also used by the Bureau of Crime Statistics and Research and the Judicial Commission. It provides web-based services for court users and the capability for electronic exchange of information between justice sector agencies.

2.14   The JusticeLink case management system was designed to integrate the Supreme, District and Local Court, including the Coroner's Court.[13] It allows for the secure electronic transfer of information between courts and agencies, including NSW Police and Corrections NSW.

2.15   The project commenced in 2001 with a budget of $30.3 million with an initial scope covering the Supreme and District Courts. The project scope was expanded twice, which required additional funding each time: $17.9 million to include Local Courts, and $11.8 million to include the Coroners Court.[14]

2.16   The Auditor-General has reported on ongoing issues regarding this project from 2007 to 2011. In his Report to Parliament, Volume Five 2007, the Auditor-General raised concerns about the initial development delays, caused by early testing that showed that the 'software could not meet all the functional and performance needed across each court jurisdiction.'[15]

2.17   Concerns were raised again in 2008, when the Auditor-General reported on the ongoing delays, scope changes and significant increases to the budget:

> The Department has advised that the main reasons for the delays, revisions and budget increases include:
>
> - the supplier advised that the original package it tendered was unable to satisfy the Department's requirements
>
> - the complexity and design requirements for the New South Wales Court system the design specifications not being sufficiently clear and well defined
>
> - the Department's needs changing in response to new legislation, re-engineering of processes, and the emerging needs of other agencies that wish to link with JusticeLink.[16]

2.18   Since 2010, the Auditor-General has been reporting on the inability of JusticeLink to automatically refer debts to the State Debt Recovery Office, which is due to unresolved interface issues. Subsequent system enhancements

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[13] Answers to questions on notice, Department of Attorney General and Justice, 9 January 2013, p. 4

[14] Answers to questions on notice, Department of Attorney General and Justice, 9 January 2013, p .6

[15] Auditor-General's Report to Parliament - Volume Five 2007 – Department of Attorney General, p. 13

[16] Auditor-General's Report to Parliament - Volume Five 2008 – Department of Attorney General, p. 30

have reduced the outstanding debts of $31.4 million at 30 June 2010 to $11.6 million at 30 June 2012.[17]

2.19   In November 2011, an internal audit report on JusticeLink's financial processes made 19 recommendations of which six were high risk and ten medium risks. The high risk processes were:

- no consistent review to ensure completeness of outcomes entered into JusticeLink
- limited controls over invoicing of transcripts
- no enforced segregation of duties in the payments process
- limited controls over payment of witness expenses
- manual process for updating debtor balances on the SUN system
- insufficient management reporting and overview over JusticeLink financial transactions.[18]

2.20   The Department has advised that except for the last matter, all of the issues have now been fully addressed. The outstanding matter was due to be addressed as part of a SAP finance system migration in December 2012.[19]

2.21   The Committee wrote to the Director General of the Department of Attorney General and Justice requesting additional information about the project. In his response to the Committee, Mr Glanfield, summarised the main reasons for the delays:

- The failure of the supplier to understand the complexity and design requirements of the NSW Court system;

- With hindsight the specifications for the design were open to interpretation requiring time to specify more clearly and in some cases rework applications; and

- The Department's needs over time developed either through changes to legislation, re-engineering of processes and the emerging needs of other agencies wishing to integrate with the JusticeLink applications'.[20]

Committee Comments

2.22   This project experienced problems at an early stage, with software limitations that became apparent at the initial stages. There were also regular changes to the scope of the project with subsequent budget increases. The Committee acknowledges that the complexity of the project and the increase in the budget developed over time, as more courts were brought on board. However, the lack of clarity and understanding regarding specifications and design, from both

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[17] Auditor-General's Report to Parliament - Volume Seven 2012 – Department of Attorney General, p. 56

[18] Auditor-General's Report to Parliament - Volume Seven 2012 – Department of Attorney General, p. 57

[19] Answers to questions on notice, Department of Attorney General and Justice, 9 January 2013, p. 5

[20] Answers to questions on notice, Department of Attorney General and Justice, 9 January 2013, p. 6

the department and the supplier, resulted in problems persisting for a number of years.

2.23   The department has advised that they are now using a formal project management methodology and projects between justice related agencies are managed by teams under a single project director.[21] Improved communications between these agencies will be important to ensure any future enhancements and integrations are managed effectively.

FIELD RESOURCE MANAGEMENT PROJECT – SYDNEY WATER

2.24   The Field Resource Management Project's primary purpose was to replace paper based processes and an out-dated radio dispatch system with 'a new wireless solution that allowed real time scheduling, dispatch and update of work orders'.[22] The scope included integration with existing systems, training and organisational change. Sydney Water reported that the project aimed at providing improvements to response times and efficiencies with forecasted saving of $4 million per annum.[23]

2.25   The project commenced in 2004, and by 2006 variations to budget and timeframe had been reported. In 2006 an internal audit found that governance over this project had not been effective. [24] The Auditor-General commented in his 2006 Report to Parliament that the project had progressed well until March 2006, after which the following problems were encountered:

- the project's scope and complexity
- the costs and complexities associated with security
- the extent of testing procedures, and
- the integration of the new system with Sydney Water's existing systems.[25]

2.26   The Auditor-General reported that Sydney Water had made changes to address these concerns; they engaged a consultant in July 2006 to review the project, and to develop a robust plan and monitor delivery of the plan. The consultant's 'health check' of the project was completed in August 2006. Sydney Water accepted the consultant's recommendations and took the following actions:

- replacing staff on the project
- supplementing the existing project team with greater capability and expertise, and
- improving the quality of management processes.

2.27   Sydney Water advised the Committee that the increase in cost was due to 'system integration capabilities, complexities relating to security, extent of testing procedures and integration with existing systems'.[26] They also reported

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[21] Answers to questions on notice, Department of Attorney General and Justice, 9 January 2013, p. 8

[22] Answers to questions on notice, Sydney Water Corporation, 21 December 2013, p. 1

[23] Answers to questions on notice, Sydney Water Corporation, p. 1

[24] Auditor-General's Report to Parliament - Volume Four 2006 – Sydney Water, p. 177

[25] Auditor-General's Report to Parliament - Volume Four 2006 – Sydney Water, p. 177

[26] Answers to questions on notice, Sydney Water Corporation, p. 3

that the final project cost was '$19.7 million, which was in line with $20.6 million advised in 2006, less unspent contingency.'[27]

MAXIMO CONSOLIDATION PROJECT – SYDNEY WATER

2.28   The Maximo Consolidation project upgraded the existing Maximo Asset Management System, by consolidating the legacy systems into a single application.[28] The scope included custom integrations with other internal systems.

2.29   The first phase of the Maximo consolidation project was completed and became operational on 20 September 2010. The final phase of the project was delayed due to resources being diverted for the development of other systems and a business case variation for the Maximo project. This resulted in an additional increase to the budget of approximately $9.0 million.

2.30   The project was initially scoped and approved in 2007 with a budget of $18.4 million. However, in answers to questions on notice the Committee were advised that the original business case was developed before the design stage was completed and the Systems Integrator appointed.[29] It was only then with understanding of integration costs, that the complexity and scope of work became apparent, resulting in the increase in budget to $31.3 million.

2.31   Sydney Water advised the Committee that both the Field Resource Management and Maximo Consolidation projects have been implemented. Post implementation reviews have been conducted and key learning has been addressed through project governance, project delivery methodologies and contract and financial management improvements.[30]

2.32   In answers to questions on notice, Sydney Water told the Committee that the learning from each of these projects has been used in the implementation of a Project Delivery Framework, based on the Project Management Body of Knowledge (PMBOK).[31] Specific project schedules are incorporated into the framework, this provides a strategic view of all projects rather than an siloed view of individual projects. There have also been changes to financial management and a corporate-wide procurement management approach.[32]

2.33   With regards to financial and contract management, the Committee were advised that this is now achieved through a process called "Pink Slip", which involves an independent financial assessment undertaken to ensure all risks, assumptions and variances are recognised.[33]

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[27] Answers to questions on notice, Sydney Water Corporation, p. 3

[28] Answers to questions on notice, Sydney Water Corporation, p. 1

[29] Answers to questions on notice, Sydney Water Corporation, p. 4

[30] Answers to questions on notice, Sydney Water Corporation, p. 5

[31] Answers to questions on notice, Sydney Water Corporation, p. 5

[32] Answers to questions on notice, Sydney Water Corporation, p. 8

[33] Answers to questions on notice, Sydney Water Corporation, p. 6

Committee Comment

2.34   The Committee was pleased to hear how lessons from these projects had been reviewed and changes made to the way projects are managed at Sydney Water. Active involvement of senior managers in governance and the introduction of a Project Delivery Framework, which is intended to provide consistency in the management of future projects, are all positive developments. The testing of business cases and contract management are now incorporated into the governance. This structure and corporation wide procurement management will be important to ensure effective ongoing management of major projects at Sydney Water.

LEARNING MANAGEMENT AND BUSINESS REFORM (LMBR) PROJECT – DEPARTMENT OF EDUCATION AND COMMUNITIES (DEC)

2.35   The LMBR project commenced in 2006/7 to replace the existing out of date finance and human resources systems. The aim of the project was to 'transform the way finance, human resource (HR) and student administration and learning management (SALM) services are delivered.'[34]   The original business case approved the project timeline of eight years and an original budget of $371 million.

2.36   The project includes replacing payroll, finance and human resources in both TAFE and NSW schools and student administration and learning management in the TAFE institutions. In its evidence to the Committee, the DEC advised that in February 2013, the project had delivered the implementation of a planned release of budget and planning applications in 229 schools.   They also advised that the deployments planned for 2013 will see the implementation of finance, HR and payroll applications in the 229 schools and six TAFE institutes, plus the implementation of the SALM tool to ten TAFE institutes. Deployment to the remaining 2,000 schools will take place in 2014.[35]

2.37   As part of its evidence gathering for this inquiry, the Committee invited the Auditor-General to comment on this project. He reported that project was split into two phases:[36]

Phase 1	Phase 2
Implementation of the SAP finance solution into state and regional office locations, schools and TAFE NSW	Development of a student administration system for schools and TAFE NSW
Implementation of the SAP human resources and payroll systems into TAFE NSW	Implementation of the SAP human resources and payroll system across State and regional office areas and schools

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[34] LMBR Stage 2 Business Case Update v5.0, Department of Education and Communities, November 2012, p. 13

[35] Answer to questions on notice, Department of Education and Communities, 11 January 2013, p. 1

[36] Letter from Auditor-General to Public Accounts Committee, 22 January 2013, p. 1

Phase 1 implementation costs were estimated at $153 million	Phase 2 implementation costs were estimated at $218 million[37]

2.38   Mr Michael McMahon, LMBR General Manager gave evidence to the Committee on the progress of the project, which he advised was on track to be completed in 2014. In particular, the Committee questioned him about the budget for the project, which the Auditor-General had reported had risen in stage one from $153 million to $210 million, along with an increase of $14 million, which had been approved for additional training. Mr McMahon contradicted the Auditor-General's conclusions:

> In reality that is not actually what happened. What happened was we had two separate buckets of money in budget paper, one for TAFE and one for department for LMBR. Because TAFE is a separate legal entity we could not just have one bucket of money......Overall the budget was $386 million. That has not changed.

> While we have changed some of the deliverables in terms of the timing, the scope of the project remains the same. It will be delivered within the budget, plus the $14 million that was approved by the Minister, in the time frame that was endorsed, which is an eight-year time frame.[38]

2.39   The Committee wrote to the Auditor-General inviting a response to the comments made by Mr McMahon. In his reply Mr Peter Acherstraat confirmed that the cost of stage 1 and stage 2 were included in the original capital costs approved by Cabinet. This was increased in 2011 when the Treasurer approved an increase from $371 million to $386 million. The approval letter from the Treasurer to the Minister for Education identified phase 1 costs as being revised to $210 million.[39] The Auditor-General justified this approach:

> I focused on the solutions to be delivered under each stage of the project and I was satisfied the scope of Stage 1 did not significantly increase. I was therefore reasonable to compare the estimated cost of phase 1 to the revised estimate cost of stage 1. [40]

2.40   The Committee also wrote to the DEC, who advised in their response that they had encountered pressures that had not been articulated in the original business case. This was particularly true for the establishment of a finance shared services centre, which had not been fully costed, and required additional training.[41] The decision was taken to request an increase of $14 million from the contingency budget to ensure cover for these additional costs:

> So the decision was taken at that point in time, rather than waiting until those pressures got to a stage where they were overwhelming. The decision was taken

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[37] Letter from Auditor-General to Public Accounts Committee, 22 January 2013, p. 1

[38] Mr Michael McMahon, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 30

[39] Letter from Auditor-General to Public Accounts Committee, 22 January 2013, p. 2

[40] Letter from Auditor-General to Public Accounts Committee, 22 January 2013, p. 2

[41] Letter from Department of Education and Communities, Mr Stephen Loquet, Deputy Director General, 11 January 2013, p. 2

> within the rules that applied at the time to create a 10 per cent contingency of $14 million to the project so that we had a budget of $386 million.[42]

2.41   An additional hearing was held on 18 March 2013, to enable the Committee to further follow up on seemingly conflicting evidence from the DEC and the Auditor-General regarding the financial reporting on this project. At the hearing both the department and the Auditor-General agreed on the overall budget and accepted that, other than the increase of $14 million from the contingency, the project was progressing on budget.

2.42   In 2011, the Auditor-General noted that the department had revised its approach by appointing a transformation service provider.[43] Accenture were recruited to provide additional resources, between 350-500 people, change management, stakeholder engagement and management of the scope and deliverables. KPMG were also engaged to provide an external independent quality assurance role, checking on the budget and time lines.[44]

2.43   At the hearing on 18 March 2013, the Committee raised concerns regarding the project's long timeframe. Mr Peter Riordan, Deputy General, Corporate Services provided background regarding the legacy systems that were being replaced and the impact of this on the length of the project:

> I think the finance system had been in place for some 25 years and the parallel system for close to 20 years. The emerging technology meant that an enterprise resource planning system could be put in place to cover all of that.

> The decision at the time was based on advice received from Accenture – that was the organisation wanting to build the business case for the department because we did not have expertise to do it internally – that the project should be done in a consolidated way, broken up into a number of waves of releases over a period of time.[45]

2.44   Mr Riordan acknowledged that the length of time for the overall project was the number one risk on the department's risk register and was discussed at the audit management committee meetings. He also stated that the needs of the organisation have changed and the project has had to adapt to these needs. This has added to the complexity of the project, which in hindsight may have been managed differently:

> The needs of the organisation changed over the period of time so we set upon our path, a journey of eight years, mapping out what the needs are at a particular point in time and then we need to adapt as the needs of schools and TAFE have changed over that period of time.

> That adds extra complexity to it. In hindsight, would we have done it differently? I think so. I think it was an ambitious project. We are still on track. Some of the time

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[42] Letter from Department of Education and Communities, Mr Stephen Loquet, Deputy Director General, 11 January 2013, p. 2

[43] Auditor-General's Report to Parliament - Volume Nine 2011 – Department of Education and Communities, p. 44

[44] Mr Michael McMahon, Record of Proceedings before the Public Accounts Committee, Wednesday 28 November 2012, p. 31

[45] Mr Peter Riordan, Record of Proceedings before the Public Accounts Committee, Monday 18 March 2013, p. 2

lines for releases have slipped a little but we are on track to deliver an upgrade to the back office systems across the organisation by December 2014, which was our initial time frame.[46]

2.45   However, when questioned by the Committee regarding setting maximum time periods for IT projects, Mr Riordan said that the most important aspect of any IT project was to have effective governance in place:

> Good governance in any project is critical. If you have good governance in a project, whether it is two years, four years or five years, the time of the project will depend on the amount of work that needs to be performed. I would not like to see is a project that requires five years or six years getting squeezed into four years just to meet some arbitrary time line.[47]

Committee Comments

2.46   The Committee remains concerned about the timeframe and budget for this project. Commencing seven years ago, to date the project has only implemented a budget and planning tool in 229 schools. The timetable for 2013 shows a full list of deliverables to be implemented, leaving a large number of outstanding schools planned for 2014.

2.47   The Committee welcomes the use of an independent quality assurance process, which provides an objective review of the project and its progress and ensures variances to the budget and time lines are reported as early as possible.

2.48   The department has acknowledged that the organisation and technology have moved on during the project. Having heard from the Department of Trade and Investment about their cloud based SAP project, which has been implemented in less than 12 months, the Committee is concerned that the LMBR project is implementing out of date technology that will require updating a short time after the project has been completed.

DRIVER AND VEHICLE ENQUIRY SYSTEM (DRIVES) PROJECT – ROADS AND MARITIME SERVICES (RMS)

2.49   DRIVES is a complex and critical computer system that RMS uses at motor vehicle registries to administer approximately seven million motor vehicle registrations and two million driver licences within the State. With the growth in demand for on-line transactions, changes in computing technology and changing legal requirements, the then Road Traffic Authority started a major project upgrade of this system in 2004.

2.50   Originally installed in 1990, the upgrade of DRIVES commencing in 2004 looked to update the existing system rather than build a new system from scratch. It started as a $9.4 million project with a planned upgrade to 10 to 20 per cent of the coding within the system. Within two years a further business case was required due to additional work that was needed. This went through the NSW Treasury Gateway review process in 2006, which looked at the scope and proposed budget before agreeing to provide the project with $23.2 million in

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[46] Mr Peter Riordan, Record of Proceedings before the Public Accounts Committee, Monday 18 March 2013, p. 2

[47] Mr Peter Riordan, Record of Proceedings before the Public Accounts Committee, Monday 18 March 2013, p. 4

additional funding. In 2009 the cost to complete the project was revised again to $32 million, with a final expenditure of $31 million.

2.51   Mr Peter Duncan, Chief Executive of RMS described the DRIVES system complexity to the Committee during his evidence:

> … this is a vast, complex and critical computer system. We do over 20 million transactions a year on this system, we have many interfaces, 5 million licence holders, information tier plus others from the point of view of identity, and we have 5.7 million vehicles on the system. So the project itself reduced the system's components from 13,000, in total length to 750 components to try to simplify what is a vast, complex system.[48]

2.52   Mr Michael Hesford, Corporate Director of RMS advised the Committee that the cost of completing regular updates to the system, responding to regular requests for additional functionality and quarterly maintenance costs RMS approximately $10 -$15 million per year. Mr Duncan commented that this has been affected by the move to online transactions and customer expectation of a quick response:

> …the way customer expectations are now with access to this type of information, there are almost daily requests to change processes.[49]

2.53   In his review of the DRIVES system in 2010, the Auditor-General reported on the project management issues that he had found, including:

- project expenditure to milestones were not adequately monitored
- the project cost was estimated at $9.3 million in 2004, but this escalated to $23.2 million in 2006 and $32.0 million in 2009. This is due to increased scope and changes in direction of the project
- deficiencies in the effectiveness of project management
- insufficient project management record keeping
- improvements in project management and reporting from 2009.[50]

2.54   The Auditor-General also reported on the improvements to project management arising from the introduction of a formal project methodology and governance framework.[51] Mr Duncan acknowledged that there were problems at the start of the project, but advised the Committee that they had been addressed and that improved project management had resulted from the lessons learned from this project.[52]

2.55   Ms Sandra Coleman, A/Chief Information Officer at RMS, advised the Committee that the scope of the project went from the 10 to 20 per cent of

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[48] Mr Peter Duncan, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 12

[49] Mr Michael Hesford, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 12

[50] Auditor-General's Report to Parliament - Volume Nine 2010 – Roads and Traffic Authority, p. 1

[51] Auditor-General's Report to Parliament - Volume Nine 2010 – Roads and Traffic Authority, p. 1

[52] Auditor General, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 13

coding that initially needed updating to 100 per cent in 2006.[53] This resulted in RMS being able to reduce the 13,000 different data access statements into 750 components.[54]

2.56   Ms Coleman also advised that as well as the work completed in 2009 on project management, the strategic direction of the project was reviewed to include updating infrastructure to provide an online delivery channel.[55] The project modernised the 14 year old system so it could be scalable for future needs. She advised that the changes to the architecture would enable the use of different channels and mobile application development and integration with Service NSW.[56]

2.57   Mr Peter Wells, Director Customer and Compliance at RMS explained some of the challenges RMS faced in integrating DRIVES with a number of other services. For example, *Service NSW* which will be a one stop shop concept offering a range of services does not currently interface with DRIVES.[57]

2.58   Mr Wells also described to the Committee the imperative that DRIVES be able to adapt to accommodate online and smartphone business:

> Very simply put, a transaction we conduct online is in the order of 17c to 27c per transaction; a face-to-face transaction is in the order of $8 to $10 to complete.
>
> ….if there are those broad imperatives for us about cost efficiency, government reforms and the biggest picture sense, we have to make sure that DRIVES is nimble and able to link to a wider range of things and be more scalable.
>
> We run firearms licenses, security licenses and a queue of forward programs that we have to integrate. That sort of sets the scene of the complexity of what we have to keep digesting and moving forward on and to be ever more linked to the web and online to satisfy very much where the community is going.[58]

2.59   Mr Duncan confirmed that all of the recommendations made by the Auditor-General had been implemented. A program management office has been set up, which established a framework of policies, procedures and processes for each project. Concept papers are produced to ensure the business need is identified before the business case is prepared, and this goes through an advisory panel, to provide a whole of organisation perspective.[59]

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[53] Ms Sandra Coleman, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 12

[54] Ms Sandra Coleman, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 13

[55] Ms Sandra Coleman, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 14

[56] Ms Sandra Coleman, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 14

[57] Mr Peter Wells, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 14

[58] Mr Peter Wells, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 15

[59] Mr Peter Duncan, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 19

Committee Comments

2.60   The Committee acknowledges that DRIVES is a complex system, managing 23 million transactions a year, with a large ongoing maintenance budget. Such a vast system will require ongoing long term resourcing and a transfer of expertise gained by staff to ensure its ongoing success and provide reassurance that the system can adapt to the fast changing ICT environment.

2.61   The Committee welcomes the introduction of a program management office (PMO). The PMO will enable the recognition of business needs and benefits of all projects in RMS. It will also monitor and track these benefits throughout the lifetime of the projects. This will be important to prevent the scope creep that was experienced with the DRIVES project.

2.62   The Committee notes the importance of providing self-service options in a customer-centric and efficient way. In time, the *Service NSW* approach should see all types of licence transactions dealt with consistently, which is obviously desirable.

T CARD PROJECT – DEPARTMENT OF TRANSPORT (NOW TRANSPORT FOR NSW)

2.63   The T Card project, which was originally due to be completed for the Sydney Olympics in 2000, was intended to implement a new ticketing system for public transport in the Greater Sydney Metropolitan Area. In 2003 the NSW Government engaged Integrated Transit Solutions Limited (ITSL), a subsidiary of ERG Limited, to provide an integrated ticketing and fare system for rail, bus, and ferry services.[60] The contract was terminated in January 2008 with no system being implemented.

2.64   The original costs as reported by the Auditor-General were $367 million: $106 million for development and $261 million over 10 years for operating costs.[61] In his 2006 Report to Parliament the Auditor-General gave a summary of the expenses incurred at that point:

> Contractual arrangements require payments to be made to the private sector contractor only upon achievement of milestones. No such payments had been made to the contractor to 30 June 2006. Capitalised project management and system development costs to 30 June 2006 totalled $45.7 million ($41.4 million to 30 June 2005). In addition, Tcard costs totalling $2.9 million were expensed during 2005-06.[62]

2.65   ITSL were required to deliver a ticketing system which incorporated the existing public transport fare structures and business rules in NSW and operated with the legacy ticketing systems and equipment.[63] ITSL agreed to bear the risk of any delay in performance.

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[60] Letter from Transport for NSW, Mr Les Wielinga, Director General, 14 March 2013, p. 2

[61] Auditor-General's Report to Parliament - Volume Five 2006 – Ministry of Transport, p. 1

[62] Auditor-General's Report to Parliament - Volume Five 2006 – Ministry of Transport, p. 1

[63] Letter from Transport for NSW, Mr Les Wielinga, Director General, 14 March 2013, p. 2

2.66   *The Transport Administration Amendment (Public Transport Ticketing Corporation) Act 2006* established the Public Transport Ticketing Corporation (PTTC) to manage Tcard operations from 1 July 2006. On 24 September 2007 the PTTC issued default notices to ITSL. A remedial programme was submitted by ITSL but this was not satisfactory to PTTC and the contract was terminated in January 2008. Proceedings were commenced in the Supreme Court of NSW in February 2008. These were settled through mediation in February 2012.[64]

2.67   The Committee wrote to Transport for NSW (TfNSW), who advised in their response that the main causes of the delay were ITSL's failure to achieve certain project events within the contracted timeframes:

- ITSL's lack of diligent project management process, planning and program execution
- ITSL's poor communication structures, ongoing people and cultural change issues with the ITSL project team
- management problems with ERG's (now called Videlli) operations division in Sydney
- quality problems with the smartcard developed by ITSL.[65]

2.68   The evidence in the Tcard litigation quantified the net cost to Government of the Tcard project as approximately $77 million. TfNSW provided the Committee with a breakdown of this cost.[66]

Table 1: Expenditure summary of TCard Project

Expenditure	Cost to Government
Interim School Student Transport Scheme (iSSTS) ticketing system	$15.8 million
Transport Network Data (TND) Costs	$4.7 million
Pre-Contract Costs	$1.9 million
Main costs: cost over those identified above	$54.5 million
Total Cost to Government	$77 million

2.69   The PPTC was initially funded through a renewable loan from NSW Treasury Corporation. On termination of the Tcard project in 2008 PTTC had borrowing debts of $60.5 million. TfNSW has advised the Committee that the PPTC also had a "Come and Go" facility with Treasury.[67] This facility was used as a

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[64] Letter from Transport for NSW, Mr Les Wielinga, Director General, 14 March 2013, p. 1

[65] Letter from Transport for NSW, Mr Les Wielinga, Director General, 14 March 2013, p. 2

[66] Letter from Transport for NSW, Mr Les Wielinga, Director General, 14 March 2013, p. 2

[67] Letter from Transport for NSW, Mr Les Wielinga, Director General, 14 March 2013, p. 3

liquidity reserve for the daily working requirements of the Tcard project prior to the recovery from Transport Operators.[68]

2.70   TfNSW also advised the Committee that during the period from 2008 to 2012 an additional debt of $52.7 million was incurred. This is summarised below.[69]

Table 2: Additional Costs 2008-2012

Expenditure	Cost to Government
Support PTTC's litigation action, including legal fees, contracted staff and monthly interest payments	$23.2 million
Payments owed for accrued Tcard project expenditure (in particular RailCorp) and roll back and decommissioning works with Transport Operators	$10.6 million
Additional 2009/2010 operating budget commitments and finalisation negotiations	$6.2million
Interest expenditure on the renewable loan (principal and capitalised interest) which is rolled over on a monthly basis	$12.8 million

2.71   In their response to questions raised by the Committee, TfNSW have identified the key lessons that have been learned from this abandoned project:

- The importance of diligent project management processes, planning and program execution for the effective management of long term projects
- The importance of ensuring that all communications between the principal and contractor are recorded in writing
- The need for any project reviews to be conducted in an informed and structured manner
- The importance of record-keeping for any testing activities observed by the principal
- The need for the principal to receive, review and where appropriate, challenge a monthly report from the contractor
- The need to clearly identify any contingency planning.[70]

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[68] Letter from Transport for NSW, Mr Les Wielinga, Director General, 14 March 2013, p. 3

[69] Letter from Transport for NSW, Mr Les Wielinga, Director General, 14 March 2013, p. 3

[70] Letter from Transport for NSW, Mr Les Wielinga, Director General, 14 March 2013, p. 4

2.72   TfNSW has advised the Committee that these lessons were shared at a seminar attended by senior members of the current Electronic Ticketing System (ETS) project and legal officers from TfNSW. The new project has implemented project management controls with a strong governance model achieved through a Program Management Office which reports to the General Manager. Risks are managed through audit and program assurance activities.[71]

Committee Comment

2.73   While it was pleasing to see that lessons learned from this project have been shared within TfNSW and have resulted in new controls being applied to the current ETS project, the Committee believes that lessons learned should be shared more widely across government agencies. Shared insights should include practical considerations in managing large projects and legal issues that arose from the termination of the contract and subsequent litigation.

INTEGRATED ENTERPRISE RESOURCE PLANNING (ERP) SYSTEMS – NSW TRADE AND INVESTMENT (NSW T&I)

2.74   The aim of this project is to deliver an integrated ERP system to the 16 agencies that make up the NSW T&I cluster. This includes HR, payroll, finance and procurement. Mr David Kennedy, Chief Information Officer for NSW T&I, in his evidence to the Committee advised that the project has two components, the ERP modules (HR and Finance) and a fully integrated local payroll:

> …one is software as a service, or SAS-based enterprise resource planning (ERP) module, which will deal with finance, procurement, assets projects and all of those components delivered by separate applications and products (SAP) business-by-design solution with a fully integrated local payroll component which will do payroll and human resources (HR).

> That payroll and human resources component will be hosted and all of the data is stored locally here in NSW. It is a transformation and a consolidation program going from multiple enterprise resource planning finance systems and reporting systems, down to that single one consolidated system.[72]

2.75   NSW T&I was the first public sector department in Australia to specify a cloud solution as first choice. Mr Kennedy advised that the software-as-a-service approach was a result of timeframes and a need to implement change quickly across the cluster:

> The software-as-a-service model enables us to implement faster and have reduced cost and dependency on hardware and infrastructure because you are just consuming the service. The flip side of that and the value of that provided to our organisation is that it means this is the first program of work across our cluster that is focused on the business and the people, not the technology.[73]

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[71] Letter from Transport for NSW, Mr Les Wielinga, Director General, 14 March 2013, p. 4

[72] Mr David Kennedy, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 3

[73] Mr David Kennedy, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 3

2.76   NSW T&I signed a $14.5 million agreement with SAP, which was broken into two architectural components. Business by Design will be used to manage finance and procurement from servers based in Germany and the department will run a locally hosted SAP payroll and human resources platform, implemented with assistance from CN Group.[74]

2.77   The Committee questioned Mr Mark Paterson, Director General, NSW T&I on the cost of implementation and the expected savings of the project by using the as-a-service model. He advised that the project had a budget of $14 million to implement, with anticipated whole of government savings of about $12.5 million per annum. The annual budget for the maintenance of the system is projected to be about $3 million per year. Mr Paterson also outlined the other benefits of using the service model, particularly regarding access for geographically dispersed teams using mobile devices:

> …one of the features of what we are doing is recognition that increasingly and particularly with a geographically dispersed team, we need to be able to work on new platforms, new technologies. So cloud-based solution means that people will be able to deal with the software as a service provision across our ERP on any platform from anywhere at any time. They will be able to do it on a mobile phone, on a Blackberry, on an iPad or an Android equivalent.
>
> Because it is a cloud-based solution we are not dependent on premises solution in a particular location and people are not tied to desktops to be able to access the HR finance systems.[75]

2.78   As the first project of its type, issues of security and sovereignty of data were important considerations for this project. Mr Kennedy assured the Committee that the storage and management of data was being managed in a hybrid approach, with data about people, staff or payroll kept on-shore with the other data stored in Germany:

> Our risk based assessment showed that the controls and measures that we were in fact putting in place with this program of work was significantly better, tighter and far more robust than we could do and possible hope to achieve ourselves.
>
> Also, being hosted in Germany by a German parented organisation, they fall under the jurisdiction of the EU Data Control rules and those criteria which again are more stringent, in fact, than Australian controls.[76]

2.79   The Committee wrote to the Department in March 2013 requesting an update on the progress of the project.   Mr Paterson responded informing the Committee that the implementation was proceeding on time and budget:

> NSW Trade & Investment has successfully completed Phase 1 of our SAP Business By Design implementation. The finance, procurement, projects and assets components

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[74] http://itnews.com.au, accessed on 5 December 2012

[75] Mr Mark Paterson, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 5

[76] Mr David Kennedy, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 7

went live on Monday 10 December 2012, followed by the integrated HR, payroll and time-sheeting elements on Monday 4 March 2013.

The first payroll run was successfully completed from the new SAP Business By Design solution on Wednesday 13 March 2013. At the time of writing I am not aware of any issues at all with payment of staff, which is both rewarding and meets our expectations.[77]

2.80   According to Mr Patterson, the transition from project, to business as usual operations and support is progressing as planned. The issues that have arisen during the overall implementation have been resolved and fine tuning of the solution for optimal performance is ongoing. The project is on budget, and has moved to the next phase which is implementation in the cultural institutions. Mr Paterson concluded that the project has gone from 'business case to market, to contract, to successful live implementation in under 12 months and is a credit to the capability and commitment of this team'.[78]

2.81   Steve Hodgkinson, Research Director for the analyst firm Ovum commented that NSW T&I is a good example of a department embracing a new model for public sector ICT procurement:

The hope is that the multi-tenant architecture and configurability of the SaaS solution will enable the many agencies within the Trade and Investment portfolio to use it as an efficient and flexible shared service.

If this hope is realised it will be an important proof point for the efficacy of the cloud services model as an alternative to more traditional in-house shared ICT services arrangements.[79]

Committee Comment

2.82   The Committee is encouraged and impressed that this innovative project is being delivered on time and on budget and it hopes that the lessons learned will be shared across government.

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[77] Mr Mark Paterson, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 7

[78] Email update from Mr Mark Paterson, Director General, Department of Trade and Investment, 15 March 2013

[79] Quoted in http://itnews.com.au, accessed on 5 December 2012

COMMITTEE FINDINGS

2.83   The Committee found that the projects discussed in this chapter were large complex projects, delivered over a number of years with ever changing deliverables and modifications to scope. It appeared to the Committee that some projects may have been too big, too long, too ambitious and out of date by the time the ICT was implemented.

2.84   The table below is a summary of the time lines and budgets of the projects reviewed by the Committee. Taken from the Auditor-General's Reports to Parliament, it clearly shows the budget increases and extensions to the completion dates.[80]

Table 3: Summary of timelines and budgets of projects reviewed by the Committee

Name of Project	Proposed completion date	Actual completion date	Original budget	Actual cost
NSW Government Licensing Project	2005	Projected to be completed 2013-14	$63 million	$108.8 million
JusticeLink	2006	2011	$30.3 million	$48.2 million 2010/11 Additional $11.8 million for enhancements
Field Resource Management	2007	2008	Stage 1 - $9.3 million	Stage 1 - $18.8 million
			Stage 2 - $7.9 million	Stage 2 - $7.4 million
Maximo Consolidation	2009	2010	$18.4 million	$31.3 million
Driver and Vehicle Computer Service Project	2004	2011	$9.4 million	$31 million
T Card	2000	Abandoned in 2010	$106 million	$129 million
Learning Management and Business Reform	2014	Ongoing	$386 million	Projected to be on budget (including $14 million from contingency)

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[80] http://www.audit.nsw.gov.au/Publications/Financial-Audits - Auditor-General's Financial Reports to Parliament, 2001 – 2012

2.85   From its review of the projects, the Committee identified the following issues with the project management of the ICT projects:

- lack of formal project management methodologies
- not identifying business benefits before preparation of business cases
- poor business cases that do not accurately reflect the actual scope of the project
- poor monitoring of project expenditure
- no testing of the viability of the projects to deliver the required outcomes
- poor communication between the agency and the suppliers
- insufficient record-keeping
- ineffective steering Committees.

2.86   The Committee was concerned to see projects running for long periods, risking the implementation of out of date technology which no longer met the needs of the agency. For example the LMBR project, designed to be implemented over an eight year period resulted in the technology moving at a faster pace than the project. Mr David Jordan, an ICT professional, in his submission argued that if a project takes longer than 2 years, 'it was virtually guaranteed to failure:'

> Tenders are structured for revolutionary change, not evolutionary change and take too long. Greater success at a lower cost can come from evolutionary change that is more adaptive and reactive and involves more frequent smaller tenders.[81]

2.87   The Committee believes that eight years is too long for any ICT project. A more realistic, useful timeframe would be two to three years and the Committee believes that the Government adopt this as best practice. The Committee also believes that DFS should conduct an audit of all projects that have been running for more than four years and that DFS and Procurement NSW undertake independent reviews of the projects identified in the audit to ensure the action plans provided by the agency enable the successful completion of the projects.

2.88   The Committee welcomed the use of an independent quality assurance process, used by DEC in the LMBR project. Mr John Blunt, in his submission commented that the Gateway Review Process (See Chapter Five for detailed analysis) provides a snapshot of progress at a given time. An internal or independent review process can then complement this, providing some assurance on the progress of programs and projects.[82] This was endorsed by the Auditor-General, who commented in his evidence to the Committee that ICT contractors can sometimes hold agencies captive as the agency does not understand the nuances of the project:

> One benefit is to have a quality assurance person to come in and review what the IT contractor is doing. So it's a quality assurance person to interface between the department. Ideally you wouldn't need that, ideally the department themselves

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[81] Submission 9, Mr David Jordan, p. 5

[82] Submission 3, Mr John Blunt, p. 2

would have those skills to be able to manage the IT contractor but in the short term I think it's not a bad solution until we can skill up the contract management skills.[83]

2.89   The Committee recognises that in responses to recommendations made by the Auditor-General agencies have reviewed their respective projects and made changes, primarily to the governance of the current project and future projects. What is not clear is whether this information is being shared. Agencies have set up Project Management Offices and introduced formal project management methodologies, which the Committee believes is a good way of ensuring all projects are dealt with under a formal governance framework.

2.90   There was limited evidence of inter-agency information sharing of the lessons learned from individual projects. The seminar held by Transport for NSW after the Tcard litigation is a good example of communicating key learning to a wider audience (the Transport for NSW cluster). The Committee believes that whole of government seminars would allow for greater transparency and the sharing of knowledge. This should include the sharing of both where things went wrong and best practice with successful projects. The ICT Leadership Group could also be used for Chief Information Officers to provide an update on current major ICT projects. The Committee believes that DFS should establish regular seminars, potentially every six months, which are open to all government agencies, where case studies can be presented and discussed. This could be reinforced with information on the website.

Recommendation 1

That NSW Government adopts as best practice, shorter, more iterative projects with timeframes of no more than two to three years.

Recommendation 2

That NSW Procurement and the Department of Finance and Services review all existing projects that have been running for over four years and request the agencies prepare detailed action plans regarding outstanding deliverables and time lines for completing the project.

Recommendation 3

That the Department of Finance and Services sponsor regular seminars across government where knowledge gained by agencies can be presented as case studies, including key lessons learned from ICT projects.

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[83] NSW Auditor-General, Background Briefing to the Public Accounts Committee, 18 October 2012, p. 8

Chapter Three – ICT Project Management

3.1   Project management covers a number of different elements, including project governance, the preparation of project documentation, including project briefs, specifications and deliverables, preparation of tender documents, financial management and the preparation of project costs through to implementation and change management. This chapter considers these and the lessons learned from projects outlined in chapter two. It also considers the use of project management methodologies and evaluates how they can provide a formal structure for project managers. The capabilities and accreditation of project managers will also be discussed.

Introduction

3.2   Effective project management is critical to the successful delivery of ICT projects. As discussed in chapter two, a review of previous ICT projects found that there were a number of issues identified with the project management process. A list of these issues can be found at paragraph 2.85.

3.3   ICT project management is just one facet of project management and ICT projects are not alone in creating problems and anxiety for governments. However, as Mr Andrew Watt from Public Service Ethics Australia commented in his submission, ICT projects will become 'more significant as technology changes and increases its transformational capacity. The smallest software glitch can create havoc across whole service areas.'[84]

3.4   High profile failures such as the Queensland health payroll system show how ICT projects can have major financial and human consequences. A Commission of Inquiry has been established to look into the failures, chaired by Richard Chesterman QC. The terms of reference for the inquiry include looking at the 'adequacy and integrity of the procurement, contract management, project management, governance and implementation process and the contractual arrangements between the State of Queensland and IBM Australia Ltd and why and to what extent the contract price for the Queensland Health payroll system increased over time'[85] The inquiry is due to report in July 2013.

3.5   In his submission to the inquiry, Mr Ian McPhee, Australian Auditor-General commented on continuing examples of project delays, cost over runs and some outright project failure. Mr McPhee identified five key areas that are critical to successful implementation of ICT projects and that highlight the importance of project management:

- a strong focus on project governance and risk management;
- effective engagement with stakeholders and management of their expectations;
- unambiguous and agreed project deliverables;

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[84] Submission 14, Mr Andrew Watt, Public Service Ethics Australia, p. 5

[85] http://www.healthpayrollinquiry.qld.gov.au/about-the-commission/terms-of-reference , accessed on 8 May 2013

- robust and effective project management; and
- appropriate agency capabilities and competencies to deliver the project.[86]

3.6   In his 2013 report to Parliament, the NSW Auditor-General reviewed the management of a major program and two projects (names not provided). The review considered the following criteria:

- project governance
- communication management
- requirements management
- data cleansing, conversion and migration
- dependency management
- quality management
- transition management
- risk and issue management.[87]

3.7   The review found that poor project management practices resulted in ICT systems not meeting the users' needs and exceeding budgets. There was also a lack of accountability for resolving issues and normal business was negatively impacted by poor system implementations.[88]

3.8   In his briefing to the Committee, the Auditor-General commented about the quality of project management:

> From a general point of view, the public sector are good at announcing a contract and signing a document but they're not as good at following it up and each of my reviews have tended to find that the project management hasn't been well done.[89]

3.9   The following graph has been taken from a recent private sector global survey by PricewaterhouseCoopers, looking at the current trends and insights into project, portfolio and programme management. Published in 2012, it provides insights from 1,524 participants from 34 industries across 38 countries.[90] It demonstrates that there are a number of factors that can lead to poor project management. The majority of these factors reflect the list of issues identified by the Committee in paragraph 2.85.

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[86] Submission 8, Australian National Audit Office, Mr Ian McPhee, p. 1

[87] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 33

[88] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 32

[89] NSW Auditor-General, Background Briefing to the Public Accounts Committee, 18 October 2012, p. 8

[90] PricewaterHouseCoopers, *Insights and Trends: Current Portfolio, Programme and Project Management Practices,* 2013, p.9

Figure 1: Factors contributing to poor project performance[91]

Factors contributing to poor project performance

Factor	Percentage
lack of change management	~3%
Inadequate risk planning	~4%
Change in strategy	~5%
Change in environment	~5%
Lack of stakeholder involvement	~7%
Poor communication	~9%
Insufficient resources	~9%
Change in scope mid project	~11%
Poorly defined goals/objectives	~12%
Lack of executive sponsorship	~16%
Poor estimates/Missed deadlines	~30%

3.10   By way of a comparison, the UK National Audit Office conducted an analysis of successful IT enabled business change programmes and projects and identified three reoccurring principles that contributed to success:

> …the level of engagement by senior decision makers; organisations' ability to act as an 'intelligent client' by ensuring they understand what it is they are setting out to do and have the skills to manage both suppliers and the change process; and having a clear understanding from the outset of the potential benefits of the business change and putting mechanisms in place to determine these have been achieved and optimised.[92]

PROJECT GOVERNANCE

3.11   Project governance is the management framework within which project decisions are made and helps make sure that a project is executed according to the standards of the organisation. Governance keeps all project activities above board and ethical and creates accountability. A project governance structure will also help define a project reporting system. It outlines specific roles and responsibilities for everyone involved in the project.

3.12   In medium to large projects, governance includes establishing a steering committee. The effectiveness of a steering committee depends upon the experience and level of commitment of its members. While individual steering Committee members are not directly responsible for managing project activities, they do provide support and guidance for those who do.

3.13   A steering committee might be formed entirely by staff from the organisation developing and implementing the project, but more usually it is made up of representatives of key organisations who are partners in the project. Ideally,

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[91] PricewaterHouseCoopers, *Insights and Trends: Current Portfolio, Programme and Project Management Practices,* 2013, p.17

[92] UK National Audit Office, Delivering Successful IT-enabled Business Change, 2007, p. 33

roles and responsibilities should be defined at the start of the project when the project structure is established, and signed off at the first steering committee meeting.

3.14   The Project Executive Sponsor is a key role providing the strategic context and direction of the project. The Sponsor guides and monitors the Project Manager's decisions, processes and progress, signs the scope of work, budget and plan and authorises and accepts the project in order that it can commence. Sponsors are also responsible for the acceptance of the project deliverables and signing off the project completion documents.

3.15   Issues regarding project governance have been reported on regularly by the Auditor-General. In the summary of the themes in his 2013 report to Parliament he highlighted the importance of project governance:

> Effective project governance is critical to ensuring project success and prudent use of taxpayer money.[93]

3.16   The Auditor-General reported on two case studies where he found a number of repeat issues. These included an absence of project governance structures and little consideration being given to stakeholder engagement.

3.17   A number of recommendations were made, that all agencies should establish:

- project governance principles through guidelines such as those provided by the Department of Finance and Services (DFS);
- clear roles, responsibilities and accountability for projects;
- appropriate stakeholder engagement throughout the life of the project;
- a formal project risk management framework to enable business owners to identify risks and appropriate migration strategies.[94]

3.18   The 2012 Report to Parliament also contained recommendations about project governance, with a recommendation that 'whole-of-government best practice project governance and data migration procedures should be developed and communicated to all agencies.'[95] The Auditor-General raised concerns about project governance during new system implementations:

> Better project governance over system implementations is required. This was highlighted in 2011 when an agency had to defer a major system replacement project pending a review of how to best meet its business needs. Inadequate skills, resources and knowledge to support the system in a shared service centre environment, poor testing and inadequate training of new users compounded the issue.[96]

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[93]NSW Auditor-General, http://www.audit.nsw.gov.au/News/Volume-One-2013-focusing-on-themes-from-2013---Governance-and-project-management-issues-on-the-rise, accessed 30 April 2013
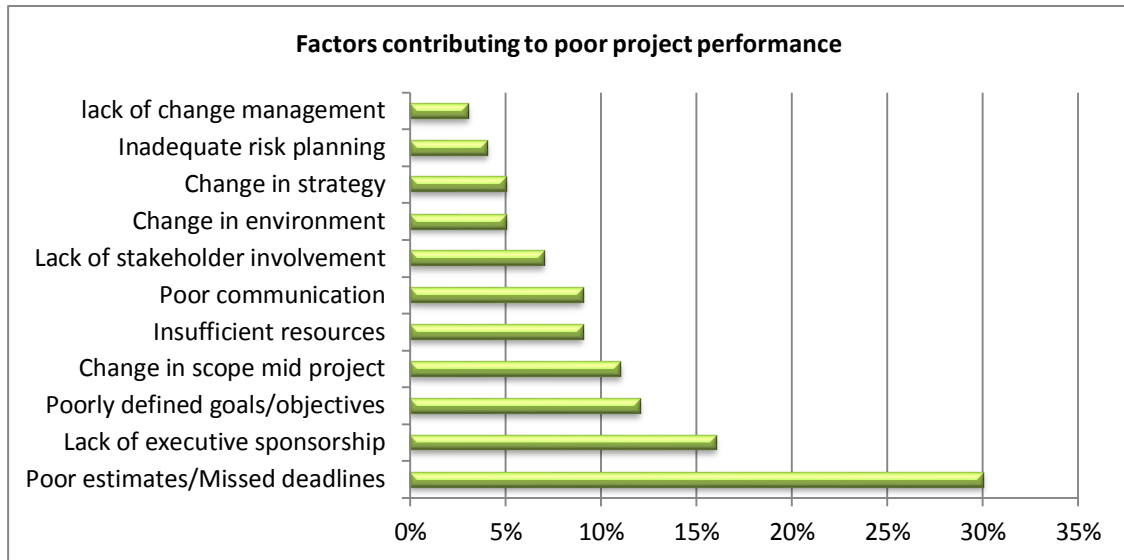
[94] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 34

[95] NSW Auditor-General's Report to Parliament, Volume One 2012, Overview of 2011 p. 28

[96] NSW Auditor-General's Report to Parliament, Volume One 2012, Overview of 2011 p. 30

3.19   In 2010, the Auditor-General undertook two Application Implementation Reviews. He found that project governance practices were implemented including oversight committees and the regular reporting of project progress, issues and cost monitoring. While these practices were appropriate for the projects, the reviews found that the governance committees were too far removed from the project and were not receiving complete and transparent information:

> In one project, I noted poorly communicated risks and issues. Specifically, critical issues were not being raised and in fact, were being closed without following due process. As a result, the Committees did not have a fair view of the project issues, risks and progress - placing the entire project at risk.[97]

3.20   In his submission Mr Watt discussed a number of suggestions to improve the governance of ICT projects. One of these was the establishment of a fully independent internal audit committee which would provide oversight on projects and services. The committee would review business unit performance of services and delivery of projects in a structured and programmed way, which would provide:

> A consistent and stable approach to service and project oversight would provide certainty for continuing projects and ensure performance metrics reflected service and project delivery. [98]

3.21   Mr Watt also recommended the introduction of a renewal plan, that could be monitored by the internal audit committee, which would alert the Executive to the emerging needs for replacement of IT solutions:

> A renewal plan would inform Treasury, Procurement and CIO positions of long term planning for ICT solutions and might assist with overcoming inertia to change which can decrease the time available for project delivery.[99]

3.22   Government agencies who gave evidence to the Committee regarding their specific ICT projects were asked about the governance arrangements that they had in place. Mr Paul Hesford, Director Corporate, Roads and Maritime Services (RMS), stated that in terms of governance within ICT, RMS had an ICT Executive Steering Committee that met monthly to oversee the ICT activities. They also use a formal project management methodology called Project Management Body of Knowledge [PMBOK].

3.23   Mr Peter Riordan, Deputy Director General, Department of Education and Communities (DEC), stated that in his agency, governance arrangement depended on the size of the project:

> So anything ranging from a project like the Learning Management and Business Reform [LMBR] project—a project of significant change in technology—would have a

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[97] NSW Auditor-General's Report to Parliament, Volume One 2011, Overview of 2010, p. 48

[98] Submission 14, Mr Andrew Watt, Public Service Ethics Australia, p. 7

[99] Submission 14, Mr Andrew Watt, Public Service Ethics Australia, p. 20

> detailed governance arrangement, ranging down to what may be a project to amend or alter an existing system that requires some program work to be done.[100]

3.24 Mr Riodan also advised sitting on the top would be a project control group, drawn from various areas of the department and on occasions from other agencies. DEC has also used quality assurance advisers, to ensure that a project is meeting all the probity requirements:

> That group would be the ultimate decision-making group for what occurs, what timing occurs and for monitoring budgets to ensure that projects remain on budget.[101]

3.25 Mr Anthony Lean, Deputy Director General, DFS, commented on how governance was addressed in the ICT strategy. He told the Committee that a key element of the ICT strategy and reforms is that control and accountability rests with directors-general for service delivery and performance:

> We are trying to get away from micro managing the activities of principal departments. Central agencies need to set a strategic framework for agencies and provide support on key enabling functions. In both procurement and ICT, director general level boards are established to oversight the new strategic frameworks.[102]

3.26 Mr William Murphy, Executive Director ICT Policy, DFS also confirmed that while the ICT strategy did not go into managing individual projects, it had established an ICT leadership group which he considered was a key part of the governance structure. He also stated that the working groups under that were bringing ICT people from across government together on a regular basis.[103]

3.27 Mr Mike Ehwaz Kano, NSW State Councillor, Australian Institute of Project Management (AIPM) stated that governance is often the cause of failure of projects. He was particularly concerned about the skill level of project sponsors:

> When we look at people who sponsor projects, mostly they have a day job and their day job is not project delivery. Their whole focus might be to run a registry or a hospital or a police service or something within the education sector but we expect them to put on a hat as a project sponsor or as a member of governance group and suddenly think in project language, thinking about benefits, schedules and project risk management. They often do that very badly.[104]

3.28 Mr David Hudson, National President, AIPM commented that arranging training for project sponsors had proved to be problematic, citing that senior managers stated they were too busy:

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[100] Mr Peter Riordan, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 29

[101] Mr Peter Riordan, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 29

[102] Mr Anthony Lean, Report of Proceedings before Public Accounts Committee, Friday 26 October 2012, p. 4

[103] Mr William Murphy, Report of Proceedings before Public Accounts Committee, Friday 26 October 2012, p. 12

[104] Mr Mike Kano, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 52

> They are running around putting out the bushfires that they created through their poor sponsorship skills and competency. Yet this has been studied quite seriously across the world and there is no reason why we cannot develop a competence base for project sponsors.[105]

3.29   Mr Kano told the Committee that there was no commitment in the ICT strategy regarding developing governance skills to enable sponsors to be effective. He suggested that there were opportunities to 'extend the ICT skills area in terms of the governance population.'[106] He advised that the AIPM is looking at developing a competence standard in portfolio and programme management, looking specifically at the areas of governance and project selection.[107]

3.30   In relation to the ICT Strategy, Mr Murphy informed the Committee that there was specific project being conducted with the Public Service Commission around ICT skills in government:

> The project was focused on getting better clarity about the ICT capabilities the Government needs. Also, part of understanding the skills set that we will need in the future is understanding the skills set we have now. DFS is working with the Public Service Commission to develop a sort of framework for understanding the ICT skill sets we have and the skill sets we will need and link that to the public sector capability framework.[108]

3.31   This was supported by Mr Paul Dobing, Executive Director, NSW Procurement who stated that training modules were being designed to focus on specific areas of capability. While the training was intended to look at addressing category management it would also pick up on themes around overall project governance. The training would look at:

> …the governance of sourcing a procurement activity through the life cycle of category management, as well as for specific areas related to categories such as ICT and others that are recognised as having unique risk elements. In practice, that is a detailed set of training and capability development that has already started to take place in recognition of that framework.[109]

Project Management Framework and Guidelines

3.32   DFS have published a number of guidelines to assist project managers. The guidelines are all available on the DFS website and agencies are advised that this set of guidelines should be used when undertaking an ICT project. The guidelines include:

- Project Management Guideline
- Benefits Realisation Guideline
- Benefits Management Plan Guideline
- Quality Management Guideline

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[105] Mr David Hudson, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 54

[106] Mr Mike Kano, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 52

[107] Mr Mike Kano, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 53

[108] Mr William Murphy, Report of Proceedings before Public Accounts Committee, Friday 26 October 2012, p. 13

[109] Mr Paul Dobing, Report of Proceedings before Public Accounts Committee, Friday 26 October 2012, p. 13

- Risk Management Guideline [110]

3.33   The use of these guidelines is not mandated or monitored and there is no evidence of how they are being used or what the take up is at an agency level. All of the guidelines provide guidance on best practice. As the project management guideline states, it has been developed to 'promote an understanding of the key requirements for successful management of a project.'[111]

3.34   Other jurisdictions have established government project management guidelines and frameworks. Both Tasmania and Victoria have developed a library of templates and guidelines that can be used by agencies. The Victorian guidelines include information on developing a business case, including options analysis, project tendering and an investment evaluation policy and guidelines.[112] The Queensland government has a project governance framework which is made available through an online knowledge centre.[113]   Western Australia has an overarching Information Technology Framework that includes a defined section for project management.

Role of central agencies

3.35   In its submission, DFS outlined the roles, responsibilities and accountabilities of each **central agency**, the key areas of responsibilities are:

- Department of Premier and Cabinet (DPC) will focus on performance and priorities including policies, initiatives and events;
- NSW Treasury will focus on effective financial and economic management;
- DFS will focus on policy reform to support agencies;
- Public Service Commission (PSC) will focus on people management, capability and workforce development. [114]

3.36   DFS explained that these roles, responsibilities and accountabilities are outlined in the Strategic Centre Initiative:

> This initiative marks a significant shift in the interaction between central agencies and other departments. For this reason, it will impact the implementation of the Auditor General's recommendations, many of which refer to project delivery functions including contract management, risk management, corruption prevention and probity.[115]

3.37   Mr Lean confirmed that accountability for the day to day management of projects rests with the directors-general:

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[110] Department of Finance and Services, Benefits Realisation Guideline, 2011, p. 10

[111] Department of Finance and Services, Project Management Guideline, 2011, p.1

[112] http://www.egov.vic.gov.au/victorian-government-resources, accessed 1 May 2013

[113] http://www.treasury.qld.gov.au/office/knowledge/financial/index.shtml , accessed 1 May 2013

[114] Submission 17, Department of Finance and Services, p. 3

[115] Submission 17, Department of Finance and Services, p. 5

A key element of these reforms is confirmation that control and accountability rests with Directors General of the nine clusters for service delivery and performance.[116]

3.38   DFS also confirmed this relationship, stating that central agencies are responsible for developing whole of government policy and governance, with project delivery functions being the responsibility of each agency head.[117]

Committee Comments

3.39   Effective project governance is vital to ensure that projects are managed correctly and deliver the business improvements expected. The ICT Strategy will be discussed in detail in the next chapter, but the Committee notes here that there is no mention of project management in the strategy. While project governance structures seem to be in place, there are concerns about how effectively they are being applied.

3.40   The Committee is concerned to see the repeat issues about project governance in the Auditor-General's reports. While the Committee accepts that the governance of individual projects is a matter for agencies, we believe that there is a role for DFS to provide proactive leadership and take responsibility for the oversight of major ICT projects in NSW.

3.41   By having a project management framework that comprises of the policies and guidelines, issued by DFS that require agencies to use them, government can ensure that best practice is being followed in all ICT projects. The Committee believes that this will also help to ensure that there is a consistent approach to project management governance in NSW.

3.42   The Committee believes that if agencies are found not to be complying with policies, resulting in poor project governance, prompt action should be taken by DFS to rectify the concerns rather than waiting for the project to go over budget and time.

3.43   The Committee also believes that the skill levels of project sponsors needs urgent review. Many sponsors sign off complex project briefs and business plans without the technical knowledge required to fully understand the deliverables. There is project sponsor training available and staff should be encouraged to attend.

Recommendation 4

That the Department of Finance and Services implement a project management framework to be applied sector wide and make its use mandatory.

Recommendation 5

That the Department of Finance and Services establish a centralised mechanism to scrutinise the effectiveness of the framework, to ensure a consistent approach to project governance in NSW.

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[116] Mr Anthony Lean, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 1

[117] Submission 17, Department of Finance and Services, p. 4

Recommendation 6

That the Department of Finance and Services and the Public Service Commission review and update project sponsor training and ensure that competencies required for effective project sponsorship are included in the revised capability framework.

Financial Management of Projects

3.44   Funding for projects in the NSW public sector is managed through business cases, requesting funding either from within the agency or externally from Treasury.   The business case examines the total lifecycle costs, benefits, risks and implementation requirements. It is also a reference for the procurement and implementation of a project or program. Critical parameters such as cost, schedule, and quality, social and environmental issues are documented, demonstrating agency capability for timely delivery of the project.[118]

Table 4: Thresholds for Business Case Submissions to Treasury

	Estimated Total Cost			
	< $5 M	$5-10 M	$10-50 M	Over $50 M
Preliminary Business Case	Not required to be submitted	No, unless requested by Treasury	Yes – for projects in years 2-4 of the upcoming forward estimates period	Yes – for projects in the upcoming 5-10 year period
Final Business Case	Not required to be submitted	Yes	Yes	Yes
Risk Assessment	Not required to be submitted	Done by agency. Results reviewed by Treasury	Done by agency. Treasury to formally sign off on risk assessments for proposals assessed by agency as low risk	

3.45   The process for submitting business cases to Treasury is set out in NSW Treasury Circular NSW TC 12/19. Business cases are only required for projects over a certain threshold amount, based on the Estimated Total Cost and risk profile thresholds shown in Table 4.

3.46   *The NSW Treasury Guidelines for Economic Appraisal* provides guidance to agencies on the preparation and submission of project cost estimates.   The guidelines cover two methods of economic appraisal - cost benefit analysis (CBA) and cost effectiveness analysis (CEA). Both techniques require as many as possible of the benefits and costs to be quantified in money terms.[119]

3.47   In their recent private sector global survey, PricewaterhouseCoopers found that poor estimation during the planning phase was the largest contributor to project failure.[120]   The Economic Appraisal Guidelines reiterate this finding,

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[118] NSW Treasury, TPP 08-5, *Guidelines for Capital Business Cases,* 2008, p. 1

[119] NSW Treasury, *NSW Government Guidelines for Economic Appraisal*, 2007, p.2

[120] PricewaterHouseCoopers, *Insights and Trends: Current Portfolio, Programme and Project Management Practices,* 2013, p.5

citing international research that found evidence of systemic bias in project appraisals, and a 'tactical under and overestimation of effects in the initial stage of project development [to] make projects look good in cost-benefit analyses and environmental impact assessments.'[121] The research suggests a tendency for the costs of major projects to be underestimated and for demand forecasts to be inflated.[122]

3.48   Underestimation of costs can mean projects are chosen that may not be economically efficient. That is, some projects proceeded that should not and some other projects failed to proceed.[123]

3.49   While a number of agencies have developed expertise in the area of economic appraisal, not all have sufficient experience in this area. Consultants can be used to either establish a general procedure for appraisals in a particular agency or undertake individual appraisals. The Treasury guidelines suggest that agencies should consider using external resources for selected projects where the size, complexity, or importance justifies their use. It recommends that agencies should aim to 'spread their economic appraisals among a range of consultants in order to gain the benefit of different approaches to particular problems'.[124]

3.50   Projects are funded on an annual cycle, which Mr Kano, from the AIPM believes results in agencies having to compete with a 'myriad of other agencies and go through the hoops with a couple of central agencies to get those dollars.'[125] He also commented that he considers the process results in agencies cutting corners, coming in too low relative to what they are actually seeking.[126] Mr Hudson, also from the AIPM, commented that at the time funding is being requested there is a 'lack of realism' with the perception that 'we simply tweak the time and cost parameters in a business case to make the business case palatable.'[127]

3.51   Mr Kano suggested that vendors are also skilled at building bids to allow for growth. He recommended benchmarking comparable larger projects in other States and other countries, checking the cost and time taken.[128]

3.52   Mr Hudson also talked about the effect of fixed price contracts on the bid process:

> …you go to the market and you ask a vendor under adverse circumstances to quote on a fixed price contract. They will build risk into that and they will automatically

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[121] NSW Treasury, *NSW Government Guidelines for Economic Appraisal*, 2007, p.23

[122] NSW Treasury, *NSW Government Guidelines for Economic Appraisal*, 2007, p.23

[123] NSW Treasury, *NSW Government Guidelines for Economic Appraisal*, 2007, p.23

[124] NSW Treasury, *NSW Government Guidelines for Economic Appraisal*, 2007, p.28

[125] Mr Mike Kano, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 54

[126] Mr Mike Kano, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 54

[127] Mr Mike Kano, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 53

[128] Mr Mike Kano, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 54

> look to the inclusion of variations because, frankly, it is the only way they make money.[129]

3.53 Mr Watt commented in his submission that the public service faces the same challenges experienced by any business. He states that the government can be seen as a 'bottomless pit of funds to prop up or promote project failures and allowing redundant activities to continue.'[130] Moreover, 'the size and complexity of the public service, changes in government and the lack of risk oversight contribute to over budget and over time projects and inefficient service delivery.'[131]

3.54 Mr Watt commented that cost blow outs or low cost estimates 'undermine the ability of government to manage government finances with certainty.'[132] He suggested that the consequence of project failures is many types of waste:

> …failures also lead to extra expense, waste of time, reallocation of resources and priorities and reduced government services. In many cases this goes unnoticed at an individual project level.

> In a whole of government sense when the failures are aggregated, they lead to a noticeable reduction in the government forward spend and adjustment to government current spending, as the State's financial position deteriorates.'[133]

Tender preparation and submission

3.55 Mr Randall Lumbewe, Managing Director of Syndeticon Electrical and Communications Pty Ltd, commented in his submission that if there was an analysis of the ICT projects, there would 'probably be a significant difference from the winning tendered prices to the final contract values for the majority of projects.'[134] Mr Lumbewe suggested that this could be due to a number of issues found throughout the project:

- a poorly written and open original specification where responses could not be truly compared
- significant variations to the original specification due to changed requirements or a poor understanding of expectations in the specification
- misinformation in the original specification
- errors in interpretation of the original specification
- withholding of variation scope of works so that the variation orders can be placed post tender award.[135]

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[129] Mr David Hudson, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 52

[130] Submission 14, Public Service Ethics Australia, p. 2

[131] Submission 14, Public Service Ethics Australia, p. 2

[132] Submission 14, Public Service Ethics Australia, p. 2

[133] Submission 14, Public Service Ethics Australia, p. 11

[134] Submission 2, Mr Randall Lumbewe, p. 1

[135] Submission 2, Mr Randall Lumbewe, p. 1

3.56   In his submission, Mr David Jordan stated that he believed that the tender process was failing to protect government against excess costs and failed deliveries.[136] Citing the Queensland payroll project, Mr Jordan raised a concern that vendors who are involved in delayed projects are still winning public sector tenders:

> It is not that these are one off cases. There is a track record of cost over runs, project delays and failures to deliver by these same vendors.

> Vendors have become proficient at manipulating the tender process. Government sector vendors have got the tender process down to an art form where failure to deliver is deemed to be a failure of scoping in the tender document rather than a failure of the vendor to deliver what they claimed.[137]

3.57   Mr Lumbewe also suggested that the cheapest price at the time of tender submission was not always the cheapest at the end of the project:

> The sweetness of a cheap winning tender response can be quickly overtaken by the bitterness of a poorly executed project. How are significant variations handled once a project is underway? I am positive that when a project is awarded under the current regime, where variations do occur, it would be a rare occasion that these are put out to tender again.[138]

3.58   Telstra, in their submission to the inquiry talked about achieving best value for taxpayers' money through the identification of actual costs, particularly where delays have occurred:

> An important consideration in the procurement process pertinent to achieving best value is that the risks associated with the various ICT options be monetised for the purpose of identifying the real contingent costs to which taxpayers are exposed if benchmarks are not achieved or delays occur. The obvious concern is that the least cost solution is not the least costly if the outcomes are unlikely to be delivered.[139]

3.59   The complexity of a project can also affect its management. The Australian Audit Office found that the larger the project and the greater level of integration involved then the higher are the risks to project success. Their audits found a number of reoccurring problems that arose during ICT projects:

- insufficient attention is given to risk identification
- insufficient consideration is given to risk that key assumptions made at the beginning of project may not be well founded
- projects are not established in manageable components to effectively manage risks
- the sequencing of activities is not designed to give maximum early warning on the more risky parts of the project

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[136] Submission 9, Mr David Jordan, p. 4

[137] Submission 9, Mr David Jordan, p. 4

[138] Submission 2, Mr Randall Lumbewe, p. 2

[139] Submission 15, Telstra, p. 1

- the monitoring of and responsiveness to, emerging risk is in sufficient.[140]

3.60   Commenting on the complexity of government projects and the gaps that result in implementations, Mr Hudson, from the AIPM, stated in his evidence to the Committee:

> …we fully understand that government business models, government business rules, even payroll system that has multiple shift options, multiple salary levels, all sorts of problems, inherently make even the implementation of good best practice software very difficult and leads perhaps in some cases to an underestimation of the gap.[141]

3.61   However, Mr Jordan argued in his submission that it is a 'misnomer that size introduces complexity'.[142]   He believes that business complexity remains the same between large and small organisations; it is only the volume that changes.[143]

3.62   DFS acknowledged in their submission the challenges facing NSW public sector agencies managing large ICT projects and advocated for the development of an integrated finance and reporting framework. In their submission they state that this framework will 'contribute indirectly to better value ICT investment by building transparency and accountability in investment decisions.'[144]

Gateway Review

3.63   The purpose of the gateway review process is to provide a level of assurance for NSW government on whether an investment is warranted, and the agency's capability and capacity to manage and deliver the project. Managed by Treasury, the reviews test the soundness of major projects. The results of each review are summarised in a report. These reports, including the agency's response to the recommendations must be included in any capital funding submission to NSW Treasury for the annual budget process.

3.64   The threshold for ICT projects requiring a gateway review is $5 million.[145] In its response to questions raised by the Committee, NSW Treasury advised that a gateway review is conducted when capital funding decisions are made and involves regular meetings with key stakeholders:

> Regular stakeholder meetings are held between the Gateway Unit and key agency personnel to discuss the agency's forward capital project and to plan their review program, which is then incorporated into the Gateway schedule of reviews.[146]

3.65   In 2011/2012, 39 reviews were conducted. The value of the projects reviewed totalled $3.2 billion, 11 of which were ICT projects valued at $737.2 million. For

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[140] Submission 8, Australian Audit Office, Mr Ian McPhee, p. 2

[141] Mr David Hudson, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 53

[142] Submission 9, Mr David Jordan, p. 4

[143] Submission 9, Mr David Jordan, p. 4

[144] Submission 17, Department of Finance and Services, p. 12

[145] Department of Commerce, Gateway Review Toolkit, 2006, p. 6

[146] Reply to Questions of Notice, NSW Treasury, 12 February 2013, p. 2

2012/2013, 27 reviews have been held to date with ten being for ICT projects valued at $706 million.[147]

3.66   In his submission to the inquiry, Mr John Blunt highlighted the benefits of completing gateway reviews:

> A gateway review delivers a peer review, in which independent, external practitioners use their experience and expertise to examine the progress and likelihood of success of the program or project. It provides a valuable perspective on the issues facing the internal team and an external challenge to the strength of the plans and processes.[148]

3.67   However, Mr Kano commented that a problem with gateway reviews is that they do not factor in project complexity and fail to identify where the agency has no experience in managing complex ICT projects. He believes that this is the challenge with gateway reviews which can lead to a 'much higher likelihood of failure'.[149]

3.68   The Australian National Audit Office reviewed the Federal Government's use of gateway reviews.[150] It found that overall gateway had been effectively implemented. In the first three years of the review process, about one in five reviews identified significant issues that needed to be addressed before the project proceeded further. In the following two years there were no reviews that identified major issues requiring urgent action.[151]

Committee Comments

3.69   Evidence of underestimation of projects costs and the variation between the costs identified in tender documents and the actual cost of the project need to be addressed. The gateway review process provides a level of scrutiny for projects over $5 million, but for projects less than this value there is little external governance or scrutiny.

3.70   The Committee believes that more should be done to improve the skills of staff preparing cost estimates and tender documents to make the process more effective and transparent. For large ICT projects, where underestimation leads to an increase in the budget, DFS and NSW Treasury should monitor these projects and provide advice to the agencies on effective financial management to ensure that project budgets are controlled.

3.71   The gateway review process provides a level of assurance at the start of the project, testing the validity of a project in terms of the cost and the proposed outcomes. However, these costs are not evaluated at the end of the project, in the benefit realisation stage. The Committee believes that this could include an assessment of how the project has offered value for money, comparing actual costs to the business benefits achieved by the implementation. Post

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[147] Reply to Questions of Notice, NSW Treasury, 12 February 2013, p. 2

[148] Submission 3, Mr E.John Blunt, p. 3

[149] Mr Mike Kano, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 55

[150] Australian National Audit Office, Report No.22 2011-12, *Administration of the Gateway Review Process*

[151] Submission 8, Australian National Audit Office, p. 2

implementation reviews and benefit realisation will be examined in the next section.

3.72   The introduction of an integrated finance and performance reporting framework will assist in managing project governance. No details were provided by DFS regarding this framework, but the Committee believes that in order to improve transparency and accountability it should be implemented as soon as possible.

Recommendation 7

That NSW Treasury and the Department of Finance and Services monitor and provide advice to agencies when cost underestimations impact on the financial management of ICT projects.

Recommendation 8

That the Department of Finance and Services and the Public Service Commission review the training currently available for the preparation of project cost estimates.

Recommendation 9

That the Department of Finance and Services implement the finance and performance reporting framework as soon as possible and consider ways to use the system to improve transparency and accountability.

Post Implementation Reviews and Benefit Realisation

3.73   All project management methodologies include a post implementation stage, where agencies can review the project. These reviews provide an opportunity to re-evaluate benefits and costs of the selected option, and examine the project design and implementation to assess the scope for improvement.

3.74   These reviews are valuable, particularly for lessons learned from individual projects, however, many agencies close projects without fully assessing whether the product or service is adopted and embedded in the organisation.

3.75   Mr Jordan commented that reviews and learning from other government departments, even from difficult projects can help agencies in structuring future tenders too avoid the same problems.[152] As we have seen in chapter 2, there has been little communication between agencies, however, the Committee does note that the ICT Leadership Group has been established and will provide a mechanism for Chief Information Officers to share knowledge and experiences. It is also hoped that the Committee's recommendation about regular sector wide seminars will improve the cross agency communications at the operational level.

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[152] Submission 9, Mr David Jordan, p. 5

3.76   A Benefits Realisation Plan can be used to define the benefits of the overall program of work and who is responsible for their realisation, measurement and reporting. The DFS Benefits Realisation Guidelines state that technology by 'itself does not deliver business benefits, technology delivers new capabilities which can be exploited to deliver business benefits.'[153] The guideline also recognises that in order to realise business benefits, agencies must go through a 'coordinated, focused combination of changes in technology, organisation, people, processes and relationships with external suppliers, customers and partners.'[154]

3.77   The plan should outline each key outcome which is considered a benefit of the program:

- baseline and target measurements to be achieved for each outcome
- a description of how each benefit will be measured
- the expected delivery schedule for each benefit
- an overview of the monitoring capabilities required to measure each specified benefit, along with details explaining how each capability will be delivered
- an explanation of the risks that may threaten the achievement of each benefit and how the threat will be handled.[155]

3.78   In his 2013 report to Parliament, the Auditor-General commented in two case studies about the setting and validating of clear business benefits. He found that business requirements were not the primary focus or were not defined. He also reported that there were no data migration strategies and no automated data transfer interfaces in place, which resulted in the manual transfer of data.[156]

3.79   Both case studies also found that comprehensive testing of the systems had not been performed to validate that all the business requirements were completed prior to implementation. There was minimal or no focus on organisational change or business transformation and accountabilities for project issues were not defined.[157]

3.80   Mr Anthony Miller, in his evidence to the Committee, commented that the Chief Financial Officer, the project management office and the auditors should be empowered to measure benefits of the project. This can take place as the project moves into business as usual and on an ongoing basis, so that you can be 'assured that the benefits of both money and effort met the original

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[153] Department of Finance and Services, Benefits Realisation Guidelines, 2011, p. 6

[154] Department of Finance and Services, Benefits Realisation Guidelines, 2011, p. 5

[155] Department of Finance and Services, Benefits Realisation Plan, p. 7

[156] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 33

[157] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 34

business case and the organisation objectives, right through project land into business as usual.'[158]

Committee Comments

3.81   Post implementation reviews are important for sharing the lessons from the project in order to make ongoing improvements. The Committee has already recommended regular government sponsored events to share lessons learned across the sector. However, the Committee believes that there should also be a formal benefit realisation review for all medium and large ICT projects. This could look at the long term implementation and the improvements and possible cost savings that have been made to the business as a consequence of the ICT project.

3.82   For benefits realisation to be effective it is crucial to identify clear benefits early in the project that relate directly to the business objectives, and to assign ownership to those responsible for planning and managing their achievement. Having sound benefits realisation plans, enhances the post implementation review phase and will increase the awareness of intended benefits throughout the project.

3.83   While identified at an early stage, the benefits can take time to be realised, so agencies must ensure that there is someone responsible for the realisation phase.

Recommendation 10

That the Department of Finance and Services encourage agencies to complete Benefit Realisation Plans for all major ICT projects.

Strategic Project Management

3.84   Strategic project management enables a strong correlation and alignment between a project scope and an agency's business strategy to help them achieve measurable business benefits from its projects. Mr Hudson defines strategic project management generically as three principal areas:

> …governance and strategy, that is, the overall governance arrangements for project delivery overall and within a project, including the alignment of the project to strategic objectives—that is one. The second is the importance of best practice project delivery methods. The third general area is the importance of the development and sustainment of a human capital strategy within an organisation.[159]

3.85   One way to achieve strategic project managed is by establishing a project management office (PMO) that is able to align projects with the agency's strategic strategy. In 2012, the AIPM reported on a *PM-Partners Group* Australian PMO Trend Survey, with PMO Managers from global and local top

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[158] Mr Anthony Miller, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 48

[159] Mr David Hudson, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 51

200 companies contributing. The initial findings of this survey found that there was a 41 per cent improvement in overall project success rates and 80 per cent of this contribution was attributable to the PMO. Over 60 per cent of the respondents had also established Project Management Communities of Practice to improve overall corporate knowledge.[160]

3.86   A PMO can provide the strategic management of all projects being undertaken by an agency. It can also help engage and facilitate executive sponsorship for the projects. As seen in the graph illustrated in Figure 1, the PricewaterHouseCoopers survey found that a lack of executive sponsorship was the second largest factor that contributed to poor project performance.[161]

3.87   The PMO plays an important role in ensuring that projects are initiated only after the required decisions and resourcing have been obtained and provide oversight of projects that enable the possible termination of unprofitable projects. They can also provide guidance on the application of the project management methodology used by the agency, and ensure its ongoing development.

3.88   Mr Paul Hesford, Director Corporate, Roads and Maritime Services (RMS) told the Committee about the PMO established in RMS, that sets up a 'framework of policies, procedures and processes which projects run through, right the way from the beginning at the conception of an idea right the way through to the delivery'.[162]

3.89   In his submission to the Committee, Mr Miller recommended the introduction of PMO accreditation from AIPM. This assessment-based accreditation program would enable agencies to 'embark on a process to continually improve their project management capabilities on an organisation-wide basis.[163]

3.90   Ovum in their submission talked about the common sales tactic of 'forward sell,' that is to persuade a customer to buy in advance of their future requirements. Ovum recommend that agencies need to understand their 'pipeline of projects' for the next three to five years and which of these projects may require a particular vendor software product.[164] Equally, they need to understand the deployment of other vendor technologies, so that consolidation opportunities can be evaluated.[165]

3.91   Ovum highlighted two critical elements of a strategy for achieving the best value from any major software vendor:

[160] AIPM, http://www.aipm.com.au/documents/3G/NSW_Chapter_Newsletter_February2012.pdf , accessed 1 May 2013

[161] PricewaterHouseCoopers, *Insights and Trends: Current Portfolio, Programme and Project Management Practices,* 2013, p.4

[162] Mr Paul Hesford, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 19

[163] Submission 9, Mr Anthony Miller, p. 12

[164] Submission 18, Ovum, p. 1

[165] Submission 18, Ovum, p. 1

Adopt a software asset management approach: Adopt a more strategic approach to thinking about the negotiation in a broader software asset management strategy. Look at the full portfolio of software assets, compliance issues and contractual arrangements rather than focusing on individual contract conditions or framework deals.

Maintain a credible Plan B: Have a well-developed and costed plan for migration away from every key vendor's products. This is both a negotiating strength…and may turn to be a necessary alternative path if negotiations break down.[166]

3.92 In his submission, the Australian Auditor-General highlighted the importance of long term strategic planning and ensuring that proposed ICT projects reflect this direction. He quoted his audit of the Australian Department of Defence, (ANAO Report No. 19 2011-2012, *Oversight and Management of Defence's Information and Communication Technology*), which highlighted that long term planning is 'both desirable and practical; and also that an ongoing effort is likely to be needed to achieve those long term plans.'[167]

3.93 Mr Kano also raised the challenges for smaller agencies, whether they try to delineate procurement expertise separate from project expertise or whether you expect the same people to do both roles and have certain levels of competency in both of them. He commented 'that this is really an issue for those smaller agencies that currently try to do both'.[168]

Committee Comment

3.94 Integrating ICT projects into long term strategic planning is an important step to embedding ICT as an integral part of an agency's strategic and change management strategies. Using a PMO has been found to improve the success rates of projects. The Committee believes that agencies should be encouraged to establish PMOs to strategically manage, not just ICT but all projects.

Recommendation 11

That the NSW Government encourage agencies to establish project management offices to strategically manage projects, including ICT projects.

PROJECT MANAGEMENT METHODOLOGIES

3.95 A systematic and organised set of processes can help bring order and efficiency to project management. The PricewaterhouseCoopers survey found that organisations who execute projects successfully employ effective project management practices as a tool to drive change:

Given the strategic impact that projects have on business, organisations must follow effective project management, processes that capitalise on innovation; measure

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[166] Submission 18, Ovum, p. 2

[167] Submission 8, Australian National Audit Office, Mr Ian McPhee, p. 2

[168] Mr Mike Kano, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 51

progress, value and risks; and confirm that the right projects can be delivered in alignment with organisational strategy.[169]

3.96   The survey also found that the percentage of organisations that use established project management methodologies increased success in the key performance indicators of quality, scope, budget, time and business benefits.[170]

3.97   Mr Lean commented that agencies have the accountability for managing their own projects and there is already a high degree of the use of project management methodologies:

> I do not think they are mandated at the moment across government; in fact I am sure they are not. Nonetheless, agencies do recognise the need for good project management and change management discipline.[171]

3.98   There are a number of different project methodologies such as PMBOK© and PRINCE2© being used in the public sector. The introduction of these methodologies helps set out what the project manager will do, and the manner in which communication will take place. The level of detail or the number of stages of plans is a matter for the project manager.

Project Management Accreditation

3.99   The current NSW Public Sector Capability Framework sets out project management capabilities under the section 'Capacity to Deliver'. The framework states that staff must demonstrate that they 'participate in/or leads successful projects, using strong communication and organisational skills to balance conflicting priorities and manage resources.'[172]   The elements for project management are:

- initiates and plans
- builds a team
- controls projects
- monitors projects
- evaluates projects.[173]

3.100   The AIPM have also developed a number of competency standards:

- Certified Practising Project Practitioner
- Certified Practising Project Manager
- Certified Practising Project Director
- Certified Practising Project Executive.[174]

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[169] PricewaterHouseCoopers, *Insights and Trends: Current Portfolio, Programme and Project Management Practices,* 2013, p.3

[170] PricewaterHouseCoopers, *Insights and Trends: Current Portfolio, Programme and Project Management Practices,* 2013, p.4

[171] Mr Anthony Lean, Report of Proceedings before Public Accounts Committee, Friday 26 October 2012, p.12

[172] NSW Public Sector Capability Framework, p. 27

[173] http://www.pscapabilities.nsw.gov.au/capability-framework/, accessed 24 May 2013

[174] AIPM, http://www.aipm.com.au/AIPM/CERTIFICATION/COMPETENCY_STANDARDS, accessed 28 April 2013

3.101   Dr Robert Waldersee, Executive Director, Corruption Prevention Division, Independent Commission Against Corruption (ICAC) raised concerns about project management capabilities and the management of project functions more generally. He commented that there 'seems to be a shortage of IT project managers in government with the knowledge necessary to adequately assess the performance of contractors'.[175]

3.102   Mr Dylan Jay, Director and Chief Technology Officer from PretaWeb Pty Ltd, commented that the best projects that he had been involved with had project managers who moved across organisations and worked on projects where they had an expertise in the type of product or systems being implemented:

> …they would ask the right questions and they would create a very focused tender and it would make it much more inviting for people to respond to.

> …what you tend to get instead is you get these big kitchen sink tenders where they have asked for everything under the sun.[176]

3.103   The importance of project management competencies and the development by DFS of competency-based assessments for project managers was raised by Mr Kano:

> It is very important to actually look at the competencies of someone, that they have demonstrated certain skill sets over a period of time and that has been fully assessed. Within AIPM there are things like the certified practicing program director and program manager components.

> I think the ICT skills area is certainly an area where greater standardisation across the public sector is going to yield efficiencies.[177]

3.104   Concern about the skill of project managers led Mr Hudson to recommend that the government should ask that service providers confirm that their 'project practitioners are certified competent project managers.'[178]

3.105   Mr Athol Chalmers, from the Australian Computer Society advised the Committee that his organisation provided an assessment and accreditation system for ICT professionals. Using the Skills for the Information Age (SFIA) framework they look at the skills needed to be an ICT professional alongside the competencies you have in those skills:

> At a base level it is important that you have a framework for assessing and accrediting and certifying people's levels of skill. If you look at other professionals like the medical profession, lawyers and accountants, they have those well-established professional societies that provide those levels of certification which give

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[175] Dr Robert Waldersee, Report of Proceedings before Public Accounts Committee, Friday 26 October 2012, p.15

[176] Mr Dylan Jay, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 48

[177] Mr Mike Kano, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 51

[178] Mr David Hudson, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 53

employers confidence that the person they are hiring can do what they say they can do.[179]

3.106   IT professional capability in SFIA comes from a combination of professional skills, behavioural skills and knowledge. The South Australia government has included in its new ICT strategy a call for a sector wide application of the *SFIA* framework as a prerequisite to ensuring that staff are acquiring the right skills at the right levels.[180]

3.107   Mr Chalmers also highlighted the need for ICT professionals to maintain their skill levels and be aware of the changes and advancements in ICT and for government agencies to plan for what ICT skills will be required in the future. This is particularly important given the pace of change in ICT. [181]

3.108   DFS advised that the skills and capability development initiative includes developing a strategy to meet the 'public sector's ICT workforce needs, and enhancing the public sector capability framework to incorporate ICT skills and knowledge.'[182] DFS have stated that these pieces of work will include consideration of the skills and capabilities needed to implement complex ICT projects and once available, agencies will be able to use the strategy to identify their training needs. [183]

3.109   The NSW ICT strategy recognises the need for 'tailoring the training for executives, business leaders, policy staff and ICT technical professionals'.[184] It states that a working group will be set up to develop 'strategies that promote and support a consistent whole of sector approach.'[185] However, the strategy does not identify any specific actions relating to project managers and the development of project management competencies.

3.110   In their submission to the inquiry, the Public Service Commission (PSC) set out the joint work it is doing with DFS to identify where the public sector needs to develop its skill base and how to attract and retain the right people. The workforce management strategy includes the following elements:

•   Mapping the mix of capabilities needed to deliver the ICT strategy
•   Examining the optimum mix of employment arrangements to meet the needs of the rapidly evolving ICT function and taking account of the highly variable ICT specific labour market
•   Developing tailored recruitment methods for filling ICT roles

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[179] Mr Athol Chalmers, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 23

[180] South Australia, Connected Ready for the Future (Consultation Draft), 2013, p. 20

[181] Mr Athol Chalmers, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 23

[182] Submission 17, Department of Finance and Services, p. 19

[183] Submission 17, Department of Finance and Services, p. 19

[184] NSW Government, ICT Strategy 2012, p. 39

[185] NSW Government, ICT Strategy 2012, p. 40

- Considering options for accreditation.[186]

Committee Comments

3.111   The use of a formal project management methodology is an effective tool to improving how ICT projects are managed in the NSW public sector. While the Committee is not advocating a specific project management methodology, it believes that DFS should ensure that an appropriate methodology is being used by all agencies for all major ICT projects. This could be achieved through improvements to the reporting of these projects, via a projects dashboard (see recommendation 31).

3.112   The Committee recognises the roles of the central agencies as set out in the Strategic Centre Initiative, however failures in project management have been a reoccurring issue that the Committee believes central agencies could be more proactive in. The Committee believes that DFS should take a role in monitoring the use of project management methodologies and in providing advice and guidance to agencies on best practice.

3.113   Having suitably trained project managers is vitally important to improving the management of projects. The use of a competency framework will provide a consistent approach during recruitment and for staff development.   The Committee believes that options for project manager accreditation should be included in the work being done by DFS and PSC.

Recommendation 12

That the Department of Finance and Services ensure that an appropriate project management methodology is used by agencies for all major ICT projects.

Recommendation 13

That the Department of Finance and Services and the Public Service Commission review and consider options for the accreditation of project managers.

Recommendation 14

That the Department of Finance and Services and the Public Service Commission ensure that the new ICT capability framework being developed takes into account specific competencies regarding ICT project management.

New Approaches - Concept Testing

3.114   The ICT Strategy contains information about *Concept Viability*, an approach that can enable effective early engagement with the ICT industry. This concept supports the development of new technologies with the aim to enable business

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[186] Submission 19, Public Service Commission, p.1

change.[187]   The Strategy comments that this is a step designed to 'fit with traditional proof of concept or feasibility assessment.'[188]

3.115   Concept Viability has been developed by the UK company Intellect Information Technology.   It describes the process as a product that allows agencies to have a two way dialogue with the ICT market and provides suppliers with an opportunity to shape and validate ideas, plans and requirements:

> The process takes place within a safe and neutral environment, which helps customers assess the opportunities and risks associated with specific projects before committing themselves to a particular approach.[189]

3.116   The ICT Strategy states that Intellect is able to draw on a range of expertise from their '800 member companies to provide an assessment of a proposal highlighting risks or issues and providing a market perspective.'[190]

3.117   Concept Viability was referenced as an example of good practice in the UK House of Commons Public Accounts Committee's conclusions and recommendations on *Delivering successful IT-enabled business change,* published in 2007. The Committee recommended the greater use of tools and techniques such as the 'IT industry body Intellect's Concept Viability Service to help test at an early point the robustness of new IT enabled plans and proposals'.[191]

3.118   The Australian Information Industry Association (AIIA) commented on the challenges faced by the public sector in being effective in bringing about business transformations:

> Once of the key challenges facing the public sector is how to transform policy ideas into the desired outcomes, particularly when this involves IT enabled business change. Concepts that appear straightforward on paper can be extremely difficult or risky to execute, especially when the technology is new or emerging, or when transaction volumes are high.[192]

3.119   The AIIA identified a number of advantages of the service in enabling early engagement with the ICT industry:

- Allows suppliers to show the client how the market can meet their need
- Provides early visibility of key risks and issues
- Give suppliers the opportunity to manage expectations of what the market can and cannot contribute to the proposed programme.[193]

3.120   The ICT Strategy acknowledges the importance of early engagement in order to address the 'challenges of transforming policy areas into the required outcomes

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[187] Submission 16, Australian Information Industry Association, p. 4

[188] NSW Government, ICT Strategy 2012, p. 28

[189] Intellect, http://www.intellectuk.org/cross-government-initiatives/concept-viability, accessed 1 May 2013

[190] NSW Government, ICT Strategy 2012, p. 28

[191] House of Commons Committee of Public Accounts, *Delivering successful IT-enabled business change,* 2007, p.5

[192] Submission 16, Australian Information Industry Association, p. 4

[193] Submission 16, Australian Information Industry Association, p. 4

and capturing the full opportunities from ICT enabled solutions.'[194] AIIA summarised the advantage of using concept viability at an early stage:

> The earlier the concept is tested, the better; clients will gain greater understanding of the achievability of their ideas and high-risk proposals can be modified or abandoned before any substantial investment is made.[195]

3.121 In her evidence to the Committee, Ms Suzanne Campbell, Chief Executive Officer, AIIA, commented that concept viability provided benefits to both government and customers:

> For customers, it provides a one-to-many engagement with a range of technology companies, including SMEs. It raises the profile of the procurement opportunity to perhaps a more diverse supplier base than traditional techniques might allow. It identifies potential areas for innovation because it is forward looking, rather than backward looking. It provides early visibility of risks and challenges and innovation opportunities. It also allows the pros and cons of different technical, commercial and delivery approaches to be explored.[196]

3.122 Ms Campbell explained that the AIIA were looking into using the tool under license in Australia, but at the time of giving evidence they were still exploring opportunities with both Federal and State governments.[197]

3.123 Other concept testing options identified by stakeholders, included Telstra's 'Innovation Centre' which offers a 'multi-faceted learning environment where the NSW Government can validate their business case through a scenario-based proof of concept trial that can be tested within a department.'[198]

3.124 In their submission the AIIA discussed the use of 'SME Speed Dating'[199] which would offer ICT SMEs an opportunity to offer their 'innovative products and services to the NSW Government.'[200] They also talked about the use of an 'ICT Early Engagement Service'[201] that would enable government agencies to gain industry advice before key decisions are made.

Committee Comment

3.125 Testing new ideas and discussing with the industry the viability of a project, before a detailed business case is prepared is a cost effective way to engage with industry at an early stage. It also helps agencies gain different perspectives about their proposals. While proof of concept demonstrations are currently used by the industry to show how their products can deliver on the requirements, testing the options with a number of different companies

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[194] NSW Government, ICT Strategy 2012, p. 28

[195] Submission 16, Australian Information Industry Association (AIIA), p. 4

[196] Ms Suzanne Campbell, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 59

[197] Ms Suzanne Campbell, Report of Proceedings before Public Accounts Committee, Wednesday 28 November 2012, p. 59

[198] Submission 15, Telstra, p. 3

[199] Submission 16, AIIA, p. 5

[200] Submission 16, AIIA, p. 5

[201] Submission 16, AIIA, p. 3

reduces the risk of complicated customisations of ICT products. Again, while the Committee is not advocating a specific approach, it believes that this concept that should be implemented across NSW public sector.

Recommendation 15

That the Department of Finance and Services develop a model for the use of concept testing.

Chapter Four – NSW ICT Strategy 2012

4.1   The NSW ICT Strategy and website was launched by the NSW Government on 4 May 2012. The Committee acknowledges that the implementations of the actions set out in the strategy remain ongoing and full evaluation will take place in the future. It is not the intention of this chapter to revisit the strategy and make suggestions about its content, instead the Committee will look at the whether the strategy has sufficient information to be able to deliver the changes identified and if it has addressed the recommendations from the Auditor-General.

Introduction

4.2   In his foreword to the ICT Strategy, the Hon Greg Pearce MLC, Minister for Finance and Services, emphasised that the Strategy is 'an ambitious strategy with no easy or quick fixes.' Mr Michael Coutts-Trotter, Director General, Department of Finance and Services (DFS), acknowledged in his foreword that information technologies, social media, mobile devices and cloud computing are routinely used by communities, but governments have been slow to embrace and take advantage of them.[202]

4.3   The ICT Strategy aims to reduce duplication and encourage the sharing of information between government agencies:

> Government needs to derive better value from its annual investment, and ICT should be leveraged more strongly to drive better service delivery outcomes. There was a shared view across government that the NSW public sector needs to reduce duplication and address an inconsistent and fragmented approach to ICT. Agencies need to share information, work with the community and industry, and provide services to citizens using the latest technology.[203]

4.4   The Strategy includes 85 actions to be delivered by the end of 2014. DFS, the Department of Premier and Cabinet (DPC), the Public Service Commission (PSC) and the Office of the Information Commissioner (OIC) are responsible for delivering the actions. Mr William Murphy, Executive Director, ICT Policy, DFS commented on how the new strategy differed from previous versions, describing it as a work plan and not a road-map:

> One thing the Committee might notice about the ICT strategy is that it is not a five or 10-year road map. I would describe it more as an evolving work plan. There are around 85 actions, things we need to do now, that are either building blocks for what we need to achieve in the future or take us in the direction that we need to go. Those actions will be updated and built on as the strategy evolves and as the ICT environment in government changes towards the new model.[204]

4.5   The following diagram has been taken from the Strategy; it sets out the key elements of the Strategy and the expected outcomes.

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[202] NSW Government ICT Strategy, 2012, Forward from the Minister

[203] http://www.services.nsw.gov.au/ict/about (accessed 22 February 2013)

[204] Mr William Murphy, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 2

Figure 2: Priority Indicatives, key services capabilities and outcomes of ICT Strategy[205]

Priority indicatives	Key Service capabilities	Outcomes
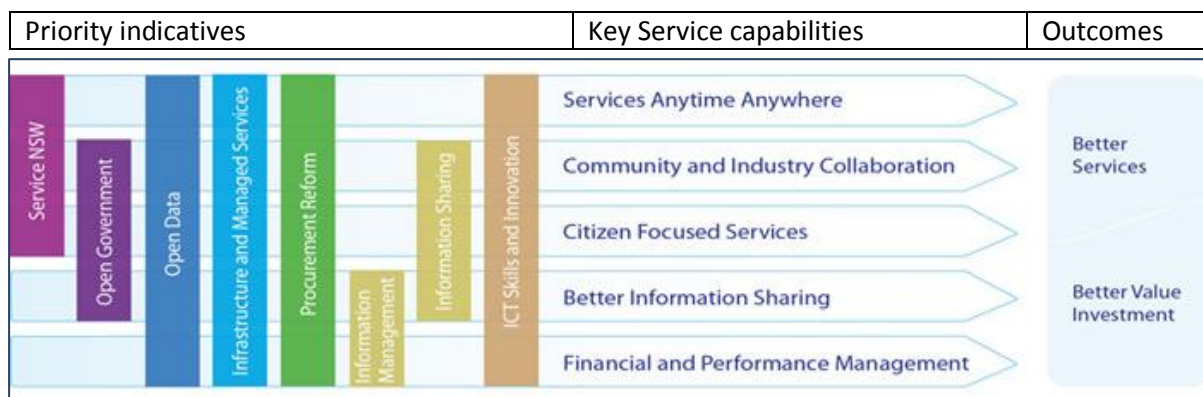
4.6   The Strategy outlines five key services capabilities and two outcomes: better services and better value investments. The actions identified through this process will form the basis of initiatives to be undertaken. The Strategy also sets out the following priority areas:

- Service NSW
- Open Government
- Open Data
- Infrastructure and Managed Services
- Procurement Reform
- Information Management
- Information Sharing
- ICT Skills and Innovation.

4.7   In its submission to the Committee, DFS explained that the objectives of the Strategy are to establish a clear, long-term strategic direction for investment and use of ICT and to ensure that ICT policy is flexible, to allow Government to take advantage of new innovations in ICT.[206] The Department also explained the key principles that would be applied in order to achieve the objectives:

1) Strategy implementation is led at the most senior levels of government. The ICT Board, represented by Directors-General of key principal Departments, has been established to drive and be accountable for a whole of government approach to ICT.

2) Strategic engagement with industry is integrated into the implementation of the ICT Strategy. An ICT Advisory Panel comprised of senior leaders from the private sector and research community has been established to provide independent advice and expertise.

3) A whole-of-government focus on improving capability in ICT enabled-service delivery.

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[205] NSW Government ICT Strategy 2012, p. 1

[206] Submission 17, Department of Finance and Services, p. 4

4) A new portfolio management approach to ICT in NSW to reduce duplication, improve the productivity of government operations, and ensure efficient and effective investment in ICT.[207]

Other Jurisdictions

4.8 Other jurisdictions are also trying to deal with the rapidly changing environment and the need to provide services. They likewise recognise the need to be flexible to ensure they are able to keep up with the rate of technological change.

4.9 The Committee reviewed the ICT strategies from South Australia, Queensland, Victoria and the Federal Government. The table at Appendix four is a summary of the key elements of these strategies. It shows that there is a level of consensus about the outcomes and objectives, key drivers for change and new initiatives and ideas in relation to ICT.

4.10 The South Australian government is currently conducting public consultations as part of the development of its new ICT strategy, and some of the information contained in the table is taken from its position paper on the proposed strategic approach to ICT across South Australian Government. In other jurisdictions, ICT strategies are recent and cover the period from 2009–2015. While the challenges are similar, opportunities to use ICT to raise productivity across the public sector are also similar. All jurisdictions recognise the rapid rate of change in the way people communicate and do business.

4.11 The strategies all recognise the importance of integrating technology with policy development and delivery. The Australian Public Service strategy comments that this is needed in order to improve the efficiency of government operations:

> …encourage people to access government services online, and making it easier for them to do so, increases people's digital confidence and digital literacy. This makes it easier for the Government to facilitate online engagement and collaboration with people, communities and business, to improve service delivery and contribute to policy and regulatory matters.[208]

4.12 In its submission to the inquiry, DFS commented that the NSW strategy 'put in place the necessary building blocks for the public sector to significantly improve service delivery and derive better value ICT investment.'[209] They stated that the development of a 'Service Catalogue, virtualisation and consolidation of infrastructure, the adoption of a service orientation and the development of an ICT skills and capability framework are key initiatives that will support these objectives.'[210]

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[207] Submission 17, Department of Finance and Services, p. 4

[208] Australian Public Service, Information and Communications Technology Strategy, 2012-2015, p. 12

[209] Submission 17, Department of Finance and Services, p. 12

[210] Submission 17, Department of Finance and Services, p. 12

Committee Comment

4.13   The Committee believes that the integration of ICT in achieving enhanced policy development and improvements to service delivery is an important measure of the success of the NSW strategy. As we have seen, ICT projects are now viewed as elements of wider business transformation programs and it will be important that the benefits realisation of these projects is acknowledged and reported on.

Concerns raised by NSW Auditor-General

4.14   In his briefing to the Committee, the Auditor-General commented that he was pleased that the ICT Strategy had a 'fairly robust timetable of things that they are going to achieve.'[211] However, he also questioned whether the Strategy adequately covered the management of ICT projects, dealt with his concerns about change management, whether the workforce has the appropriate skills, and how guidelines issued by central agencies would be implemented and enforced.[212]

Project Management

4.15   As seen in the chapter two and three, the Auditor-General has raised concerns about the management of a number of ICT projects. For example, he noted that his financial audits of major ICT projects, 'have tended to find that the project management hasn't been well done.'[213] These projects have resulted in significant costs and many gave rise to concerns about standard of project management in NSW. In his briefing to the Committee, the Auditor-General commented that the strategy 'covered procurement and how to procure things' but that there was little information about change and project management.[214]

4.16   The strategy contains no specific information about project or change management. The Committee heard evidence from DFS regarding the limited role of central agencies in regulating ICT project management.

4.17   Currently the governance of projects is the responsibility of individual agencies. Mr Anthony Lean, Deputy Director General, DFS, told the Committee that there was 'a high degree of the use of project management disciplines, like PRINCE2©.'[215] He acknowledged that these methodologies were not currently mandated across government, but believed that agencies 'recognise the need for good project management and change management discipline'.[216]

4.18   Mr William Murphy, DFS confirmed that the ICT strategy does not go to managing individual projects, but he reported that the ICT Leadership Group, along with the working groups, would bring information together from across

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[211] NSW Auditor-General, Background Briefing to the Public Accounts Committee, 18 October 2012, p. 1

[212] NSW Auditor-General, Background Briefing to the Public Accounts Committee, 18 October 2012, p. 7

[213] NSW Auditor-General, Background Briefing to the Public Accounts Committee, 18 October 2012, p. 2

[214] NSW Auditor-General, Background Briefing to the Public Accounts Committee, 18 October 2012, p. 1

[215] Mr Anthony Lean, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 11

[216] Mr Anthony Lean, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 11

government in an informal network, including challenges and lessons learned from projects.[217]

Committee Comments

4.19   The Committee acknowledges that implementation of the actions set out in the ICT Strategy remains ongoing and any evaluation of success will take place in the future.

4.20   Other strategies reviewed by the Committee addressed certain aspects of project management: some stated that central agencies would provide advice and guidance, while others set out a specific role for central agencies. Some established a whole of government response: for example, Victoria focused on adopting sound project management methodologies and improving skills and capabilities of project management staff.[218] The Queensland Government ICT Strategy states that it will develop and implement 'a whole-of-government portfolio management approach and standard approaches for successful project delivery.'[219]

4.21   The Committee believes that the connection between the Strategy and project management is inadequate. Such a connection is important because project management in NSW has a direct impact on the overall management of ICT at an agency level.

4.22   While the Committee accepts that agencies are responsible for managing their individual projects, central agencies can play a role in monitoring and providing advice on major ICT projects to ensure that that effective methodologies are in place. As we have stated in recommendation five, the Committee believes that DFS should have a central role in scrutinising how projects are managed in the NSW public sector.

Recommendation 16

That the Department of Finance and Services establish a centralised mechanism to scrutinise the effectiveness of project management in the NSW public sector.

Contract Management

4.23   Lack of information in the Strategy about contract management was another concern of the Auditor-General. The Performance Audit report *Managing IT Services Contracts*, tabled in 2012, identified significant opportunities to improve contract management procedures and capabilities across government. The audit reviewed the IT contracts managed by NSW Police and NSW Health and it found that while the agencies had frameworks in place for the management of the contracts, there were gaps in their implementations which limited their effectiveness. Specifically the audit found that there was no one

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[217] Mr William Murphy, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 11

[218] Victorian Government ICT Strategy 2013, p. 7

[219] Queensland Government, *Towards Q2 through ICT,* The Queensland Government's strategy for government ICT, 2009-2014, p. 4

assigned to the role of contract manager and contract management plans were limited or not in place.[220]

4.24   The Auditor-General also commenting on the broader issues and risks in managing IT services and outsourcing arrangements.   The three contracts reviewed were 'complex and high risk because the services being provided were long term arrangements that supported the agencies' core business systems.'[221]

4.25   In his evidence to the Committee the Auditor-General also raised concerns regarding the lack of processes around the review and renewal of contracts and the effect of changing personnel on the long term management of contracts.

4.26   The ICT Strategy recognises the importance of effective contract management and work has already been done to update the Procure IT contracting framework and short form contracts which support low risk contracts with Small and Medium Enterprises (SME).   The Strategy also recognises the requirements for long term contracts and partnerships with vendors, as well the need to move to a 'pay-as-you-go consumption models.'[222] Mr Lean commented that this contract framework provides a set of minimum standards which act as a default position that can be varied according to an agency's risk assessment.[223]

4.27   The Strategy expands the role of the **ICT Board** to include procurement governance arrangements, which require that the ICT policies and strategies be endorsed by the Board.[224] The ICT Strategy also establishes an **ICT Procurement and Technical Standards Working Group.** Key objectives of the group include reviewing the standard specifications on existing ICT contracts, which are due for renewal.[225]

4.28   Mr Lean advised the Committee that he felt that issues regarding contract management and procurement would be addressed through the implementation of the Agency Accreditation Scheme, which requires agencies to have contract management plans in place:

> In response to an Auditor-General's recommendation concerning the review of ICT service contracts we have actually changed the accreditation scheme which was set up by the former State Contract Control Board to specifically include an assessment of whether agencies have processes in place to develop contract management plans.[226]

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[220] NSW Auditor-General's Performance Audit Report, *Managing IT services contracts*, 1 February 2012

[221] NSW Auditor-General's Performance Audit Report, *Managing IT services contracts*, 1 February 2012, Executive Summary

[222] NSW Government ICT Strategy, 2012, p. 29

[223] Mr Anthony Lean, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 9

[224] NSW Government ICT Strategy, 2012, p. 28

[225] NSW Government ICT Strategy, 2012, p. 28

[226] Mr Anthony Lean , Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 4

Committee Comments

4.29   While the Committee notes that the Strategy outlines a number of initiatives regarding contract management, the actions contained in the Strategy merely comment that the 'Government will also consider ways to improve its management of ICT contracts and suppliers, after they have been awarded.'[227] The Committee believes that DFS and NSW Procurement should issue guidance to agencies on contract renewals and the management of roll overs.

4.30   Openness and transparency are important to the successful implementation of the Strategy. This includes monitoring of schemes and guidelines issued by central agencies. The Committee notes that an update on the progress of the priority initiatives has been posted onto the '*Have Your Say'* website,[228] but believes that more can be done to inform agencies and the wider community about the progress of the implementation.

4.31   The Committee believes that DFS should consider providing more information in its updates on the implementation of the actions set out in the Strategy. The Committee believes DFS can use the implementation plan as a template to capture specific details on the progress of each action, including timelines and expected outcomes. Over time, information about the effectiveness and impact of implementation could be added.

Recommendation 17

That the Department of Finance and Services and NSW Procurement provide guidance to NSW Government agencies on renewals and/or roll overs of ICT contracts.

Recommendation 18

That the Department of Finance and Services provide more detail regarding the implementation and effectiveness of the NSW ICT Strategy. This should be made public on the ICT Strategy website.

Information Security

4.32   Information security has been a repeat issue in the Auditor-General's financial reports and performance audits. He reported that in 2012, the primary issues relating to information security related to user administration (24 per cent of all 2012 issues), with over a half of these relating to weak processes around user accounts and access reviews. There were also concerns about weak password parameters, not being in line with the agencies policies.[229]

4.33   A new Digital Information Security Policy was issued in December 2012. The Premier's Memorandum M2012-15 states that digital information security requirements for the NSW public sector are to be established, including the requirement to have 'an Information Security Management System (ISMS) that takes into account a minimum set of controls, and requirements relating to

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[227] NSW Government ICT Strategy, 2012, p. 30

[228] http://engage.haveyoursay.nsw.gov.au/document/show/877 accessed 24 April 2013

[229] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 30

certification, attestation and the establishment of the Digital Information Security Community of Practice.'[230] Agencies must implement the Policy requirements by the end of 2013.

4.34   In 2010, the Auditor-General identified weaknesses in implementing the previous information security policy, in particular the lack of enforcing and monitoring compliance. In 2013 he made recommendations to all agencies to ensure compliance with the ICT strategy and the Premier's Memorandum, M2012-15:

- revise their information security management framework to align with Premier's Memorandum
- enhance agency compliance with information security procedures and guidelines to focus on appropriate user access requirements including segregation of duties and security configurations
- consider information security requirements during new system implementations and business process changes.[231]

4.35   In its 2012 Report on the follow-up of the Auditor-General's performance audit of ICT information security, the Committee recommended that any new electronic information security governance arrangements provide minimum standards, policies and rules, with which all NSW public sector agencies must comply.

4.36   The Committee also recommended that the new electronic information security policy should provide for a centralised mechanism to scrutinise implementation of electronic security measures by NSW Government agencies, and ensure that the policy is implemented in an effective and consistent manner.[232]

4.37   As well as information security, the Auditor-General also raised concerns about the inconsistent development and use of disaster recovery plans. In Volume one of his 2013 Report to Parliament, it was noted that in 2012 there was a 'significant increase in the number of issues reported for Disaster Recovery/Backups.'[233] There was particular concern regarding disaster recovery of financial systems and the lack of involvement by senior management:

> Lack of senior management buy-in and involvement in disaster recovery planning has resulted in insufficient allocation of resources to disaster recovery activities. There is scope for agencies to improve staff awareness of disaster recovery plans and procedures.[234]

4.38   In a letter to the Committee, the Auditor-General commented that in the past the lack of disaster recovery plans, business continuity plans and back-ups of data were common security vulnerabilities. Mr Achterstraat confirmed that new

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[230] Department of Premier and Cabinet, Memorandum M2012 – 15, *Digital Information Security Policy*

[231] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 30

[232] Public Accounts Committee, Report on the Examination of the Auditor-General's Performance Audits, September 2010 – April 2011

[233] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 29

[234] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 31

guidelines were now in place, requiring agencies to protect their information, have controls to counteract interruptions and protect information systems from major failures.[235]

4.39   Mr Lean, in his evidence to the Committee, advised that disaster recovery management was addressed in Treasury policy TPP0905. As part of this policy, agency heads are required to attest to compliance in their annual reports and report to risk committees on the disaster recovery plans in place.[236]

4.40   The Strategy recognises the balance between the need to release data and information and the need to ensure that private information is protected. It states that the security of electronic information needs to be protected consistently across NSW government, as threats to this information are increasing.[237]

4.41   Making information and knowledge accessible will be vital to the success of cross-agency service delivery. The Strategy aims to develop and implement a standard approach to information sharing, undertaken in a manner consistent with privacy and security considerations.[238] DFS have also set up an Information Security Community of Practice, which will enable agencies to meet and share knowledge regarding information security.

Committee Comments

4.42   The Committee noted the requirement for agencies to report on the progress of the implementation of the information security policy to the ICT Board, using a simple template, setting out all the required actions. The Committee believes that this type of monitoring and reporting should be considered for other policy requirements set out in the Strategy.

4.43   The implementation of the new Digital Information Security Policy and the requirements for agencies to make annual attestations in their Annual Reports and to the ICT Board has addressed the recommendations made by the Committee in its report on the Auditor-General's information security performance audit.

4.44   However, the Auditor-General continues to report on his concerns regarding ICT disaster recovery preparedness, particularly for key financial systems:

> Although some agencies have invested in building disaster recovery capabilities (80 per cent of agencies audited had disaster recovery plans in place) I continue to note agencies are not testing significant or critical portions of their recovery capabilities and plans. Without a documented plan and sufficient testing, the effectiveness of disaster recovery solutions may only be determined when an actual disaster occurs.[239]

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[235] Mr Peter Achterstraat, NSW Auditor-General, Correspondence to Chair, dated 14 December 2012, p. iv.

[236] Mr Anthony Lean, Report of proceedings before the Public Accounts Committee, 28 November 2012, p. 11

[237] NSW Government ICT Strategy, 2012, p. 36

[238] NSW Government ICT Strategy, 2012, p. 35

[239] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 31

Recommendation 19

That the NSW Government make the annual testing of disaster recovery plans a mandatory part of the agency attestations to the ICT Board.

ICT Skills

4.45   As discussed earlier in this chapter (paragraphs 4.23-4.26), the Auditor-General has raised concerns about the lack of contract management skills, not just in ICT projects but in other projects.[240]   Mr Lean acknowledged that the issue regarding capability of procurement officers is not unique to government, as the shortage of procurement expertise in the private and public sectors is well known.[241]

4.46   The Strategy states that the PSC and DFS will conduct a project to identify where the public sector needs to develop its skill base and attract and retain the right people.[242] The PSC will also review current ICT staffing and develop a 'workforce model that accounts for capability needs and in-house ICT requirements. The review will provide a clear picture of the current public sector capability and what will be required in the future.'[243]

4.47   As well as attracting skilled staff, the NSW Government must also improve the skills of existing staff. Many of these staff members are currently employed in in-house ICT departments where they have developed an expertise around in-house infrastructure and systems.

4.48   As well as skills, the Strategy also looks at opportunities to keep in contact with innovation and encourages engagement with industry associations and research bodies to give agencies the opportunity to investigate the latest digital tools and services on the market. According to the Strategy, DFS will identify examples of best practice and share these across government. The Strategy emphasises that early engagement with the industry is vital in helping agencies to identify how ICT can assist them to meet service delivery objectives.

Committee Comments

4.49   Having the right people with the right skill set to deal with the speed of change in the ICT sector will be critical to ensuring the successful delivery of the actions and goals set out in the Strategy. The Committee considers that the development of the Capability Framework to include ICT skills and knowledge will provide a sound structure to assist with the recruitment of qualified and competent staff.

4.50   The Committee heard evidence from Mr Athol Chalmers from the Australian Computer Society, who is part of the ICT Skills and Capability Working Group, about the use of the *Skills for Information Age* (SFIA). This is a globally recognised framework for assessing and accrediting information technology professionals:

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[240] NSW Auditor-General, Background Briefing to the Public Accounts Committee, 18 October 2012, p. 4

[241] Mr Anthony Lean, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 4

[242] NSW Government ICT Strategy, 2012, p. 40

[243] NSW Government ICT Strategy, 2012, p. 40

On the one side is a set of skills you would need to be an information technology professional and on the other the level of competency you have in those skills. Basically, we assess people against that framework and give you an assessment of what level of skill you have in certain information technology competencies.[244]

4.51   While the Committee is not advocating for a particular framework in NSW, it does believe that whatever framework is developed by the PSC must be applied across the sector and its use made mandatory.

4.52   The launch of a new ICT Professionals Community of Practice in May 2013 will provide some cross-agency networking and opportunities to share experiences. The Committee believes that DFS and the PSC should explore options for developing an online knowledgebase, where the ideas and knowledge generated from this community of practice can be shared.

Recommendation 20

That the capability framework developed by the Public Service Commission be applied sector wide and its use made mandatory.

Recommendation 21

That the Department of Finance and Services and the Public Service Commission develop an online knowledgebase where the ideas and knowledge generated from Communities of Practice can be shared.

Progress Update

4.53   In his evidence to the Committee, Mr Murphy explained the mechanisms that have been put in place to help with the effective implementation of the Strategy, in particular the governance arrangements that are aimed at driving and monitoring implementation:

This makes sure that across government we can share the learning from past experiences, bring a sort of collective vision to where we are going on ICT and maintain a whole-of-government oversight of the progress of the implementation of the ICT strategy to make sure that we get to where we need to go.[245]

4.54   In April 2013 DFS published an implementation update, outlining the achievements and proposed next steps on each of the initiatives. The update set out the implementation highlights that have been completed including:

- Improvements to *Service NSW*
- Publication of NSW Government Open Government Plan
- Publication of NSW Government Social Media Policy
- Open access to information via the opengov.nsw.gov.au
- Best practice website, smartphone and tablet design guidelines developed
- Access to data through *apps4nsw* competitions
- Establishment of a number of working groups

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[244] Mr Athol Chalmers, Report of proceedings before the Public Accounts Committee, 28 November 2012, p. 22

[245] Mr William Murphy, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 2

- Enhancements to data.nsw.gov.au
- New ICT Service Catalogue established
- Establishment of a number of Communities of Practice[246]

4.55   Some of the proposed next steps look to implement policies in some key areas and identifies that there are still a number of major projects to be delivered. DFS have stated that they will look at expanding and developing the use of *Service NSW* to improve the customer experience and make more data available through the development of a digital strategy and an open government data policy. A cloud policy, the expansion of the ICT Service Catalogue, the implementation of a category management approach to ICT procurement and the development of innovative ways to engage with the ICT industry are important steps that will provide guidance and support for agencies in benefiting from the procurement reforms. The ICT skills framework and ICT specific capabilities requirements are vital elements of the strategy, to ensure that staff working in all aspects of ICT have the required experienced and skills.

Committee Comment

4.56   The Committee notes that there are still some major projects to be completed, particularly in relation to ICT skills and capabilities and the publishing of the Cloud Policy and Procedures. The Committee would encourage the ongoing publication and consultation with the wider community including regular updates on the progress of the implementations.

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[246] Department of Finance and Services, http://engage.haveyoursay.nsw.gov.au/document/show/877 accessed 20 May 2013

Chapter Five – ICT Procurement

5.1   This chapter will review the procurement reforms currently under way in NSW, how these reforms are being implemented and what impact they will have on ICT procurement. With agencies becoming responsible for their own procurement through devolved responsibility, the chapter considers how this will be managed and whether the agencies have sufficient expertise to manage ICT procurement and obtain value for money.

5.2   The chapter will also look at the *ProcureIT* framework[247] and the ICT services scheme, examining how the new reforms encourage competition, particularly with regard to small and medium enterprises.

Introduction

5.3   All procurement of goods and services by NSW Government agencies is governed by the requirements of *Section 149* of the *Public Sector Employment and Management Act 2002 [PSEM Act]:*

> ***149   Obligations of government agencies***
>
> 1) *A government agency is to exercise its functions in relation to the procurement of goods and services in accordance with:*
>
>   a) *any policies and directions of the Board that apply to the agency, and*
>
>   b) *the terms of its accreditation (if any) by the Board, and*
>
>   c) *the principles of probity and fairness.*
>
> 2) *A government agency is also to ensure that it obtains value for money in the exercise of its functions in relation to the procurement of goods and services*
>
> 3) *A government agency is, at the request of the Board, to provide information to the Board about its activities in relation to the procurement of goods and services* [248]

NSW Government procurement system prior to recent changes

5.4   Under the previous procurement system, in place until July 2012, it was mandatory for government agencies to use State Contracts Control Board whole-of-government contracts to buy goods and services. These contracts were established as 'panel', or 'standing offer' arrangements set up for a fixed term, under which one or more suppliers of similar goods and services were appointed as suppliers to government agencies. Based on 2010–11 data, the NSW Government spent an estimated $12.7 billion on ICT goods and services.

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[247] http://www.procurepoint.nsw.gov.au/before-you-supply/standard-contract-templates-lp/procure-it-framework-version-30, accessed 26 March 2013

[248] http://www.legislation.nsw.gov.au/ accessed 26 March 2013

The State Contracts Control Board's State contracts accounted for $3.8 billion of that expenditure.[249]

5.5   This 'one-size fits all' approach was required by the *Public Sector Employment and Management (Goods and Services) Regulation* 2010, unless the State Contracts Control Board granted an exemption. Mr William Murphy, Executive Director ICT Policy, Department of Finance and Services (DFS), recognised that past practices in ICT investment resulted in a very disparate and disjointed ICT infrastructure. 'This has led to some duplication of expenditure and effort, and it has really reduced opportunities for collaboration and sharing of resources across government', he said.[250]

5.6   This was reinforced by Mr Anthony Lean, Deputy Director General, DFS, who acknowledged that in the past there had been unclear division of responsibilities between the State Contract Control Board and agencies and 'a plethora of legislative and policy requirements that agencies needed to comply with.'[251]

5.7   The unclear responsibilities were also identified by the Auditor-General when he conducted a compliance review of e-Procurement and e-Tendering in 2011. Recognising the benefits of electronic procurement and tendering, the review found widespread non-compliance with the e-Procurement requirements.[252] The review of 19 agencies tested compliance with the Premier's Memorandum M2006-11 *'NSW Procurement Reforms'*.[253] Overall the review found that compliance with both e-Procurement and e-Tendering requirements was poor and that there was significant scope to improve the use of Smartbuy.[254] This electronic service has since been replaced by NSWBuy, which can be accessed via the ProcurePoint website; which is a single point of access for all NSWBuy service delivery platforms.[255]

Recent changes to the NSW Government procurement

5.8   The *Public Sector Employment and Management Amendment (Procurement of Goods and Services) Act 2012*, which came into effect on 1 July 2012, introduced changes to the procurement system.

5.9   The amendments to the Act saw the abolition of the State Contracts Board and the establishment of the NSW Procurement Board. The new legislation made changes to the regulatory framework, moving away from a one-size-fits-all approach to procurement. Mr Lean told the Committee that the panel contracts had a tendency to lock up the market for lengthy periods, bringing into question whether they actually delivered value for money. He advised that the new

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[249] Auditor-General's Financial Report, Volume One 2012, p. 23

[250] Mr William Murphy, Report of proceedings before Public Accounts Committee, 26 October 2012, p. 2

[251] Mr Anthony Lean, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 7

[252] NSW Auditor-General's Report, Volume One 2011, *Compliance Review Report – Procurement Reform of E-Procurement and E-Tendering*, p. 6

[253] http://www.dpc.nsw.gov.au/announcements/ministerial_memoranda/2006/m2006-11

[254] NSW Auditor-General's Report, Volume One 2011, *Compliance Review Report – Procurement Reform of E-Procurement and E-Tendering*, p. 7

[255] http://www.procurepoint.nsw.gov.au/

framework would enable agencies and DFS, when conducting whole of government procurements, to have access to a wider range of strategies to enable them to get the best outcome. [256]

5.10   The *Procurement Reform Strategic Direction Statement* issued in November 2012 identified the overarching strategic direction for procurement. Its stated aims are to deliver value for money, business alignment and service improvements.[257] There will be a move to procurement category management, which looks to manage the processes end to end and improve relationships with vendors:

> Effective category management is an end to end process that focuses on the identification of needs, analysis of internal and external environments, planning; research, through to contract management (including vendor management).[258]

5.11   The goals for the revised approach to procurement were set out in a discussion paper issued by DFS in January 2012:

- Better value for money
- Government wide strategic approach
- Reduce administrative costs and duplication of the procurement function across Government
- Reduce red tape
- Simplify the regulatory and governance framework, and
- Build procurement competence.[259]

5.12   Mr Lean, in his evidence to the Committee, outlined the key aspects of the procurement reforms, in particular the devolution of responsibility to agencies within an agreed policy framework:

> …the procurement reforms will bring contracts up to date with modern practice, introduce greater innovation and make it easier for SMEs to do business with government. Most importantly, work is well underway on developing a single, clear and consistent policy framework.[260]

5.13   Mr Lean also advised that agencies would be responsible and accountable for ICT procurement. Control and responsibility rests with directors-general of the nine clusters for service delivery and performance.[261] Engagement with the agencies will be through a **Procurement Leadership Group** and the **ICT Leadership Group.**

5.14   The Government response to the NSW Commission of Audit Final Report identified the progress that had already been made regarding financial savings that were being delivered:

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[256] Mr Anthony Lean, Report of proceedings before Public Accounts Committee, 26 October 2012, p.8

[257] NSW Procurement Board, Strategic Directions Statement, November 2012, p. 6

[258] NSW Procurement Board, Strategic Directions Statement, November 2012, p. 7

[259] NSW Department of Finance and Services, *NSW Government Procurement Discussion Paper*, January 2012, p. 6

[260] Mr Anthony Lean, Report of proceedings before Public Accounts Committee, 26 October 2012, p. 1

[261] Mr Anthony Lean, Report of proceedings before Public Accounts Committee, 26 October 2012, p.1

> The Government has already begun significant reform to government procurement and is on track to deliver both significant savings as well as improvements to the efficiency of procurement practice in NSW. The NSW Government is committed to saving $1.015 billion over four years through procurement reform. $72 million savings have already been achieved in 2011-12 and agencies are on track to save $199 million in 2012-13.[262]

New governance structure and operating framework for NSW Government Procurement

5.15   An interim *Procurement Policy Framework for Goods and Services* was issued by the NSW Procurement Board in January 2013. Mr Paul Dobing, Executive Director, NSW Procurement advised the Committee that the Board expected to implement an updated framework in July 2013, after consulting with a number of working groups.[263]

5.16   The new policy framework replaces the 2004 *NSW Government Procurement Policy*, with regards to good and services procurement, including ICT procurement, with the exception of the Gateway Review Process which continues to apply. The policy framework also replaces the 2005 Code of Practice for Procurement.

5.17   Mr Lean commented that, when finalised, the framework would create 'a single source of truth that pulls together all the requirements that are currently contained in a number of different polices and instruments.'[264] The interim framework states that its aim is to provide a devolved model for procurement, be less prescriptive and keep mandatory elements to a minimum.[265] The mandatory elements provide the core elements for agency heads:

- All procurement of goods and services by government agencies is to be conducted in accordance with the overarching requirements set out in section 29 of the *Public Sector Employment and Management Act 2000.*
- Procurement must also be in accordance with any policy, direction or requirement issued by the NSW Procurement Board.
- Officer(s) must be appointed to exercise the functions of a chief procurement officer.
- Agencies must use existing whole of government contracts for obtaining goods and services, where available.
- Agencies are required to apply the Value for Money Statement. A government agency is required to ensure it obtains value for money in relation to the procurement of goods and services.
- Procurement arrangements cannot mandate prospective suppliers to have prior experience in providing goods or services to the NSW Government or a government agency.

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[262] NSW Commission of Audit Final Report, Government Response, May 2012, p. 30

[263] Mr Paul Dobing, Report of proceedings before Public Accounts Committee, 18 March 2013, p. 10

[264] Mr Anthony Lean, Report of proceedings before Public Accounts Committee, 26 October 2012, p. 13

[265] NSW Government – Goods and Services Procurement Policy Framework, December 2012, p. 5

- If procuring ICT goods and services, the *ProcureIT* framework must be used.
- 'Order splitting' with the intention of avoiding upper procurement threshold levels is inconsistent with the objectives of the procurement system and is prohibited.[266]

5.18   NSW Procurement also has a new governance structure and operating framework, which now consists of the NSW Procurement Board, the Procurement Leadership Group, working groups, and an Industry Advisory Group.[267] DFS provides the secretariat for all levels of these groups.

5.19   NSW Procurement, under the management of DFS, is the operating arm of the NSW Procurement Board. It has a centralised procurement function providing strategic coordination to agencies, including policy development, procurement capability development, and procurement life cycle management.[268]

5.20   The ***Procurement Board*** is responsible for overseeing the Government's procurement system, setting policy and ensuring compliance. It has the statutory power to issue directions to agencies and make decisions and monitor the progress of compliance. It can also accredit agencies to undertake their own procurement of goods and services.[269]

5.21   The ***Procurement Leadership Group***, reporting to the Procurement Board, comprises senior executives from across the public sector. A primary purpose of the Group will be to advise the Board on its functions, particularly in relation to overseeing the development of category management plans.[270] These plans include a statement on medium to long term issues and challenges being faced by NSW Government purchasers. Such statements will provide a signal to the market on the future high level needs and priorities for NSW Government procurement within each category.[271]

5.22   ***Working Groups*** will undertake the detailed strategy development work with an Industry Advisory Group, comprising procurement experts from the private sector who will provide external advice for the Government.

5.23   The ***ICT Advisory Group*** comprises senior ICT business and research leaders and provides a source of expertise and a 'first step in a continuing dialogue with industry stakeholders.'[272]

5.24   Principal departments and certain cluster agencies will be accredited by the Procurement Board and be responsible for sourcing and contract management. All clusters must be accredited under the Agency Accreditation Scheme by July 2013.[273] Once accredited, agencies are responsible for undertaking their own

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[266] NSW Government – Goods and Services Procurement Policy Framework, December 2012, p. 19

[267] NSW Procurement Board, Strategic Directions Statement, November 2012, p. 4

[268] NSW Procurement Board, Strategic Directions Statement, November 2012, p. 5

[269] NSW Procurement Board, Strategic Directions Statement, November 2012, p. 4

[270] NSW Procurement Board, Strategic Directions Statement, November 2012, p. 4

[271] NSW Procurement Board, Strategic Directions Statement, November 2012, p. 41

[272] NSW Government ICT Strategy 2012, p. 3

[273] Submission 17, Department of Finance and Services, p. 6

procurement, subject to directions from the NSW Procurement Board. Accredited agencies must use NSW Government contracts where they are available. [274]

5.25   The Agency Accreditation Scheme objectives are to:

- benchmark capability to undertake best procurement practice and provide a framework for continuous improvement;
- reduce costs and manage risks though effective aggregation and improved procurement capability;
- extend category leadership to lead buyer agencies as appropriate; and
- provide visibility of agency procurement activity through reporting by accredited agencies.[275]

Pre-Qualification Scheme

5.26   In 2008 the Department of Premier and Cabinet (DPC) introduced a *Pre-Qualification Scheme: Performance and Management Services*. The Scheme aims to improve agencies' procurement and use of these services. In his performance audit of the Scheme, the Auditor-General outlined that the key objectives of the scheme are to ensure:

- High probity standards, by third party assessment and selection of service providers.
- Streamlined competitive tendering process, by prequalified individuals and suppliers with a demonstrated track record, saving on tendering costs relative to open tender while maintaining appropriate levels of competition.
- Quality assurance in the engagement of service providers, by managing poor performance through monitoring to possible suspension or removal from the scheme.
- Fee rates that represent value for money.[276]

5.27   The audit concluded that the Scheme had simplified procurement practices and allowed faster engagement of consultants with proven credentials. However, the Auditor-General identified a number of concerns about compliance monitoring and auditing that would need to be addressed to ensure the scheme's ongoing success:

- The requirement to *invite* rather than *obtain* three proposals from service providers is not enough to create the necessary competitive tension to achieve value for money. We found that nearly 30 per cent of engagements

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[274] https://www.procurepoint.nsw.gov.au/policy-and-reform/nsw-procurement-reform/information-agencies/agency-accreditation-scheme, accessed 27 March 2013

[275] https://www.procurepoint.nsw.gov.au/policy-and-reform/nsw-procurement-reform/information-agencies/agency-accreditation-scheme, accessed 27 March 2013

[276] Auditor-General's Performance Audit, *Pre-Qualification Scheme: Performance and Management Services,* Executive Summary, p. 2

reviewed with an estimated value over $150,000 each proceeded with one or two proposals only.

- Agencies are not provided with all the information needed on prequalified service providers, including agreed fee rates and previous engagement outcomes, to select the best shortlist. We also found gaps and inconsistent information about the Scheme, which are a potential source of confusion.

- There are no provisions under the Scheme for monitoring the compliance of agencies and service providers with the rules to ensure the Scheme is used as intended.

- There are also no periodic risk-based compliance audits of agencies and service providers.[277]

5.28   At a Committee hearing for the Follow up Inquiry of the Auditor-General's Performance Audits, April 2011 to September 2011, held on 18 March 2013, Mr Dobing, Executive Director, NSW Procurement gave evidence on the progress in implementing the Auditor-General's recommendations.

5.29   The Auditor-General, Mr Peter Achterstraat, also gave evidence and commented on the monitoring of the effectiveness of the pre-qualification scheme:

> It is a good concept to have a central register of people to whom tenders can be let, but a concept is only as good as it is administered.
>
> The main area we wanted to look at was: Are they monitoring this program?
>
> I guess our main finding was it is good idea, it is going well but we do think they need to tighten up particularly the feedback loop. If only 5 per cent of contractors are giving feedback to say how they went, that means there are 95 per cent of contracts that have been awarded and later on down the track no-one knows how they go.[278]

5.30   Mr Dobing commented that there was a need to reach a balance between accountability at a central level and the compliance responsibilities of individual agencies. He told the Committee that currently agencies are only required to report on performance where there is unsatisfactory performance or on engagements over $150,000. He advised that performance based rating was currently being considered by the Minister and the Procurement Board:

> It is the intention of the implementation of the performance rating scheme that information is visible to them at the time they are seeking to go out to a quotation, so they get both information more generally about the profile of the supplier but they will also get access to information that suggests to them how suppliers performed in previous engagements and that is the intention of the rating system.[279]

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[277] Auditor-General's Performance Audit, *Pre-Qualification Scheme: Performance and Management Services,* Executive Summary, 2011, p. 3

[278] Auditor-General, Report of proceedings before the Public Accounts Committee, 18 March 2013, p. 2

[279] Mr Paul Dobing, Report of proceedings before the Public Accounts Committee, 18 March 2013, p. 6

Committee Comments

5.31   These broad changes to the governance and management of procurement in the NSW public sector aim to put in place effective control mechanisms that can be used by central as well as individual agencies. With strategic direction being managed by the NSW Procurement Board, the leadership group and the working groups will help to improve communications between agencies.

5.32   The Committee will follow up the implementation of the Auditor-General's recommendations made in the performance audit report on the pre-qualification scheme as part of its ongoing review of all performance audits.

ICT PROCUREMENT REFORMS

5.33   There have been some specific changes to ICT procurement which sit under the broader procurement reforms. Many of the procedures for government ICT procurement can be traced back to when technology developed at a slower pace. In his evidence to the Committee Mr William Murphy, Executive Director of ICT Policy, DFS, recognised that 'this space is changing rapidly and we need to have in place a system that allows us to be flexible and agile in response to that change'.[280]

5.34   Telstra argued in its submission that the overarching objective of effective ICT procurement, as set out in the Commonwealth Government policy, is to achieve best value for taxpayers' money, with a focus on the value delivered and total cost, not just the price.[281]

5.35   The NSW ICT Strategy outlines the ICT procurement reforms and new approaches, including:

- allowing for contemporary means of sourcing government goods and services;

- bringing the form and content of government contracts in line with modern practices;

- expanding the ways that small and medium enterprises (SMEs) can effectively gain opportunities to supply goods and services to the government;

- introducing greater innovations into government procurement and in turn foster innovation and stimulate a more vibrant NSW economy.[282]

5.36   The Strategy states the changes to ICT procurement, including the strengthening of the governance structure; maximising the use of purchased assets and services; early engagement with industry and improving contracts and contract management.

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[280] Mr William Murphy, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 2

[281] Submission 15, Telstra, p. 1

[282] NSW Department of Finance and Services, *NSW Government ICT Strategy 2012,* p. 27

5.37   While the NSW Procurement Board has sector-wide responsibility for goods and services procured by government agencies, managing certain ICT related goods and services procurement has been delegated to the *ICT Board*.[283]

5.38   Agency specific ICT procurement will continue and must be consistent with the whole of government standards set out in the ICT strategy. These include early engagement with industry, maximising the utilisation of purchased services and improving contracts and contract management.[284]

5.39   The Strategy also recognises that agencies can still require long term contracts and partnerships with vendors and providers to meet agency needs, with guidelines for agencies on industry engagement to be available from the third quarter of 2013. This aims to ensure that the process and outcomes are repeatable and consistent.[285]

5.40   An *ICT Procurement and Technical Standards Working Group* has been established to seek advice from technical and industry experts. The working group will review standard specifications on existing ICT contracts due for renewal, develop a framework and policies to enable agencies to procure standardised ICT services, provide advice on standards and standardisation of the as-a-service procurement arrangements, and ensure that any recommendations for standardisation effectively address business needs. [286]

5.41   An important outcome of the new structure is improved communications on procurement between government agencies. Mr Murphy, set out how he saw the new framework improving communications:

> There is a role for all cluster agencies in the governance framework. So we have the ICT Board at the top which is seven directors general from across the Government. That board is supported by a leadership group. It has a chief executive officer from government on it. That is a pretty significant group of people from across government which meets regularly. Out of that group a number of working groups are formed which include other people from across government. So the ICT strategy development and its monitoring and implementation are very integrated into all the clusters across government.[287]

Committee Comment

5.42   The Committee acknowledges that the procurement reforms and the ICT Strategy are still in the initial stages of implementation.

TENDERING

5.43   Many stakeholders raised issues regarding current tendering processes, including traditional tendering practices not facilitating early engagement with the industry, precluding small and medium enterprises from accessing

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[283] NSW Government – Goods and Services Procurement Policy Framework, December 2012, p. 15

[284] NSW Department of Finance and Services, *NSW Government ICT Strategy 2012,* p. 28

[285] NSW Government ICT Strategy, 2012, p. 30

[286] NSW Government, ICT Strategy 2012, p. 28

[287] Mr William Murphy, Report of proceedings before Public Accounts Committee, 26 October 2012, p. 12

government work and current tendering practices not reflecting the rapid pace of change now found in the ICT marketplace.

5.44   The Minister for Finance and Services, the Hon Greg Pearce MLC, outlined the effect on tendering of changes to the *Public Sector Employment and Management Amendment (Procurement of Goods and Services) Act 2012* during his second reading speech on the Bill:

> …tendering will no longer be the prescribed means for acquiring government goods and services in every case, and complex approval processes for methods rather than tenders will be replaced with approved methods of sourcing good and services, which will be set out in NSW Procurement Board directions.
>
> While tendering will still be used relatively frequently, more flexible approaches to sourcing goods and services will also be possible. These approaches include such mechanisms as greater engagement with the market prior to tendering. Such outcomes-based procurements will allow agencies opportunities to identify what is currently being offered in the market to access current research and to see what the private sector may be capable of designing or offering. This will be done within an overarching framework of probity and fairness.[288]

5.45   Traditional tender processes can be lengthy and resource intensive. Under the existing NSW Government tender guidelines agencies are expected to undertake the following steps:

- an approved scope of work before going to tender
- an approved budget and approved contract price estimate before receipt of tenders
- documented tender evaluation, recommendation and approval process
- monitor the delivery of contractual obligations
- monitor payments against the approved budget
- have a governance structure that establishes independent approval through the procurement process. For example, the person approving the outcome of the tender process should not be the same person who evaluated tender responses or was involved in conducting the actual tender process.[289]

5.46   It is important that government agencies achieve value for money by ensuring there is adequate competition when a tendering process is conducted. The new Procurement Policy Framework notes that some actions can inadvertently limit competition:

- certain requirements, such as requirements to supply "state wide" or requirements that firms will be engaged only if they have experience with a particular agency can prevent new and smaller suppliers from tendering

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[288] Legislative Council Hansard - *Second reading of Public Sector Employment and Management Amendment (Procurement of Goods and Services) Bill 2012,* 23 May 2012

[289] NSW Government, Tendering Guidelines 2011, p. 7

- extended contract durations can lock up the market, reducing long term competition
- contract structuring (such as the aggregation into large lots) that exclude small and medium size enterprises.[290]

5.47   The policy framework also provides requirements that are designed to facilitate competition and make it easier for new suppliers to engage, including setting the contract duration, knowing how you are going to engage with the market, prepare market documentation and contract structure and 'commercialising' contract terms, to improve understanding with suppliers.[291]

5.48   Mr Joseph Rayment, Account Manager, the Ethan Group, in his evidence to the Committee discussed the use of resellers as intermediaries between government departments and vendors, and how central agency policies regarding tendering can help engage different companies:

> Effective central policies that guide ICT projects in the public sector are essential to improving the flowing functionality of ICT procurement by Government and can help to reduce market friction. Policies pertaining to the offering and assessing of tender responses should foster and encourage the utilisation of companies that not only offer competitive prices but can provide accurate and efficient lead times for both large and small orders.[292]

5.49   Mr David Jordan argued in his submission that the current tender processes do not fit with modern practices of agile development:

> By the time an organisation has gone through a consulting process, made recommendations, defined a tender through to a vendor winning the tender, the requirements have changed due to the pace of change.[293]

5.50   This perspective was supported by Mr Anthony Miller, Director, Wot Link, who also noted that traditional procurement favours the selection of 'complex applications with high feature/function' that may not be required, and lead to expensive, overly complex systems being implemented:

> These applications traditionally score well in the tender process to meet every need. These systems however invariably require deep ongoing support from ICT specialists (with associated whole of life costs). Unfortunately, the vast majority of users, who only need a few feature/functions, are left overwhelmed by these systems, that often lack usability benefits, or worse, their business needs have changed and these systems no longer support their work requirements. [294]

Service Catalogue

5.51   A service catalogue will enable agencies to procure common products and services from a list of pre-negotiated contracts. The ICT Strategy states that the

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[290] NSW Government – Goods and Services Procurement Policy Framework, December 2012, p. 27

[291] NSW Government – Goods and Services Procurement Policy Framework, December 2012, p. 27

[292] Submission 5, Mr Joseph Rayment, Ethan Group, p. 2

[293] Submission 9, Mr David Jordan, p. 4

[294] Submission 7, Mr Anthony Miller, p. 10

development of a service catalogue is 'a fundamental element of an effective and efficient ICT supply chain.'[295] The catalogue will define the characteristics of each service which will allow agencies to select a service that suits their needs.

5.52   The ICT Strategy sets out a timeframe for the implementation of a service catalogue, with the building of the catalogue, in collaboration with industry by the fourth quarter of 2012, and the development and implementation of policies by the second quarter of 2013.

5.53   In its submission to the Committee, the DFS highlighted the benefits of developing an ICT Service Catalogue and in defining the essential characteristics of each service, including cost:

> Delivering services through a whole of government service catalogue will leverage NSW Government purchasing power to secure the most effective pricing and support consistent service delivery across Government. [296]

5.54   A number of people who gave evidence to the Committee talked about the benefits in developing a services catalogue. For example Ms Suzanne Campbell, Chief Executive Director of Australian Information Industry Association (AIIA), said that:

> ...it could potentially improve project management and service delivery by identifying the specific services available.
>
> It could also provide the NSW Government with a standardised set of definitions for services so that they are in fact comparing apples with apples. By that I mean improving the efficiency of the selection processes and certainly the execution of capability.[297]

5.55   Ms Virginia Choy, Director and Business Development Manager, PretaWeb Pty Ltd, informed the Committee about the United Kingdom Government's CloudStore, where her company offered software-as-a-service:

> If the proposed services catalogue is modelled on the United Kingdom Government's CloudStore where they have commoditised ICT services and all vendors are listed, their pricing is predetermined and it is totally transparent, then it will have a really strong positive impact on the small to medium sized enterprises in New South Wales as it will reduce time and cost to small business previously spent on traditional tendering process.[298]

5.56   Mr Athol Chalmers, Federal Government and Industry Advisor for the Australian Computer Society, observed that a service catalogue would lower costs for agencies because the range of services and the terms and conditions and prices are generally best practice and benchmarked. He advised that individual

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[295] NSW Government ICT Strategy 2012, p. 22

[296] Submission 17, Department of Finance and Services, p. 13

[297] Ms Suzanne Campbell, Report of proceedings before the Public Accounts Committee, 28 November 2012, p. 61

[298] Ms Virginia Choy, Report of proceedings before the Public Accounts Committee, 28 November 2012, p. 39

agencies do not have to go through a tender process and therefore work with various suppliers to come up with a final decision.[299]

5.57   While a supporter of a service catalogue, Ms Choy raised concerns that the catalogue will not be adequately promoted and mandated so agencies will continue to use their old tender processes. Her experience had shown that with the old 2020 contract, agencies were not aware of it and had gone through lengthy open tender processes that precluded SMEs, due to high costs of this kind of tendering process.[300]

5.58   Mr Anthony Miller, Managing Director, Wot-Link Ltd, an ICT consultancy company, raised issues regarding incentives to use the catalogue:

> Where is the incentive for the existing IT shops to actually buy from the catalogue?
>
> ….I think the real challenge for the Government is that, while there will be more and more capability added to the service catalogue, how do you drive change and encourage – what is the incentive, if you like – the buying dollar to move into that service catalogue?[301]

5.59   Another challenge was noted by Mr Mike Kano, NSW State Councillor, Australian Institute of Project Management who suggested that the challenge will be when a minimum scale has been set. Using an example from the Federal catalogue for data centres, a minimum floor area of 100 square metres was required. Smaller Federal agencies do not require this amount of space, so they have to 'cobble together alliances with often disparate entities.' [302]

e-Catalogue and e-Quote

5.60   The current e-Catalogues can be accessed through the NSWBuy website. This is an online procurement solution that comprises a number of platforms and tools for buyers and suppliers that enables agencies to search and browse the items available under the NSW Government's contracts and supply arrangements. NSWBuy e-Catalogues enables the advertising and purchasing of goods and services. Suppliers can also update their information regarding products and services via a supplier portal.[303]

5.61   e-Quote is an agency tool to issue quotes to registered suppliers. NSW Government agencies can use e-Quote to issue, manage and award requests for quotes (RFQ) online from suppliers registered on established pre-qualification schemes and panel arrangements. Agencies can select the pre-qualification scheme, set the job detail, define requirements, select relevant suppliers and publish the RFQ online. Suppliers will receive a notification of the pending RFQ.[304]

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[299] Mr Athol Chalmers, Report of proceedings before the Public Accounts Committee, 28 November 2012, p. 26

[300] Ms Virginia Choy, Report of proceedings before the Public Accounts Committee, 28 November 2012, p. 39

[301] Mr Anthony Miller, Report of proceedings before the Public Accounts Committee, 28 November 2012, p. 39

[302] Mr Mike Kano, Report of proceedings before the Public Accounts Committee, 28 November 2012, p. 56

[303] http://www.procurepoint.nsw.gov.au/buying/nswbuy-buyers/ecatalogues, viewed 23 April 2013

[304] http://www.procurepoint.nsw.gov.au/buying/nswbuy-buyers/equote, viewed 23 April 2013

Committee Comments

5.62   There is a balance between the requirements to have a fair and competitive tendering process and the need to have processes that reflect the current market place. The Committee believes that early engagement with the market is vital to ensure that agencies are aware of the products that are available.

5.63   It is also important for agencies to have a comprehensive understanding of their requirements in the preparation of the tendering documentation. This will help prevent the implementation of overly complex systems, where the majority of functionality is not required.

5.64   A number of ICT products and services are already available through the NSWBuy e-Catalogues, with information on the products and services including price, contract, suppliers, manufacturers and regions serviced. The Committee notes the expansion of this service and looks forward to its implementation. A service catalogue will offer benefits regarding moving agencies towards common approaches, technologies and systems. The Committee supports mandating its use.

Recommendation 22

That once implemented, the Department of Finance and Services makes the use of e-Catalogue and e-Quote mandatory across the whole sector.

CONTRACT MANAGEMENT AND CONTRACTING FRAMEWORKS

5.65   Contract management and contract renewals were highlighted as particular areas of concern by the Auditor-General and other stakeholders in the Inquiry. This section will look at a number of different aspects of ICT contract management, including the Procure IT contracting framework, category management, the ICT Services Scheme and the introduction of a revised funding model for purchasing ICT services.

5.66   The Auditor-General conducted a performance audit into the management of IT service contracts in 2012, examining the management of contracts by NSW Health and NSW Police. The report found that IT services contracts were complex to manage and required a level of proactive management and well written guidance for staff which 'emphasises regular testing of business needs and value for money, and a governance system which provides effective oversight of key decision points.'[305]

5.67   The audit found that the then State Contracts Control Board and DFS provided limited guidance to assist agencies to effectively manage IT services contracts.[306] There were missed opportunities to review the level of service required when renewing contracts. For example the audit found that the

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[305] Auditor-General's Report, *Managing IT Services Contracts*, 2012, p. 14

[306] Auditor-General's Report, *Managing IT Services Contracts*, 2012, p. 15

'Health Support Services had renewed at the same fixed rate despite a 36 per cent decline in service demand'.[307]

5.68   The ICT Strategy states that the Government will consider ways to improve its management of ICT contracts:

> Better contract management will ensure that full benefits of the procurement process are achieved and sustained over the life of the contract and that the risks and cost that may arise during the contract term are appropriately assessed and minimised.
>
> Monitoring and managing supplier performance and encouraging continuous improvement and innovation from the supply partnership are also crucial outcome of effective contract management.[308]

5.69   The ICT Strategy refers to the Auditor-General's ICT contracts audit, suggesting that it 'found significant opportunities to improve contract management procedures and capabilities across Government.'[309] The Strategy itself however does not provide details or examples of the proposed actions to address the recommendations. Although, the Committee notes that under the Agency Accreditation Scheme, agencies are required to have contract management plans around ICT services.[310]

5.70   In his briefing to the Committee, the Auditor-General talked about agencies preparing risk based contract management plans, which would help the agencies achieve the contract which best reflected their needs:

> Some of the people are taking contracts off the shelf and this is the generic one to use. What we are suggesting is that they are to be tailored into account financial and business risks of the different agencies so that those risks can be at least identified up front and strategies can be put in place to mitigate them.[311]

5.71   DFS have recently started using a new contract lifecycle management system (CLMS), which will be the repository for the contracting process. It aims to provide a single database of all existing Government procurement contracts and includes features to construct and manage contract documents with triggers for approval (workflow).[312] Mr Lean advised the Committee that it provides a tool for improved contracts and vendor management: '...it helps to reduce probity risk through greater transparency and it has inbuilt audit functions. It will also be used as a tool to share information across agencies'.[313]

5.72   Federally, a centralised agency managed by the Australian Government Information Management Office and Department of Finance and Services manages ICT procurement. Mr Joseph Rayment, Account Manager from the

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[307] Auditor-General's Report, *Managing IT Services Contracts*, 2012, p. 19

[308] NSW Government, ICT Strategy 2012, p. 30

[309] NSW Government, ICT Strategy 2012, p. 30

[310] Mr Paul Dobing, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 8

[311] NSW Auditor-General, Background Briefing to the Public Accounts Committee, 18 October 2012, p. 8

[312] Submission 17, Department of Finance and Services, p. 18

[313] Mr Anthony Lean, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 7

Ethan Group informed the Committee of a number of initiatives undertaken by the Commonwealth, including a central admissions fee on the whole of government agreement:

> ...they allow for a greater economy of scale by mixing orders together and then separating them after they have been delivered. They also have a great way of keeping track of orders.

> ...they also have a great relationship with the suppliers on the panel....They have a very open decision making process. They consult and conform and inform and ask directions from those who are on the panel...that includes suppliers, vendors and resellers.

> It is something great that the State Government can adopt...they have included more than just vendors and large multinational corporations on their panels.[314]

Contract Negotiations and Renewals

5.73   The Auditor-General also raised concerns about contract renewals and made recommendations around a risk based approach. Reporting on Information Systems Audits each year, the management of contracts is a recurring issue. At a briefing for the Committee, the Auditor-General commented about the ongoing management of contracts:

> ...the public sector is good at announcing a contract and signing a document but they are not as good at following it up. In some cases contracts have been rolled over at the end of the two year period without any review.[315]

5.74   In his performance audit of ICT contracts, the Auditor-General found inadequate oversight of key aspects of a contract by NSW Police. A contract initially valued at $450,000 had risen in cost to $1.3 million 18 months later. This 200 per cent increase was approved 'without an explanation of the increase or evidence that the increase was warranted.'[316] The audit concluded that while NSW Police were satisfied with the level of service provided from the supplier, it could not demonstrate that it was receiving value for money.

5.75   In evidence to the Committee on the performance audit report into the pre-qualification scheme, the Auditor-General also commented on a contract that that had been repeatedly rolled over:

> In our report we highlighted an exceptional example where one quote came in and a small amount of work was done. It kept getting rolled over, and rolled over and, still on the basis of one quote, it ended up being a $13 million job.[317]

5.76   Mr Lean told the Committee that DFS was considering providing more information and guidance to agencies around contract renewals and what needs to be considered when a contract comes up for renewal:

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[314] Mr Joseph Rayment, Report of proceedings before the Public Accounts Committee, 28 November , p. 48

[315] NSW Auditor-General, Background Briefing to the Public Accounts Committee, 18 October 2012, p. 9

[316] Auditor-General's Report, *Managing IT Services Contracts*, 2012, p. 23

[317] Auditor-General, Report of proceedings before the Public Accounts Committee, 18 March 2013, p. 9

… under the old State Contract Control Board policies, there was an absolute requirement of five years and you then had to get ministerial approval before extending the contract.

There are a range of factors that DFS takes in to account when making recommendations to the Minister in that regard and certainly we will use those considerations to inform more general guidance to agencies around what they should think about when renewing. That would include things like looking at whether the market has changed and will you continue to get value for money by extending the contract.[318]

5.77　　Mr Andrew Watt from Public Service Ethics Australia, in his submission commented about some agencies having limited experience with managing ICT contracts which may lead to increase costs:

Where the specification is deficient, external risks occur or the contract clauses must be invoked. The agency ends up paying for variations, with those realised risk resulting in additional project funding.

In many cases the agency may not have the skills to get the specification right and relies on an external consultant to perform this function or continues to approve variations as the specification is progressively modified. There is limited utility compensation from a consultant in these circumstances.[319]

5.78　　Mr Michael Hennessey, Client Executive, Ovum raised concerns about managing the risks regarding license conditions. He commented that many organisations 'find themselves subject of a usage audit by major software vendors such as Oracle, to check that their usage is commensurate with their license conditions.'[320] Very often this results in a claim for payment and Ovum report that 'it is not unusual for these claims to be many millions of dollars.'[321] Ovum recommended that agencies should regularly submit to a third party audit, so that they can determine their 'own exposure and remedy under-licensing in a manner and timing that suits them – without the time pressure that an audit will bring.'[322]

5.79　　In its submission to the Inquiry the Department of Education and Communities (DEC) set out how they manage ICT contracts and, as a cluster agency, how they are working towards accreditation under the Agency Accreditation Scheme. Currently the Information Technology Directorate (ITD) administers 99 software contracts and a smaller number of hardware contracts, all but 23 of which are less than $150,000. Large contracts that are in place include agreements with Telstra, Microsoft, Adobe, SAP and IBM.[323] Each of these contracts has been negotiated by the Department, facilitated by procurement, legal and audit teams.

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[318] Mr Anthony Lean, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 8

[319] Submission 14, Public Service Ethics Australia, p. 8

[320] Submission 18, Ovum, p. 1

[321] Submission 18, Ovum, p. 1

[322] Submission 18, Ovum, p. 2

[323] Submission 6, Department of Education and Communities, p. 2

5.80   An example of the positive outcome of these negotiations was the contract for software licensing negotiated with Microsoft in 2009. The contract was based on the total number of users, rather than the more usual number of devices on which the software was loaded:

> This innovative approach has allowed the Department to expand its fleet of devices and services with great flexibility under a firmly established cost framework.

> This provision allowed the Department to forego extending the contract in 2012, in favour of renegotiating the agreement in order to review the products covered, to gain access to new offerings and to expand coverage to include the new staff added to the Department as part of the integration of the Office of Communities and Early Childhood.[324]

5.81   In its submission, DEC advised that a Procurement Solutions Directorate (PSD) had recently adopted a Category Management model, of which IT and IT Services is one category. Category Managers have been appointed to manage each of the four categories.[325]

Vendor Management

5.82   The relationship between vendors and government agencies is changing to reflect the long term relationship that is required when purchasing services. Mr David Kennedy, Chief Information Officer, the NSW Trade and Investment (NSW T&I), in his evidence to the Committee, talked about the relationship with SAP in delivering a software-as-a-service product:

> …we do not see SAP as a vendor, we see them as our partner. They have as much skin in the game and in this program as we do, and as much reputation at risk and as much commitment to make this successful because they can see that if we are successful they are successful and the NSW Government becomes successful.[326]

5.83   Mr Michael Hennessey, Client Executive, Ovum commented on the need to have a strategic approach to software asset management:

> …managing the commercial relationships with suppliers over the full lifecycle of contracts, and over the full portfolio of suppliers and products – rather than a more reactive supplier-by-supplier and contract-by-contract approach at contract expiry or renewal.[327]

5.84   In response to the performance audit on ICT contracts, HealthShare NSW developed a Tactical Vendor Management Framework, which reflects the move in the ICT industry towards Vendor Management as a complementary role to Contract Management.[328] In its submission to the Committee, HealthShare outlined the detail of the framework:

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[324] Submission 6, Department of Education and Communities, p. 3

[325] Submission 6, Department of Education and Services, p. 4

[326] Mr David Kennedy, Report of proceedings before the Public Accounts Committee, 28 November , p. 7

[327] Submission 18, Ovum, p. 2

[328] Submission 22, HealthShare NSW, p. 1

> The Tactical Vendor Management Framework which HealthShare NSW is implementing recognises that strategic vendors are integral to the business. By taking a vendor-centric view of the delivery of ICT goods and services consideration can be given to the entire relationship, not simply the contract.[329]

5.85   The framework implements a four -tier structure for management of contracts and vendors:

- The Technical Project Manager manages day to day service provision at an operational level
- The Program Director is responsible for contract management and meets with the Vendor on a regular basis (e.g. monthly)
- The Commercial team within HealthShare NSW coordinates Tactical Vendor Management which has oversight of all product and service provision from a Vendor. This is the escalation point for risks and issues that cannot be resolved at the individual contract level
- HealthShare NSW will be responsible for promoting best practice Contract Management by providing processes and templates, and ensuring that work programs/contract managers implement and follow the processes.[330]

5.86   Vendor management was supported by other stakeholders. For example, Mr Anthony Miller, Managing Director, Wot-Link advocated a 'VMO, or Vendor Management Office' similar to one introduced in the United Kingdom:

> ...it has the characteristics that are similar to the procurement shop, but they actually went further. Instead of having more requests for tender processes, it is more about measuring service levels that are actually provided.[331]

Category Management

5.87   Category Management is one method that the government is considering to improve ICT procurement. There is no current standing definition of ICT goods and services; however there is an accepted category of ICT across the public sector and industry that is referred to as the ICT procurement category. Procurement category taxonomy is being developed for ICT by the Procurement Leadership Group.[332]

5.88   In its submission to the Inquiry and in evidence to the Committee, Mr Lean advised that the Procurement Board is currently collating whole-of-government data to identify opportunities for more effective category management. The collated data will be reported to agencies to assist in contract management and cost effectiveness:

> ....we are moving to a category management model, which involves looking at a category such as ICT or contingent labour as a whole. We need to feed really good data into that so that we can get some good analysis going on about what is the best

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[329] Submission 22, HealthShare NSW, p. 1

[330] Submission 22, HealthShare NSW, p. 4

[331] Mr Anthony Miller, Report of proceedings before the Public Accounts Committee, 28 November , p. 39

[332] http://www.procurepoint.nsw.gov.au/policy-and-reform/ict-goods-and-services-procurement/ict-related-goods-and-services, accessed 21 April 2013

way to procure goods and services in the future. We are drawing data from right across the sector with a view to coming up with a whole-of-government view around what current expenditure there is and other things like that. That is being given to the category management working groups who will then come up with category management plans to guide procurement activity over the ensuing years.[333]

5.89   In accordance with the NSW Procurement Board Direction 2013-02, category management plans will be developed by **Category Management Working Groups**. The management plans will consider:

- the nature of the market in which the goods or services are proposed to be sourced, and the market conditions prevailing at the time of planning procurement activities.
- how the size, nature and scope of a category or contract could impact on competition,
- whether or not the size, nature and scope of a category or contract is justified having regard to the impact on value for money,
- what opportunities exist for innovation to redefine the business need, and
- both the short and long term impacts on competition.[334]

Procure IT

5.90   Procure IT is a set of standard terms and conditions that Government agencies are required to use when entering into an arrangement for the supply of ICT goods and services. This contracting framework, developed in collaboration with the Australian Information Industry Association (AIIA) aims to reduce time and cost for agencies by minimising the need to negotiate on individual procurement actions.[335] It does not include a scheme or panel of suppliers.

5.91   In September 2012, the NSW Procurement Board issued Direction 2012-05: *Use of Procure IT when entering into an arrangement with a supplier for the procurement of ICT goods and services*.[336] This mandates government agencies to use the Procure IT framework for all ICT contracts valued over $150,000.

5.92   The ICT Strategy comments that contracts that operate over long periods limit the Government's ability to respond to price changes, delivery models and technology innovations. In its submission, DFS outlined what this meant to agencies and suppliers:

> …suppliers appointed to a Government ICT panel or pre-qualification scheme now negotiate and sign ProcureIT once, with all subsequent agency-level contracts then placed as orders under that prevailing head agreement.[337]

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[333] Submission 17, Department of Finance and Services, p. 10

[334] http://www.procurepoint.nsw.gov.au/policies/nsw-procurement-board-directions/direction-2013-02, accessed 23 April 2013

[335] NSW Government, ICT Strategy 2012, p. 29

[336] http://www.procurepoint.nsw.gov.au/policies/nsw-procurement-board-directions/direction-2012-05

[337] Submission 17, Department of Finance and Services, p. 1

5.93   The contract framework also creates a default position in favour of the ICT suppliers owning the intellectual property (IP) of the product developed under contract with a government agency.

5.94   Mr Lean outlined the development of the framework and its benefits:

> The idea behind it and where it delivers benefits in terms of procurement is that we are trying to get to the point of having a single set of terms of reference and conditions for use by all government agencies when they are procuring ICT goods and services. It is driven by two things. One is to reduce the need to negotiate contracts on a case-by-case basis…
>
> The second thing is it is directed towards getting a commercially realistic set of terms and conditions in place so that business is comfortable in dealing with government.[338]

5.95   The latest version of Procure IT (version 3) has reduced the number of parts from six for whole of government and an additional six for client specific contracts to a four parts in total. There is now one set of documents consisting of a Head Agreement, Customer Contract, a dictionary and modules.[339] However the Committee notes that, to date it has not been updated to reflect the new governance structure, including replacing the State Contracts Board with NSW Procurement Board.

5.96   In answer to a question on notice regarding monitoring compliance with Direction 2012-05, NSW Procurement stated that compliance with it was being treated as part of a wider project to improve compliance:

> The issue of compliance with this Board Direction is being treated as part of a wider project to improve compliance with all procurement laws and policies through education and auditing. The Procurement Strategic Directions Statement includes an action for the Procurement Board to issue a requirement to agencies to regularly test compliance with the procurement policy framework through internal audit. This measure will apply to all procurement including that conducted under Procure IT.[340]

ICT Services Scheme

5.97   The ICT Services Scheme which commenced on 1 March 2013 replaced the whole of government 2020 Contract for ICT services providers.   The scheme uses the Procure IT terms and conditions, abolishes the Management Fee (usually 2.5 per cent), and introduces simplified contracts and tenders with the aim of improving the opportunities for small and medium enterprises (SMEs).[341]

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[338] Mr Anthony Lean, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 9

[339] Procure IT Version 3.0 User Guide, April 2012, p. 1

[340] NSW Procurement, Answers to questions on notice, 27 February 2013, p. 5

[341] NSW Government ICT Services Scheme, Guidelines for Customers, p. 3

5.98   The 2020 ICT services contract, which locked suppliers out for the term of the contract, will be replaced by a pre-qualification scheme, to allow new suppliers to be added at any time.[342]

5.99   The ICT Services Scheme aims to move from period contracts with fixed supplier panels to more pre-qualification schemes, with simple registration (for low risk goods and services).[343]

5.100   The scheme establishes two supplier listings, according to contract value and risk. A Registered Supplier List enables registration to supply low risk contracts valued up to $150,000 and the Advanced Registered Supplier List which is an approved list to supply high risk or contracts valued at over $150,000.[344] Supplier admission is subject to them meeting the acceptance criteria and agencies are also advised to conduct their own investigations into value for money, including the company capacity and capability for each engagement.[345]

5.101   NSW Procurement advised the Committee that in both tiers 'the scheme includes performance management guidelines and risk assessment tool sets for agencies. The scheme has specific provisions for collating vendor performance assessment reporting by agencies on a contract by contract basis.'[346]

5.102   A Short-Form ICT General Contract Terms and Conditions have been established for low risk contracts. These conditions reflect the lower risk and value profile of the scope of works and have significantly less details and lower insurance requirements than the Procure IT Framework.[347] Prepared in consultation with the AIIA, the contract is in plain English and is designed to explicitly facilitate SME engagement.[348]

5.103   Agencies are advised to ensure that they anticipate any potential for the total contract value to exceed $150,000, either through related follow on contracts or a change in the scope of works. If this is possible they should source suppliers from the *Advanced Registered Supplier List*.

5.104   Agencies can use their own discretion when selecting suppliers to invite proposals and are not obliged to seek quotations from every supplier within a category. The ICT Services Scheme guidelines advise that agencies can conduct preliminary investigations such as reviewing information on eQuote, checking the company website, contacting referees, having an informal discussion with the supplier about the requirements and conducting an informal expression of interest process.[349]

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[342] NSW Government ICT Services Scheme, Guidelines for Customers, p. 10

[343] NSW Government ICT Services Scheme, Guidelines for Customers, p. 9

[344] NSW Government ICT Services Scheme, Guidelines for Customers, p. 6

[345] NSW Government ICT Services Scheme, Guidelines for Customers, p. 6

[346] NSW Procurement, Answers to questions on notice, 27 February 2013, p. 4

[347] NSW Government ICT Services Scheme, Guidelines for Customers, p. 8

[348] Ms Suzanne Campbell, Report of proceedings before the Public Accounts Committee, 28 November 2012, p. 60

[349] NSW Government ICT Services Scheme, Guidelines for Customers, p. 11

5.105   The following table is a summary of contract values and recommended actions that have been implemented under the ICT Services Scheme.[350]

Table 5: Contract Thresholds for ICT Services Scheme

Estimated total contract value	Contract Risk	Recommended minimum of suppliers to RFQ	Supplier List	Terms and Conditions
Up to $150,000	Low	1	Registered Supplier List	Short-form
Up to $150,000	High	1	Advanced Registered Supplier List	Procure IT Framework (v3)
Over $150,000	Low	3	Advanced Registered Supplier List	Procure IT Framework (v3)
Over $150,000	High	3	Advanced Registered Supplier List	Procure IT Framework (v3)

As-A-Service Model

5.106   Traditional ICT contract management was built to support in-house managed, on-premise deployments of ICT infrastructure, systems and applications.[351] As-a-service models are where traditional in-house deployments are now managed by vendors offering to provide services using cloud-based technologies.

5.107   As-a-service is a delivery model in which software, infrastructure, platforms and any associated data are hosted in the cloud. Cloud computing is the use of computing resources (hardware and software) that are delivered as a service over a network (typically the Internet).

5.108   The rapid growth in the availability of cloud services presents opportunities and challenges to government in delivering services to the community.

5.109   There are three basic types of cloud as-a-service offerings accepted by the ICT industry. Table 6 provides a brief description of each of these.

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[350] NSW Government ICT Services Scheme, Guidelines for Customers, 2013, Appendix 2

[351] Submission 7, Mr Anthony Miller, p. 4

Table 6: Description of As-A-Service Models

Cloud Services	Description
Software-as-a-Service (SaaS)	Offers renting application functionality from a service provider rather than buying, installing and running software yourself. Agencies can use SaaS to deliver standard application services such as email, office applications and more complex solutions such as ERP tools.
Platform-as-a-Service (PaaS)	Provides a platform in the cloud, upon which applications can be developed and executed. Agencies could use PaaS for application deployment projects and application delivery, as well as virtual desktops to end users.
Infrastructure-as-a-service (IaaS)	Vendors offer computing power and storage space on demand. Agencies could use IaaS to access virtual machines to run their applications.

5.110   Cloud services can be deployed through a private or public cloud, or a combination of both. A private cloud is one in which the supporting infrastructure is provisioned for the exclusive use of a single organisation. A public cloud is provisioned for open use by the public or any company.[352]

5.111   The ICT Strategy acknowledges the need to change the way agencies provision managed services, including new contract instruments. The strategy states that there will need to be contracts that '...address the pay-as-you-go consumption models of infrastructure as-as-service, platform as-a-service and software as-a-service.'[353]

5.112   The purchasing of managed services will require the development of contracts and schedules that address the pay as you go consumption model. The ICT Strategy states that new modules of Procure IT will be developed in collaboration with industry and are expected to be delivered by the second quarter of 2013.[354]

5.113   A *Cloud Computing Strategic Direction Paper* from the Commonwealth Department of Finance and Deregulation, published in 2011, commented on the potential of cloud computing to transform the way ICT is consumed and managed:

> International governments such as the United States, the United Kingdom, Canada and New Zealand, like Australian governments see cloud services as an opportunity to improve business outcomes through eliminating redundancy, increasing agility

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[352] Submission 17, Department of Finance and Services, p. 14

[353] NSW Government, ICT Strategy 2012, p. 29

[354] NSW Government ICT Strategy, 2012, p. 30

and providing information and communication technology services at a potentially cheaper cost. [355]

5.114   The Committee reviewed both of the SAP ERP projects currently being implemented in NSW Trade and Investment (NSW T&I) and in the Department of Education and Communities (DEC) as examples of the traditional approach and the new as-a-service model. As discussed in Chapter Two, both of these projects covered multiple agencies to deliver finance, human resources and payroll functions. The Cloud-based SAP implementation at NSW T&I has been delivered in less than 12 months with a cost of $14 million up front, with ongoing costs of approximately $3 million. [356] This compares to the DEC project which is due for completion in 2014, after eight years at a projected cost of $386 million.

5.115   Mr David Kennedy, Chief Information Officer, NSW T&I described the benefits using a software-as-a-service solution for its implementation of the SAP ERP project:

> The software as a service model enables us to implement faster and have reduced cost and dependency on hardware and infrastructure because you are just consuming the service. [357]

5.116   In evidence to the Committee, Mr Mark Paterson, Director General, NSW T&I briefed the Committee on the progress of the cloud based SAP ERP project. He acknowledged that the transition into a complex environment would be a big test for the project, particularly in the limited time frame available. [358]   Mr Paterson also discussed the advantages of purchasing a service rather than the technology:

> We are contracting with another party to deliver that service to us; it is up to the party to maintain and sustain the technology that underpins it. So the servers, the updated hardware, the updated software that will be required over time is the responsibility of the service provider. So SAP takes a lot of the technology and software risk from us to them and they are providing this service in an out of the box solution. [359]

5.117   When examining the Learning Management and Business Reform (LMBR) project, the Committee questioned the DEC about using the as-a-service approach. Mr Peter Riordan saw some advantages in the new approach:

> It is an interesting and vexed question. If we can reduce the cost of software through a services model, as opposed to an asset-based model where we hold our intellectual property, which reduces the cost of these systems to the taxpayers of NSW, that has to be a good thing.

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[355] Department of Finance and Deregulation, A *Cloud Computing Strategic Direction Paper*, April 2011, p. 7

[356] Mr Mark Paterson, Report of proceedings before the Public Accounts Committee, 28 November 2012, p. 6

[357] Mr David Kennedy, Report of proceedings before the Public Accounts Committee, 28 November 2012, p. 3

[358] Mr Mark Paterson, Report of proceedings before the Public Accounts Committee, 28 November 2012, p. 7

[359] Mr Peter Riordan, Report of proceedings before the Public Accounts Committee, 28 November 2012, p. 8

> …I think as this develops and as suppliers become more sophisticated and the Government becomes more sophisticated as a procurer of these types of services, if we can commoditise them in some way that will invariably reduce the cost.[360]

5.118   Mr Michael McMahon, General Manager, LMBR program at DEC cautioned that while there may be advantages the department was not ready to move to an as-a-service model:

> Are we ready to do it right now? My opinion is no. There is a bit of change in the thinking and culture that needs to happen both within the Government and also as a taxpayer in understanding what governments are trying to achieve but it is something that we would be looking to do going forward.

> I know commercial companies will tell you they are ready and can do it – cloud and security in cloud and all this kind of stuff. I come from that environment and sometimes there is a lot of talk that says it is ready but I would just be very cautious in checking and then taking time in the transition towards that model.[361]

5.119   Mr Miller highlighted his concerns that the innovations and opportunities offered by the new technologies are not being prioritised while IT departments are 'supporting the legacy applications, systems and procurement models'.[362] In his evidence to the Committee, Mr Miller emphasised the need to provide an incentive for IT departments to move away from legacy investments:

> The systemic issue today is there is no incentive really for the current information technology shop to move away from its legacy investments – in fact, they are being encouraged to continue to maintain it. The real challenge is to drive that more brokerage, in other words, the CEO becoming more of a broker of services rather than try to do everything themselves.[363]

5.120   Despite the reservations expressed by DEC, trials are underway for cloud based projects. In a media release issued on 5 February 2013, the Minister for Finance and Services, the Hon Mr Greg Pearce, MLC, called for expressions of interest for a comprehensive trial of cloud-based computing. The Minister outlined the purpose of the trial and the proposed outcomes:

> We will test multiple cloud based systems across different scenarios and environments to ensure they are cost-effective, secure and efficient and if successful we will look at how they can be rolled out across government.

> The trial will test technical and regulatory questions, as well as opportunities to reduce the Government's annual ICT expenditure.[364]

5.121   The trial includes five pilot projects targeting:

- Email as a service

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[360] Mr Peter Riordan, Report of proceedings before the Public Accounts Committee, 28 November 2012, p. 33

[361] Mr Michael McMahon, Report of proceedings before the Public Accounts Committee, 28 November 2012, p. 34

[362] Submission 7, Mr Anthony Miller, p. 6

[363] Mr Anthony Miller, Report of proceedings before the Public Accounts Committee, 28 November 2012, p. 41

[364] Media Release, http://www.services.nsw.gov.au/ict/sites/default/files/130205-nsw-gov-targets-the-cloud.pdf,accessed 3 April 2013

- Enterprise Resource Planning (ERP) as a service
- Shared Service multi-tenanted email as a service
- Infrastructure as a service, and
- Desktop as a service, email and collaboration as a service.

5.122   WorkCover, Fire and Rescue NSW, the Department of Trade and Investment and Businesslink have already engaged with suppliers of cloud-based email, finance and case management services.[365]

5.123   DFS is currently developing a new module of Procure IT version 3 to provide agencies with a contract and performance management framework for the 'as-a-service model.' NSW Procurement informed the Committee that once this has been finalised the ICT Services Scheme will be widened to include as-a-service projects.[366]

Funding of as-a-service model

5.124   Depending on the cloud model adopted, staff will need to understand and address a number of issues, particularly regarding the establishment of an appropriate funding model. Due to the cloud's pay-per-use model, capital expenditure will need to be shifted into operating costs, which may require different levels of authorisations to commit expenses and procure services.

5.125   The Federal Department of Finance and Deregulation strategic directions document provides a useful summary of the changes agencies will have to make to their cost models in order to benefit from potential cost savings:

- Services and storage become available on demand without serious financial commitments required for infrastructure purchase and maintenance. Additionally, they are priced as a pay-as-you-go-service;

- Transfer of costs

  ➢ From CAPEX (Capital funding) to OPEX (Operational funding) – no need to invest in high cost IT equipment; able to test software solutions without capital investment

  ➢ Reduction of operating costs

    ▪ reduced energy consumption and less expense in managing IT systems

    ▪ potential to reduce support and maintenance costs through transitioning legacy systems to new systems

    ▪ potential to reduce the demand for data centre resources

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[365] Media Release, http://www.services.nsw.gov.au/ict/sites/default/files/130205-nsw-gov-targets-the-cloud.pdf,accessed 3 April 2013

[366] Answers to questions on notice, NSW Procurement, 27 February 2013, p. 5

- potential to reduce the Government's carbon footprint.[367]

5.126   The Strategy also sets out a role for the ICT Board to set whole of government ICT investment principles, and to ensure that these principles are reflected in relevant investment and business case processes. This is intended to support a move to a more consistent, shared and standardised approach to ICT projects across government.

5.127   DFS advised the Committee that it recognises services will be paid for through recurrent operational expenditure, noting the shift away from ICT capital investment.[368] The Committee notes that there is a proposed program of work to assess whether the existing funding policy framework adequately supports the transition and encourages this to be completed as soon as possible to ensure that potential cost savings are being made.

Committee Comments

5.128   The Committee believes that the new approach regarding intellectual property set out in the Procure IT documentation is a positive change that will encourage innovation and improved engagement with start-up companies. The Committee is pleased to note the changes being implemented in the ICT Services Scheme, particularly the language used in the short contract and the establishment of approved supplier lists, will help agencies select an appropriate vendor and improve engagement with SMEs. The Committee believes that the replacement of the 2020 contract with the ICT Services Scheme will enable vendors to be added to the approved supplier list at any time, providing agencies with an up to date list of vendors and their services.

5.129   The Committee welcomes the project to improve compliance with all procurement laws and policies through education and auditing and reporting to the Procurement Board.

5.130   The Committee found that the documentation and information regarding Procure IT needs updating, as it refers to the previous governance arrangements, making reference to the State Contract Control Board and panel arrangements.

5.131   The Committee welcomes the introduction of Vendor Management as a complementary role to Contract Management. The initiative by HealthShare NSW to develop a Tactical Vendor Management framework recognises that strategic vendors are integral to the business. By taking a vendor-centric view consideration can be given to the entire relationship, not simply the contract. The Committee believes that this model should be implemented across the cluster agencies.

5.132   An important element of the transition from in-house IT shops to purchasing services will be the management of the legacy systems.   Migrating some or most of an agency's service delivery to the cloud will involve major changes to the procurement, ongoing management and level of support required by an

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[367] Department of Finance and Deregulation, A *Cloud Computing Strategic Direction Paper*, April 2011, p. 18

[368] Submission 17, Department of Finance and Services, p. 14

internal ICT department. As discussed in Chapter Two, NSW T&I have demonstrated that cloud based technology can be used to implement a business critical application based on an as-a-service model. The Committee is keen that the lessons learned from this project be passed onto to other agencies.

5.133　　The Committee is pleased to see progress being made with pilot cloud based projects under way. However, progress regarding the cost model for these projects and the implementation of a new funding policy framework to maximise the potential cost saving is equally important. The Committee believes that a key part of this transition to purchasing services is to ensure that the correct funding model is in place, to enable agencies to make the shift from capital expenditure to operational expenditure, in their financial management and planning and in the preparation of business cases. The gateway review process may also need updating and should be reviewed.

5.134　　The Committee recognises that ICT procurement in NSW is going through a transitional stage from traditional in-house projects to the purchasing of services. The Government is committed to moving to this model and this is reflected in the strategies and documents that have already been published. The Committee acknowledges the savings that were made in the NSW T&I SAP project.

Recommendation 23

That NSW Procurement update Procure IT documentation to reflect the new governance structure, including the NSW Procurement Board, ICT Board and Leadership Groups.

Recommendation 24

That the NSW Government implement a vendor management framework to assist agencies and vendors improve communications and ongoing relationships.

Recommendation 25

That NSW Treasury review the current funding framework for ICT projects and expenditure, and implement an appropriate investment model that reflects the adoption of as-a-service models in order to maximise the potential cost savings.

GOVERNMENT PROCUREMENT AND SMALL AND MEDIUM ENTERPRISES (SME)

5.135　　Small and medium businesses are key drivers for the NSW economy, employing more than 1.8 million people. Currently there are approximately 580 SMEs engaged in whole-of-government contracts and they make up 80 per cent of tender responses.[369] In its submission to the inquiry, the AIIA commented that

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[369] NSW Government Procurement: Small and Medium Enterprises Policy Framework, 2013, p. 3

> ICT SMEs would like to be able to offer their innovative products and services to the NSW Government, but face challenges when trying to engage.[370]

5.136   Historically, government has outsourced the majority of its systems development and operations to large single suppliers, known as system integrators. The role of SMEs has therefore been largely limited to that of sub-contractor.

5.137   The AIIA identified a number of problems faced by SMEs. They commented in their submission that limited resources and a small market presence made it difficult for SMEs to gain the attention of a government agency or department. Larger firms have established relationships and multi nationals are more likely to get an audience with a prospective buyer. Conversely the agencies do not get access to the SME's products, as SMEs do not bid in response to tenders, as they perceive they will not be selected:

> …This represents a lost opportunity for both IT SMEs and for the NSW Government, as well as a loss for NSW citizens, as SMEs can offer new innovated and cost effective solutions which may not be available from other sources in the market place.[371]

5.138   A number of SMEs contributed to the Inquiry and highlighted both their value and the difficulties they face when competing for contracts. One SME, PretaWeb commented that the current procurement rules were failing as SMEs can only bid or work on small projects:

> This assumes there is a higher risk that SMEs will not deliver; in fact the contrary is true. The government needs to implement procurement policies that ensure the engagement with local SMEs who specialise in particular technologies either directly or sub-contracted via a large enterprise. This is to replace the traditional method of contracting only to large system integrators who process generalised technical knowledge.[372]

5.139   At the public hearing on 28 November 2012, the Committee heard evidence from a panel of SMEs. The panel all felt that in order for any new contracts and frameworks to be effective, their use would need to be either mandated or strongly encouraged.[373]

5.140   Mr Joseph Rayment, Account Manager, Ethan Group, commented on what he saw as the main issues for SMEs in the current structure:

> …the current strategy empowers larger vendors and integrators to effectively own their projects This relegates small to medium-sized enterprises to the sidelines….At the moment, small to medium-sized enterprises do not currently benefit from the strategy employed by the NSW public sector, and certainly not as much as they might, should they be utilised to the best of their ability.[374]

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[370] Submission 16, Australian Information Industry Association, p. 4

[371] Submission 16, Australian Information Industry Association, p. 5

[372] Submission 4, Ms Virginia Choy, PretaWeb, p. 2

[373] Report of proceedings before the Public Accounts Committee, 28 November , p. 37-59

[374] Mr Joseph Rayment, Report of proceedings before the Public Accounts Committee, 28 November , p. 39

5.141   Commonwealth Government procurement rules and policies set a minimum level of SME participation for IT and non-IT purchases. Under the *Australian Government Financial Management Accountability (FMA) Act 1997*, agencies must source 'at least ten per cent of procurement by value from SMEs.' [375]

5.142   A Commonwealth report, *Study to identify options to ensure that the Government's ICT and SME policies are mutually reinforcing*, quoted research undertaken by Intermedium, which reported that the SME proportion of total contract value had remained consistent, averaging 25.55 per cent (2003-2007). Analysis by the Department of Finance and Regulation (July 2009) found that market shares for SMEs supplying a broad range of goods and services to Government routinely exceeded the ten per cent threshold.[376]

5.143   In its submission the AIIA recommended a 'Meet the Buyer' one day event, to overcome the 'access' challenge. This would enable NSW Government buyers to identify potential products and services from IT SMEs and meet them in an informal environment. [377] The AIIA also recommended that NSW Procurement attends the event to provide updates and answers questions on future procurement plans and the implementation of the new policy framework.[378] This approach was endorsed by Ms Virgina Choy, who said that her company (PretaWeb) had experienced a reluctance from agencies to talk to vendors:

> …have some kind of government approved expo where whoever wants to participate at a low cost, the agencies, the buyers can come and speak to all the vendors and find out what their services are and even what their requirements are as well.[379]

5.144   Since the public hearing in November 2012, the NSW Government Procurement: Small and Medium Enterprises Policy Framework and the ICT Services Scheme have been introduced by DFS. The stated aim of the SME Enterprise Policy Framework is to improve access for SMEs:

> ...improves access to government procurement, opens up opportunities, supports competition and reduces the administrative burden on SMEs engaged in delivering goods and services to the NSW Government.[380]

5.145   Developed in consultation with industry and government agencies, the policy aims to enhance the support to SMEs by increasing direct opportunities to do business with government. The mechanisms will include SMEs targeted supplier panels and pre-qualification schemes, aimed to provide SMEs with greater access to procurement opportunities and remove barriers to government procurement opportunities.

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[375] Department of Finance and Deregulation and Department of Innovation, Industry, Science and Research, Study to identify options to ensure that the Government's ICT and SME policies are mutually reinforcing, 2009, p. 3

[376] Australian Government, Department of Finance and Deregulation, Statistics on Australian Government Procurement Contracts, July 2009

[377] Submission 16, Australian Information Industry Association, p. 5

[378] Submission 16, Australian Information Industry Association, p. 5

[379] Ms Virgina Choy, Report of proceedings before the Public Accounts Committee, 28 November , p. 43

[380] NSW Government Procurement: Small and Medium Enterprises Policy Framework, 2013, p. 2

5.146   All agencies will be required to identify SME capability and prepare an SME Opportunities Statement during the procurement planning stage.[381]   SME Participation Plans will be required for contracts valued at $10 million and above. These are designed to show how the tender will support local industry, jobs and skills development.[382]

5.147   Agencies are also required to use the Contract Simplification Structuring Guidelines which require contract documents to be short, simple and written in plain English.[383] Short form contract templates are available on the NSW Procurement website.

5.148   Future developments will see the establishment of forward procurement plans, under the direction of the Procurement Board and a new online platform which will enable SMEs to register with NSW Procurement.[384]   SMEs can register with basic information, including the types of goods or services they provide.

Committee Comments

5.149   The Committee acknowledges the importance of SMEs to the NSW economy and considers the introduction of the Small and Medium Enterprises Policy Framework and the ICT Services Scheme as positive developments.   The Committee believes that the introduction of opportunity statements and participation plans will raise the profile of SMEs.

5.150   The Committee does not believe that it is appropriate for NSW to set a minimum level of engagement with SMEs, due to the measures that are already in place. However, the Committee believes that monitoring the compliance will be essential to ensuring that the initiatives in the policy framework and the ICT services scheme are being completed by agencies.

5.151   The Committee is grateful to the representatives of SMEs who attended the public hearing and welcomed their insights and ideas. The Committee felt that one of the key issues for SMEs was establishing relationships with agencies and gaining access to them. The Committee believes that DFS and NSW Procurement should consider supporting a 'Meet the Buyer' event, along the lines suggested by the AIIA.

Recommendation 26

That the Department of Finance and Services monitor and report on agency compliance with the requirements to prepare opportunity statements and Small and Medium Enterprise participation plans.

Recommendation 27

That the Department of Finance and Services and NSW Procurement sponsor 'Meet the Buyer' events to promote the work of Small and Medium Enterprises in NSW.

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[381] NSW Government Procurement: Small and Medium Enterprises Policy Framework, 2013, p. 6

[382] NSW Government – Goods and Services Procurement Policy Framework, December 2012, p. 29

[383] NSW Government – Goods and Services Procurement Policy Framework, December 2012, p. 30

[384] NSW Government ICT Services Scheme, Guidelines for Customers, p. 11

CAPABILITY AND TRAINING

5.152   A number of stakeholders, including the Auditor-General, raised concerns about the lack of expertise within the NSW Government regarding contract management and general competence in ICT. This section examines how this problem is being addressed, what courses are available and how measures put in place can improve the capability levels of existing staff and new staff.

5.153   The PSC has responsibility for developing the existing NSW Public Sector Capability Framework to include specific capabilities for ICT. In his submission to the Inquiry, Mr Graeme Head, Public Service Commissioner outlined the responsibility of the PSC on a number of major workforce reforms relevant to ICT:

> (i) measures to improve ICT project and contract management in the public sector, in particular in relation to contract negotiation and ongoing contract management
>
> (iv) long-term planning to meet the ICT needs of the public sector and ensure the best value for money in the procurement of government ICT products and services.[385]

5.154   The Commission of Audit's *Interim Report on Public Sector Management,* released in 2012, recommended that government adopt a more flexible approach to whole-of-government contracts and that clusters and agencies improve their procurement capabilities.[386] The report found that take-up of the existing capability framework had been 'limited and inconsistent across agencies and not fully integrated with workforce planning, performance management and learning and development activities.' [387] In his evidence to the Committee, Mr Lean advised that a joint working group would be established with the PSC to look into capability across the sector.[388]

5.155   As well as specific skills and knowledge of the procurement process, Mr Murphy told the Committee that the ICT strategy includes a discrete project relating to ICT skills in government. This is intended to increase clarity on ICT capabilities that are required by government and understanding what skills are currently available:

> DFS are working with the Public Service Commission to develop a sort of framework for understanding the ICT skill sets we have and the skill sets we will need and link that to the public service capability framework.[389]

5.156   The PSC, in its submission, also advised that its work with DFS included identifying where the public sector needs to develop its skill base and how to attract and retain the right people. A workforce management strategy has been developed to support the ICT strategy, which includes:

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[385] Submission No 19, Mr Graeme Head, Public Service Commission, p. 1

[386] NSW Commission of Audit Final Report, Government Response, May 2012, p. 20

[387] Submission 19, Public Service Commission, p. 1

[388] Mr Anthony Lean, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 7

[389] Mr William Murphy, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 13

- mapping the mix of capabilities needed to deliver the ICT strategy
- examining the optimum mix of employment arrangements to meet the needs of the rapidly evolving ICT function and taking account of the highly variable ICT-specific labour market
- developing tailored recruitment methods for filing ICT roles
- consider options for accreditation.[390]

5.157   In relation to capacity building, DFS advised the Committee that a review is looking at the characteristics of the ICT labour market and the needs of the public sector ICT workforce. Industry associations are being consulted to ensure 'that the public sector can leverage training and accreditation programs to build capability across the sector.'[391] An ICT Capability Framework will be developed which will form the basis upon which the other strategies will be developed.

5.158   In evidence to the Committee, Mr Mike Kano, Australian Institute of Project Management (AIPM) commented that there were issues about how agencies procure certain IT skill sets, especially some technical skill sets:

> ….the ICT skills area is certainly an area where greater standardisation across the public sector is going to yield efficiencies. There are certainly also some opportunities in terms of innovation as certain skill sets such as cloud expertise become very hot at the moment and in the years to come and social media also becomes a very hot skill. A lot of the existing workforce may not have those skills sets, so it's whether you procure it or you train people up.[392]

5.159   Mr Murphy advised the Committee that different skills will be required to enable staff to manage as-a-service projects and implementations:

> If it is done on your premises you need a skill set that can manage those boxes and that software in that environment. If you acquire that service as a service that is being done by somebody else then your skill set is around managing the relationship with the vendor and management of the contract and service level agreement. It is a different focus of where the skill set needs to be.[393]

5.160   The NSW Procurement Board has stated that training will be an important mechanism to 'help build procurement officers' strategic procurement capabilities.' [394] A *Capability Working Group* has been established, tasked with developing a capability development plan for procurement practitioners along with tertiary and vocational programs for professional bodies and tertiary institutions.

5.161   The Procurement Strategic Directions Statement recognises that guidelines and training may not be enough to achieve a change in culture amongst procurement staff. It recognises the need for engagement:

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[390] Submission No 19, Mr Graeme Head, Public Service Commission, p. 2

[391] Submission 17, Department of Finance and Services, p. 10

[392] Mr Mike Kano, Report of proceedings before the Public Accounts Committee, 28 November 2012, p. 52

[393] Mr William Murphy, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 3

[394] NSW Procurement Board, Strategic Directions Statement, November 2012, p. 44

There needs to be a mind-shift amongst Government procurement staff and senior procurement managers that will lead to greater early engagement of industry and from there to outcome based procurement and procurement of potentially-transformation solutions.[395]

5.162   The Auditor-General has also raised concerns about the lack of expertise in contract management skills in the NSW public sector:

Time and time again in the public sector, we just don't have the contract management skills to manage not just IT projects but any other project. It happens well in pockets but not across the board. That is my main concern.

We could say there is $2 billion worth of IT that has to be managed better, we can issue all the reports we would like in the world but we have to have highly trained people and there is no point having someone who has just been promoted every year in the public sector. We have got to get the right people to manage these contracts.[396]

5.163   In her submission to the Inquiry, Judy Hurditch, Managing Director of Intermedium, suggests that there is also a lack of understanding by suppliers about Government procurement, 'particularly prevalent in aspirant SME suppliers'.[397]   She recommended that SMEs be encouraged to attend courses provided by government which outline the principles of government markets.

5.164   There are a number of formal procurement training courses, including:

- Institute of Public Administration Australia (IPAA) - Procurement Certification Training Program
- The NSW Procurement Certification Training (PCT) Program.

5.165   NSW Procurement also offers the following online courses:

- NSWBuy e-catalogues training (buyers only)
- Supplier Data Portal training (suppliers only)
- NSW e-Tendering training (buyers and suppliers)
- GC21: General Conditions of Contract for Construction training (suppliers only)[398]

5.166   IPAA also provides gateway review training, which consists of three courses:

- Gateway Familiarisation (half day)
- Gateway Reviewer Simulation (full day)
- Building a Credible Business Case (2 days)[399]

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[395] NSW Procurement Board, Strategic Directions Statement, November 2012, p. 44

[396] NSW Auditor-General, Background Briefing to the Public Accounts Committee, 18 October 2012, p. 10

[397] Submission 20, Ms Judy Hurditch, Intermedium, p, 5

[398] http://www.procurepoint.nsw.gov.au/support-and-self-help/training/training-overview (accessed 7 February 2013)

[399] 399 NSW Treasury, answers to Questions of Notice, 12 February 2013, p. 2

5.167   As a short term solution to the shortage of specialised contract managers, the Auditor-General has found that the use of independent quality assurance processes to review work of ICT contractors, employed to undertake contract management roles is effective.   A quality assurance manager can review contracts and provide advice, as well as acting as an interface between IT contractors and the department:

> Time and time again in the public sector, we just don't have the contract management skills to manage not just IT projects but any other project. It happens well in pockets but across the board that is my main concern. [400]

Committee Comments

5.168   Developing capabilities in procurement and contract management, including ICT procurement is vital to the success of the procurement reforms, particularly with the introduction of as-a-service models. However, this will take time and leave a gap in the availability of suitably trained staff.   As an interim measure, the Committee recommends that agencies consider the use of an independent quality assurance process to provide assurance about ICT projects and ICT contractors until suitably trained permanent staff can be appointed.

5.169   The take-up of the existing NSW Capability Framework has been poor, so it is therefore important that a workable mandatory framework is established for ICT capabilities. The mapping of required skill sets and competencies for staff involved in procurement and contract management will assist in the training of existing staff and the recruitment of appropriately skilled staff.

5.170   The Committee believes that it will be important for procurement professionals to collaborate and share information on best practice. It believes that a procurement practitioners' network would assist in sharing information and best practice and also provide a forum for training opportunities.

Recommendation 28

That the Department of Finance and Services and the Public Service Commission ensure that the ICT capability framework reflects the as-a-service purchasing model and recognises the importance of having appropriately skilled procurement and contract managers.

Recommendation 29

That the NSW Government apply the ICT Capability Framework sector wide and make its use mandatory.

Recommendation 30

That NSW Government agencies consider using an independent quality assurance process to conduct a review of ICT projects, ICT contractors and contract management where appropriately qualified internal staff are not available.

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[400] NSW Auditor-General, Background Briefing to the Public Accounts Committee, 18 October 2012, p. 11

TRANSPARENCY AND ACCOUNTABILITY

Performance Management Information about Suppliers

5.171   There is currently only limited information available to agencies regarding the performance of suppliers and contractors. The Government has stated in its Procurement Strategic Directions Statement that it is committed to moving to outcome based procurement.[401]   It recognises that currently there is limited performance information available about suppliers and it is common to rely on past experience:

> A new simplified performance rating system will be developed by the Board to encourage use of a wider range of suppliers by agencies. Agencies will benefit from having a simple performance based measure and suppliers will be able to outline their capability.[402]

5.172   Mr Dobing described to the Committee the progress that has been made in improving accountability:

> It is a feature now of our procurement system that I think creates the right balance between accountability at a central or directional level and responsibility within individual agencies for taking accountability of their performance of and compliance with the Government's procurement framework.[403]

5.173   Mr Dobing responding to questions on notice from the Committee explained how performance was currently being managed by NSW Procurement. As stated earlier in the report, agencies are currently only required to submit a performance report where either a service provider performance is considered unsatisfactory or the total cost of the engagement is more than $150,000 inclusive of GST.[404]

5.174   A performance report is submitted by the agency at the end of the engagement, or when a critical aspect of performance is unsatisfactory. Information is entered into the Contractor and Consultant Management System (CCMS) including scoring against separate assessment criteria. This score is then averaged as a percentage in CCMS.[405] This information is included in the service provider listing that is now available on the e-Quote system.

5.175   NSW Procurement has advised that each agency is responsible for managing supplier performance and those agencies are encouraged to resolve issues directly with the supplier. If the agency is not satisfied with the outcome after submitting a performance report, DFS may intervene through a formal process. Ultimately, if there is a substantial breach of the Scheme conditions, 'it may lead to a formal review and potential suspension from the Scheme.'[406]

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[401] NSW Procurement Board, Strategic Directions Statement, November 2012, p. 5

[402] NSW Procurement Board, Strategic Directions Statement, November 2012, p. 14

[403] Report of proceedings before the Public Accounts Committee, 18 March 2013, p. 2

[404] Answers to questions on notice, NSW Procurement 27 February 2013, p. 3

[405] Answers to questions on notice, NSW Procurement, 27 February 2013, p. 3

[406] Answers to questions on notice, NSW Procurement, 27 February 2013, p. 3

5.176   NSW Procurement explained that in order to implement changes to the performance management process they would need, in the short term, to identify issues regarding resourcing the changes. Performance management procedures would need to be prepared and included as part of the implementation of the ICT Services Scheme. NSW Procurement has advised that they will administer ongoing supplier management in the longer term.[407]

5.177   The Australian Government Information Management Office (AGIMO) has recently introduced a process to capture agency feedback for an as-a-service implementation.[408] On completion of a relevant job, an agency will assess a supplier's performance against the following criteria:

- Quality of service;
- Accuracy;
- Responsiveness;
- Understanding of Agency needs/requirements;
- Professionalism and experience of personnel working on the service; and
- Value for money.[409]

5.178   A rating score will also be provided against each of the above criterion. The score scales range from 'did not meet expectations' to 'exceeded expectations':

- Did not meet needs / expectations;
- Met some needs / expectations;
- Met all needs / expectations; and
- Exceeded all needs / expectations.[410]

5.179   Mr Dobing informed the Committee that the existing pre-qualification schemes were being reviewed and recommendations would be made to the Minister around a possible star rating system. [411]

Public Scrutiny of ICT Projects

5.180   Submissions received by the Committee raised concerns about the level of public scrutiny in the procurement process. Ms Judy Hurditch, Managing Director of Intermedium, stated that NSW lags behind other jurisdictions in terms of transparency:

> ...'only tangentially touches on the publication of contract data as an accountability measure. In Intermedium's view, the NSW Government does not match other jurisdictions, particularly the Australian Government, when it comes to the transparency of goods and services procurement.' [412]

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[407] NSW Procurement, Answers to questions on notice, 27 February 2013, p. 5

[408] http://agimo.gov.au/policy-guides-procurement/data-centres/ accessed 17 January 2013

[409] Australian Government Information Management Office, Operational Rules, Data Center as a service, p. 1

[410] Australian Government Information Management Office, Operational Rules, Data Center as a service, p. 2

[411] Mr Paul Dobing, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 10

[412] Submission 20, Judy Hurditch, Managing Director Intermedium, p. 1

5.181   Mr Jordan also commented that there is a lack of transparency and accountability. He stated that:

> Those in the ICT sector are far more aware of the significant failures in the public sector than the general public due to the level of spin and cover up. [413]

> If other government departments are not aware of the failure, then how can they structure tenders to avoid the same problems? [414]

5.182   Mr Jordan provided information regarding a project by the US Federal Government that is trying to bring ICT spending under control. They have created a dashboard of project performance and spend that is available to the public.[415] The dashboard (http://www.itdashboard.gov/porfolios) is able to highlight projects that are falling behind schedule.

5.183   Mr Miller argued in his evidence that as agencies shift to buying services, the focus will move away from DIY in-house ICT shops to a more results-focused environment which will be outcomes based and seek benefit measurement. In order for this to be successful there will need to be transparency of ICT activity and the measurement of results against the agreed service levels.[416]

Other Jurisdictions

5.184   The United Kingdom House of Commons Public Accounts Committee has recently reported on Assurance for Major Projects.[417] The report examined the role of the Major Projects Authority, which was set up in 2011 to report on projects and intervene where they are going off track.[418] The report concluded that the Authority had not made progress with the publication of project status information:

> Considerations of commercial confidentiality should not be allowed to frustrate proper accountability. They should not be used as an excuse to override the responsibilities of departmental officials to be held to account for the progress of their projects. The Committee expects the complete and transparent disclosure of information on project status, including the current delivery confidence rating, with immediate effect, and will expect to receive annual updates on the performance of projects in the Authority's portfolio.[419]

5.185   While not specifically about ICT projects, the Victorian Government has a Major Projects division that has been in place for 20 years and played a role in delivering large infrastructure projects. *Major Projects Victoria* is a division of the Department State Development, Business and Innovation and reports to the Minister for Major Projects.[420]

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[413] Submission 9, Mr David Jordan, p. 2

[414] Submission 9, Mr David Jordan, p. 5

[415] Submission 9, Mr David Jordan, p. 6

[416] Submission 9, Mr Anthony Miller, p. 15

[417] House of Commons Public Accounts Committee, *Assurance for major projects,* October 2012

[418] House of Commons Public Accounts Committee, *Assurance for major projects,* October 2012, p. 1

[419] House of Commons Public Accounts Committee, *Assurance for major projects,* October 2012, p. 4

[420] http://www.majorprojects.vic.gov.au/, accessed 21 May 2013

5.186   Under the *Australian Government Financial Management Accountability (FMA) Act 1997*, Commonwealth agencies are required to publish all contracts with a value of over $10,000 on the AusTender website. [421]   Agencies are also required to publish an Annual Procurement Plan (APP), which is a statement of an agency's planned procurements for the forthcoming financial year. It consists of a short strategic procurement outlook for the agency, supported by details on planned strategic and major procurements.

5.187   The Commonwealth Department of Finance has also released procurement data from the AusTender tender and contract tracking system as a single file to improve the visibility of purchasing. Mr John Sheridan, Australian Government Procurement Coordinator and Chief Technology Officer, speaking at a conference on 17 February 2013, said that while the data has been in the public domain before, the publication of a single file will allow industry, researchers and the public to drill down into purchasing data. [422]

5.188   The South Australian State Government publishes a strategic ICT procurement program, which is a simple table setting out information about the type of project and category (e.g. services, software, hardware and systems development), current contracts, date of the actual or anticipated approach to market and the current status. This document is located on the SA.gov.au website, providing a snap shot of current and future projects. [423]

Reporting in NSW

5.189   The Committee looked at Infrastructure NSW, which updates its projects on its website.[424] Whilst this does not show specific information about milestones and budget, the information provides an overview of the major projects being undertaken, the latest news on each project, along with some artist impressions. For example, the Darling Harbour project update also included information on the commercial detail of the project, set out in a media release from the Deputy Premier, Mr Andrew Stoner MP. [425]

5.190   In NSW the requirement to publish information under the NSW Government *Information (Public Access) Act 2009* does not apply to contracts of less than $150,000.[426] The Department of Premier and Cabinet memorandum M2007-01 provides guidance to government agencies on what, how and when specific information arising from government tenders and contracts should be publicly disclosed and what information should remain confidential.[427]

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[421] https://www.tenders.gov.au, accessed 5 February 2013

[422] http://www.governmentnews.com.au/2013/02/18/article/Full-exposure-for-Federal-procurement-data/ELAMSRPJDO.html (accessed 18 February 2013)

[423] http://www.sa.gov.au (accessed 8 April 2013)

[424] http://www.insw.com/ , accessed 28 March 2013

[425] http://www.insw.com/news/currentnews/darling-harbour-redevelopment-reaches-project-milestone.aspx, accessed 28 March 2013

[426] https://tenders.nsw.gov.au (accessed 5 February 2013)

[427] NSW Premier and Cabinet M 2007-01 *Public Disclosure of Information arising from NSW Government Tenders and Contracts*.

5.191   Ms Hurditch expressed concern about both the threshold and the governance and monitoring of the requirements to publish contracts:

> A bigger issue than the reporting level threshold however, is the fact that NSW government agencies pay scant regard to the requirements to publish contracts above the $150,000 level. Reporting of ICT contracts is at best patchy and at worst, absent altogether.
>
> Even more significant is the fact that there is no requirement to publish the details of ICT contracts that are let as a result of a restricted procurement process via NSW Procurement.
>
> By far the greater majority of ICT contracts in NSW are therefore unreported.[428]

5.192   In its submission to the inquiry, DFS stated that DPC is developing an integrated finance and performance reporting framework, which will:

> ...contribute indirectly to better value ICT investment by building transparency and accountability in investment decisions.[429]

Access to information

5.193   Online procurement technology solutions have been implemented aimed at streamlining and improving the procurement process.[430] DFS have established a new single point of access for all NSWBuy service delivery called ProcurePoint that includes a specific section aimed at SMEs.[431] As discussed previously, the NSWBuy portal provides access to e-Catalogues, e-Quote and e-Tendering portals.

5.194   The *supply2gov* section allows suppliers to register to receive business opportunities available with NSW Government Agencies.[432] The Government has undertaken that agencies will give 'adequate notice of all major purchases so that industry can plan for participation in government procurement' [433]

5.195   Agencies may contact the **NSW Industry Capability Network** (ICN) who can match SME capability to government procurement opportunities and assist tenderers to prepare the SME Participation Plans.[434] Once an agency has decided to go to tender, advance tender information will be published on the *e-tender* website.

5.196   Service providers will be given information as to why they were unsuccessful with their tender response. This should include constructive suggestions on the ways in which future tender responses can be improved.[435]

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[428] Submission 20, Judy Hurditch, Managing Director Intermedium, p. 1

[429] Submission 17, Department of Finance and Services, p. 12

[430] NSW Government Procurement: Small and Medium Enterprises Policy Framework, 2013, p. 6

[431] http://www.procurepoint.nsw.gov.au/ (accessed 7 February 2013)

[432] http://www.procurepoint.nsw.gov.au/supplying/nswbuy-suppliers

[433] NSW Government Procurement: Small and Medium Enterprises Policy Framework, 2013, p. 7

[434] NSW Government ICT Services Scheme, Guidelines for Customers, p. 14

[435] NSW Government ICT Services Scheme, Guidelines for Customers, p. 15

Committee Comment

5.197   Public scrutiny of projects is an important element in improving openness and transparency regarding government spending. The Committee acknowledges the work of the Major Project Authority in the UK which has resulted in improvements in the monitoring and reporting of large projects. The Committee believes that the NSW Government take some of the lessons learned from the Authority to improve the transparency of ICT projects and expenditure. The Committee believes that NSW Procurement should publish milestones and progress of major ICT projects on the ProcurePoint website.

5.198   While the Committee considers the level of reporting of government contracts for Commonwealth agencies is too low ($10,000), the Committee recommends that a review of the current threshold be undertaken in NSW and to review compliance with the *Government Information (Public Access) Act 2009* for contracts over $150,000.

5.199   At present only limited performance information is captured. An average percentage value for each service provider is captured, based on performance reports provided by agencies. While the Committee is pleased to note that this is available to agencies via the e-Quote system, he Committee believes that improvements can be made regarding performance management of suppliers, under both the Pre-qualification Scheme and the ICT Services Scheme. The Committee recognises that there is a performance management structure in place, but the Committee considers that the current level of information is too limited and supports the introduction of a supplier rating system, similar to the AGIMO scheme.

5.200   The Committee believes that Annual Procurement Plans should be introduced based on the format used by the Federal Government. This would include a statement of an agency's planned procurements for the forthcoming financial year; a short strategic procurement outlook for the agency, supported by details on planned strategic and major procurements. This information should be publish on the ProcurePoint website and provide suppliers with an opportunity to forward plan for upcoming projects.

Recommendation 31

That the Department of Finance and Services and NSW Procurement improve transparency by publishing the milestones and progress of major ICT projects on the ProcurePoint website.

Recommendation 32

That the NSW Government reduces the reporting threshold from $150,000 to contracts valued over $100,000 and monitor and report on compliance.

Recommendation 33

That the Department of Finance and Services and NSW Procurement expand the performance information about suppliers and introduce a rating system for all ICT projects, which should be available to all agencies via the NSWBuy web portal.

Recommendation 34

That the Department of Finance and Services and NSW Procurement introduce Annual Procurement Plans based on the Commonwealth model and publish them on the ProcurePoint website.

Chapter Six – Innovation and Emerging Technologies

6.1   New technologies are growing in influence, providing audiences with more choice than ever before and challenging the existing regulatory environment. Digitisation is transforming the way content is produced, distributed and consumed. The growth in the 'information economy' is being driven by new communication devices, broadband and social media and creates increased demand for content for these new digital platforms.[436] The rollout of the National Broadband Network will provide a platform for emerging technologies, facilitating the distribution of services and content.

6.2   One of the major changes in technology affecting ICT is the implementation of cloud based computing. This has already been looked at in terms of the procurement of a service. This chapter will consider some of the security aspects and how the risks of cloud computing can be managed. This chapter will also look at the use of social media, how it opens up opportunities to establish different channels of communication and transfer knowledge in real time, balanced with the need to use it responsibly.

6.3   The chapter will also discuss cyber-security and the management of cyber-attacks.

Introduction

6.4   Mr Anthony Miller, Managing Director, Wot-Link Pty Ltd, commented in his submission about the rapid pace of change and the appetite of users for increased mobility and innovation:

> Over the past decade, the degree of ICT complexity, massive take up of the internet and an insatiable appetite by users for mobility and innovation, has outstripped the traditional structure of the CIO's branch and its ability to deal with change.[437]

6.5   When asked how the NSW public sector would keep pace with new and emerging technologies, the Department of Finance and Services (DFS) stated in their response to questions on notice that the ICT governance framework 'embeds collaboration between agencies and industry to ensure that government is able to adopt appropriate new and emerging technologies coming onto the market.'[438] DFS advised that through the ICT Leadership Group and the ICT Advisory Panel, senior public sector business leaders can obtain expert advice from leaders in the ICT industry.

6.6   The Advisory Panel is tasked with 'ensuring that prevailing and emerging technologies and solutions can be effectively aligned with agency requirements

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[436] NSW Digital Economy Industry Action Plan, p.10
[437] Submission 7, Mr Anthony Miller, p. 4
[438] Submission 17, Department of Finance and Services, p. 15

and government objectives.'[439] The digital economy action plan reinforces this, stating that it is critical that the NSW government be 'seen as a leading exemplar in the application of ICT to the delivery of government services and in helping to stimulate, support and engage NSW innovation ecosystem.'[440]

Cloud Computing

6.7   As discussed in chapter five, moving to cloud computing can lead to a reduction in the cost of managing and maintaining ICT systems. Rather than purchasing expensive systems and equipment, NSW government can reduce their costs by using the resources of a private cloud or a cloud computing service provider. It is a significant shift from how ICT has been managed before. However, as well as the benefits of cloud computing, concerns regarding security and business continuity need to be assessed and the risks managed.

6.8   In their submission DFS quoted the widely adopted US National Institute of Standards and Technology (NIST) definition of 'cloud':

> Cloud computing is an ICT sourcing and delivery model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications and services), that can be rapidly provisioned and released with minimal management effort or service provider interaction.[441]

6.9   The NSW ICT strategy describes cloud computing as a 'model of service provision that enables simple, convenient, on demand access to a shared pool of computing resources.'[442] While this is not new technology, cloud computing is only now being adopted by a number of Governments, both here in Australia and abroad.

6.10   Migrating towards cloud computing requires a fundamental shift in the way people perceive ICT. Rather than thinking about ICT in terms of asset ownership, it requires people working in ICT to start thinking about ICT as a utility. As discussed in chapter five, the over-riding focus on capital expenditure (CAPEX) needs to change to change as customers experience the transition to an operating expenditure (OPEX) model where ICT becomes a predicable monthly expenditure.

6.11   The ICT strategy states that a 'service orientation – where agencies procure ICT as a service rather than buying and operating ICT assets directly themselves – underpins the use of cloud technologies.'[443] Cloud services can be deployed through a private or public cloud, or a combination of both. A private cloud is one in which the supporting physical infrastructure is provisioned for exclusive use by a single organisation. A public cloud is provisioned for open use by the general public or any enterprise.

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[439] Submission 17, Department of Finance and Services, p. 16

[440] NSW Digital Economy Industry Action Plan, p.13

[441] Submission 17, Department of Finance and Services, p. 16

[442] NSW Government ICT Strategy, 2012, p. 24

[443] NSW Government ICT Strategy, 2012, p. 22

6.12   In their submission to the inquiry, DFS advised that the NSW Government Cloud Computing Policy and Guidelines are currently being prepared[444] and work is underway with WorkCover, Fire and Rescue NSW, NSW Trade and Investment and Businesslink, who have already engaged with suppliers of cloud-based email, finance and case management services.[445]

Benefits of Cloud Computing

6.13   A number of our stakeholders commented on the benefits that can be achieved by using cloud technologies to drive business improvements and reduce costs. The Government News reported in March 2012, that cloud computing delivers six major benefits that can benefit the public sector.   These were 'cost effectiveness; speed; ease of use; scalability; anytime, anywhere availability and continuous innovation'.[446]

6.14   The NSW Government's *Infrastructure and Managed Services Plan* promotes the move to a service orientation to provide greater flexibility, allow agencies to respond more effectively to technological changes and take advantage of rapid implementations.[447]   The plan will also see the deployment of cloud technologies into mainstream business, which will provide opportunities to reduce cost by 'leveraging small portions of a larger infrastructure base on an on-demand basis.' [448]

6.15   Mr Anthony Lean, Deputy Director General, DFS in his evidence to the Committee commented that the introduction of cloud based business models provided a 'significant opportunity for government to take different methods to procuring and managing ICT. Given this context, I expect there will be significant change in the government ICT and procurement space over the next few years.'[449]

6.16   The Committee's review of the NSW T&I SAP implementation found that cloud computing can achieve efficiencies such as cost savings, reducing the reliance on in-house resources and enabling shorter timeframes to deploy ICT services. DFS commented in their submission that cloud services 'offer opportunities for significant cost savings through utilising ICT infrastructure more efficiently. The ICT Strategy requires agencies to develop and execute virtualisation plans, and includes several actions to test and refine managed services and cloud options for ICT provision.'[450]

6.17   Cloud computing has the potential to help agencies leverage modern technologies such as computer virtualisation and worldwide Internet connectivity. However, as Mr Miller advised in his evidence to the Committee, while the latest innovations in applications and cloud computing provide

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[444] Submission 17, Department of Finance and Services, p. 17

[445] Mr Greg Pearce MLC, Minister for Finance and Services, NSW Government targets the cloud, Tuesday 5 February 2013

[446] Government News, *What Cloud Computing Means for Government,* March 2012, p. 16-17

[447] NSW Government ICT Strategy, 2012, p. 23

[448] NSW Government ICT Strategy, 2012, p. 21

[449] Mr Anthony Lean , Report of proceedings before the Public Accounts Committee, 26 October 2012, p.3

[450] Submission 17, Department of Finance and Services, p. 15

massive opportunity for operational improvement, direction and guidance is needed from the DFS on the management of legacy applications and systems.[451]

6.18   Ms Suzanne Campbell, Chief Executive, Australian Information Industry Association (AIIA) commented about the benefits and opportunities for using cloud options within multiple agencies as part of a whole of government approach:

> …cloud computing options could be leveraged by multiple agencies or conversely cloud computing could make those multiple options visible to multiple agencies. The requirements for interoperability and standards based on approaches for key solutions and applications across government agencies could be simplified and applied consistency. Finally, harmonisation of policies across agencies would be a further advantage of a whole-of-government approach.[452]

6.19   As discussed in chapter 2, during his evidence to the Committee on their SAP cloud implementation, Mr Mark Paterson, Director General, NSW T&I talked about some of the benefits of cloud technology in breaking down location barriers and having the ability to access information via mobile devices, such as iPads, Blackberry, Android equivalent and laptops. [453]

6.20   In their submission, Ovum, independent research analysts, looked at why cloud services are better. The submission referenced their report on *Practical Steps to the Cloud for Government Agencies*, which concluded that Ovum has yet to study a professionally conducted enterprise-grade cloud service project where the results were not highly positive:

> The superior and iteratively evolving functionality is material to gaining user acceptance and minimising the need for traditional over specification of user requirements. In general, the experience of the executives in the case studies was that the cloud service already included most of, if not more than, their desired technical and functional requirements without the need to build or customise solutions specifically for their agency's needs.[454]

International Perspective

6.21   The Committee noted that many international governments have committed to a 'cloud first policy'. Ovum, in their recent report into cloud based platforms talked about the debate that is currently taking place around this style of mandate as a method for driving ICT procurement reform:

> Despite the debate, there is no doubt that the adoption of such mandates is a trend that is gaining steam. In Ovum's view, these mandates are a positive development that explicitly recognises the opportunity cost of inaction.[455]

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[451] Submission 7, Mr Anthony Miller, p. 7

[452] Ms Suzanne Campbell, Report of proceedings before the Public Accounts Committee, Wednesday 28 November 2012, p. 62

[453] Mr Mark Paterson, Report of proceedings before the Public Accounts Committee, Wednesday 28 November 2012, p. 6

[454] Ovum, *Practical Steps to the Cloud for Government Agencies* (O100190-008), July 2007, p. 8

[455] Ovum, *The Role of Cloud-based Application in Government Innovation* (IT007-000688) 8 April 2013, p. 3

6.22   The US Federal Government spends approximately $80 billion dollars on Information Technology annually.[456] In order to leverage cloud computing across the US Federal Government's IT portfolio, a 'Cloud First' policy was published in December of 2010. Under this policy, Federal agencies are required to 'default to cloud-based solutions whenever a secure, reliable, cost-effective cloud option exists.'[457]

6.23   The UK Government ICT strategy states that 'through innovations in cloud computing we will transform the public sector ICT estate into one that is agile, cost effective and environmentally sustainable.'[458] The strategy states that the vision for government is to adopt a public cloud solution first policy. The UK Government has implemented *G-Cloud*, which can be accessed via an internet portal. In her submission, Ms Virgina Choy, Managing Director, PretaWeb Pty Ltd, talked about the *G-Cloud* implementation and the benefits it has provided as part of a major procurement reform in the UK. She confirmed that her company has been accepted as an official supplier of services. The catalogue provides a 'comprehensive listing of ICT solutions and pricing. It is totally transparent. The model commoditises ICT services, encouraging competitive pricing.'[459]

6.24   Governments in Asia are also looking at cloud services to introduce efficiencies in their ICT use. According to a Frost & Sullivan study in the Asia Pacific region in 2010, 21 per cent of the respondents from governments had adopted cloud computing in one form or another. [460]

6.25   The Hong Kong Government issued a new ICT Strategy in 2011, which has cloud computing as a major focus area.[461] The Office of Government Chief Information Officer is responsible for the implementation of Government Cloud Platform (GovCloud) for hosting common e-government services for shared use by departments. Singapore has become the data centre hub of the Asia Pacific region, so it is 'well positioned to leverage the current investments of market participants to establish a strong position in the global cloud computing market'.[462]

Concerns about Cloud Computing

6.26   As well as benefits of using cloud computing, there are a number of concerns relating to the security of the data and managing the access to this information. Governments and the public need to be confident that the information stored

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[456] CIO Council, *Creating Effective Cloud Computing Contracts for the Federal Government. Best Practice for Acquiring IT as a Service,* 2012, p. 1

[457] CIO Council, *Creating Effective Cloud Computing Contracts for the Federal Government. Best Practice for Acquiring IT as a Service,* 2012, p. 3

[458] UK Cabinet Office, Government Cloud Strategy 2011, p. 2

[459] Submission 4, Ms Virgina Choy, PretaWeb Pty Ltd, p. 5

[460] Frost & Sullivan, *Increasing Acceptance of Cloud Computing in the Public Sector*, 2010, p. 8

[461] http://www.ogcio.gov.hk/en/strategies/government/cloud_strategy/develop_gov_cloud.htm, accessed 8 May 2013

[462] Frost & Sullivan, *Increasing Acceptance of Cloud Computing in the Public Sector*, 2010, p. 13

in the cloud is safe and secure. Governments will only adopt cloud computing if they are convinced that their data will remain secure and available.[463]

Location of data

6.27   International legislation needs to be taken into account when determining where the data from a cloud based application is stored. For example, the United States Patriot Act enables the US government to access anything it wants from any cloud infrastructure over which it is has jurisdiction. Mr David Kennedy, Chief Information Officer, NSW T&I informed the Committee about the process that they had undertaken to decide on the location of data, as part of the cloud SAP implementation. He confirmed that the human resources capability was being hosted locally in Australia:

> We decided, and we looked at it from a risk base and a business risk base perspective, what information we deemed appropriate to keep on-shore and thus remain exclusively on-shore so anything to do with people and staff, payroll related information is exclusively held on-shore.[464]

6.28   He also commented that the risk based assessment that had been completed in this project, showed that the controls and measures that were in place in Germany were more robust than controls currently available in Australia:

> SAP is a best practise provider when it comes to the certification program for security control of data. They have the SAS70, SSA16, ISAP 27001—they have far better controls in place than we do. Also, being hosted in Germany by a German parented organisation, they fall under the jurisdiction of the EU Data Control rules and those criteria which again are more stringent, in fact, than Australian controls.[465]

6.29   Mr Mark Paterson, Director General, NSW T&I also gave evidence on the SAP project, advising the Committee about the robust security considerations that had been taken into account, including data sovereignty and access controls:

> I would add that data security sovereignty, access to data, protection of data will be substantially enhanced by the path we are going down over where we are at the present time. So this means that we meet all of the requirements in relation to data security and it means that we will be better placed on all elements of data security and sovereignty.[466]

6.30   However, there are still some concerns about having data located outside of Australia. Mr Michael McMahon, General Manager, Learning Management and Business Reform Project (LMBR), NSW Department of Education and Communities (DEC) commented that security in the LMBR project was being managed in-house and within the department's direct control:

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[463] Frost & Sullivan, *Increasing Acceptance of Cloud Computing in the Public Sector*, 2010, p. 6

[464] Mr David Kennedy, Report of proceedings before the Public Accounts Committee, Wednesday 28 November 2012, p. 8

[465] Mr David Kennedy, Report of proceedings before the Public Accounts Committee, Wednesday 28 November 2012, p. 9

[466] Mr Mark Paterson, Report of proceedings before the Public Accounts Committee, Wednesday 28 November 2012, p. 44

What we have now in terms of security is, it is within our control and it is within our own firewalls and we understand the implications. Are we liable to be hacked at some point? Every industry gets hacked, even Defence gets hacked. I have worked in the Ministry of Defence in the United Kingdom so I know that hacking happens. Will you ever prevent it? No, but at least if you have got control of your own security and you are not depending on some other company or their exposure, then your risk is less because you know your risk within your organisations, within your own structure within your infrastructure.[467]

6.31   Another factor to be considered in terms of the location of data is whether to use a private or public cloud. Mr Miller, in his evidence to the Committee, discussed the 'security paradigm as being on an axis' in relation to the establishment of a private versus a public cloud, arguing that they both have a place for different types of data:

…you actually have a public cloud, and, if you think about it, it is more akin to, let us say, your Google, which is perfectly reasonable for, let us say, non-classified data. Then you have, let us say, moving along to a more secure state, the in-house IT shop or government department that has put a lot of time and effort into building up their firewalls and so on. But then you move further to an even more secure environment with the economies of scale, much better levels of expertise and knowledge and rigour, and that would be the secure data centre, as I call it, where the private cloud deployment of software as a service is available.[468]

Risk Management

6.32   A risk management process can be used to balance the benefits of cloud computing with the security risks associated with outsourcing to a cloud services provider. A risk assessment should consider possible reputational risks, how business continuity will be managed, and how the agency will deal with the release of data to a vendor that may insecurely transmit, store and process the agency's data.

6.33   The level of risk that an organisation attributes to a proposed cloud computing arrangement will vary according to the content or subject matter of the records, their level of sensitivity and importance. In some cases, agencies can decide that some records are simply too sensitive or important to be managed by the cloud computing service provider.

6.34   The security model implemented by the UK for its *G-Cloud* platform recognises the importance of identifying risks. As Mr Dylan Jay, Director and Chief Technology Director, PretaWeb stated in his evidence to the Committee, different levels of risk are determined along with the appropriate action to mitigate that risk:

…if you are doing, say, a small agency website, maybe it is not the biggest risk; if you are doing a very important government website then the provider that you pick should be security accredited. By using international standards for accreditation of the providers and having a framework that everyone works with that is the same

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[467] Mr Michael McMahon, Report of proceedings before the Public Accounts Committee, Wednesday 28 November 2012, p. 36

[468] Mr Anthony Miller, Report of proceedings before the Public Accounts Committee, Wednesday 28 November 2012, p. 43

framework across the board. Again if it is on a tender-by-tender basis then people get different requirements. If it is a framework that everyone sees and understands and they can say, "Okay, it is worth us as an organisation going and getting that accreditation." I think that is a fair way of doing things.[469]

6.35   Ovum reported that an important aspect of mitigating risk was effective leadership, a topic they state has arisen more often than any other in Ovum's conversations with agencies on cloud application platforms:

In Ovum's view, it is by some degree the most important factor in government innovation and the best mitigator of risk. Indeed, at a time of major technology disruption, effective leadership is the difference between an IT infrastructure that enables powerful outcomes for citizens and one that simply checks boxes and leaves money on the table.[470]

6.36   Dr Steve Hodgkinson, from Ovum also looked at the concerns over data sovereignty and privacy and suggested that these should be tested rather than allowing them to become 'monsters under the bed'.[471] He also commented on how the key mitigation of off-shore data risks is the 'quality and maturity of the cloud provider's operational and technical security arrangements.'[472]

6.37   Mr Kennedy commented that 'risk was paramount' in ensuring the effective use of cloud technologies and in deciding where the data would be stored:

It was part of our tender. It was part of our evaluation. We identified up-front 139 major risks that we had to account for as part of the program of work.[473]

6.38   The content of the contract in these types of service arrangements is very important and agencies should seek legal advice when entering into contract negotiations.

NSW Digital Information Security Policy

6.39   NSW government adopted a new Digital Information Security Policy in December 2012. Agencies must implement the Policy requirements by the end of 2013. The policy sets out the minimum controls that are required to address the risk associated with securing digital information. Each agency must have an Information Security Policy and a designated individual responsible for digital security. Information must be classified to ensure it receives an appropriate level of protection, with access to information systems monitored and controlled.[474]

6.40   The policy states that controls must be in place to manage business continuity to counteract interruptions and protect critical processes from major failures of

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[469] Report of proceedings before the Public Accounts Committee, Wednesday 28 November 2012, p. 9

[470] Ovum, *The Role of Cloud-based Application in Government Innovation* (IT007-000688) 8 April 2013, p. 8

[471] Dr Steve Hodgkinson, *Cloud computing is all about sustainable innovation,* GN News, March 2012

[472] Dr Steve Hodgkinson, *Cloud computing is all about sustainable innovation,* GN News, March 2012

[473] Mr David Kennedy, Report of proceedings before the Public Accounts Committee, Wednesday 28 November 2012, p. 8

[474] NSW Government, *Digital Information Security Policy* 2012, p.4

systems or disasters. There is also a requirement to be collaborative, sharing information security experiences and knowledge:

> Digital information security events, incidents and near misses that pose a threat across the public sector must be disseminated through the Digital Information Security Community of Practice in a time and manner appropriate to the nature and magnitude of the threat.[475]

6.41   Each NSW government department and statutory body must include a Digital Information Security Attestation in its Annual Report. From 2013-14 the statement must attest the following:

- an Information Security Management System (ISMS) was in place during the financial year being reported on
- adequate security controls are in place to mitigate identified risks to digital information and digital information systems
- if applicable, certified compliance with the Australian Standard (*AS/NZS ISO/IEC 27001 Information Security – Security techniques – Information security management systems – Requirements)[476]*

6.42   The policy states that all government agencies must use the Annual Attestation Statement Template provided.

Committee Comments

6.43   The Committee recognises the benefits of moving to a service orientated ICT environment in NSW and notes the commitment in the ICT strategy to develop a private cloud. However, in supporting a move to cloud based computing solutions, the Committee believes that the security of data is paramount and people need to have confidence in security measures in order for them to be willing to engage with it. Personal information needs to be strongly protected either in a private or public cloud.

6.44   Cloud technologies have resulted in a different set of security issues to those found in traditional in-house software implementations. These include managing the access to the information which could be located outside of Australia, issues related to data sovereignty and the repatriation of data if required. Whether these issues are greater than the risks of in-house ICT was not clear from the evidence before the Committee.

6.45   The Committee believes that the cloud computing guidelines should be completed and published as soon as possible, particularly in light of agencies already engaging with cloud computing service providers. We would like to see clear advice provided on how to manage the risks involved in cloud computing, including templates for conducting risk assessments.

6.46   The Committee believes that collaboration and information sharing at this stage with the agencies that have already undertaken a cloud based project would be

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[475] NSW Government, *Digital Information Security Policy* 2012, p.6

[476] NSW Government, *Digital Information Security Policy* 2012, p.15

very beneficial. The guidelines need to reflect this practical experience and provide clear and practical advice to agencies based on the lessons that are being learned from others.

Recommendation 35

That the Department of Finance and Services complete and publish the NSW Government Cloud Computing Policy and Guidelines as soon as possible and ensure that the guidelines provide clear guidance on risk management and security in cloud implementations.

Cyber security

6.47   The growth of the internet, or cyberspace, has impacted on everyday life and the global economy. It is important that we better understand how to stay safe and secure on the internet. It provides a way for us to socialise, shop, transact and do business, which means we are sharing more and more personal and financial information online. In doing so we potentially expose ourselves to number of online risks which we need to be aware of and properly manage.

6.48   There is currently no strategy in NSW specifically dealing with cyber space and cyber security. The NSW Digital Information Security Policy references the Commonwealth Cyber-Security Strategy 2009 as a related source, but does not set out any specific actions. The Commonwealth Defence Signals Directorate (DSD) provides the Federal government with an understanding of cyber threats, and the coordination of whole-of-government operational responses to cyber incidents through the Cyber Security Incident Reporting scheme.[477]

6.49   The Federal Information Security Manual states agencies must report cyber security incidents to DSD. Cyber security incident reports can be made online and are the basis for identifying and responding to cyber security incidents across government.

6.50   At a recent Commonwealth Telecommunications Organisation Cyber security Forum, attended by Mr Bart Bassett, Public Accounts Committee member, the opening address of the Hon Jean-Pierre Biyiti Bi Essam, Minister of Posts and Telecommunications, Republic of Cameroon, referred to the central role Information and Communication Technologies (ICTs) plays in economic development. He referred to evidence which suggested that a 10% growth in broadband contributes to the growth of Gross Domestic Product by 1.38%, but also noted that this growth can only be realised if the ICT channels remain safe, secure and resilient.[478]

6.51   The issue of cyber-security was discussed at the 2013 Australasian Council of Public Accounts Committees (ACPAC) conference. In a media release following the conference, the Committee Chair, Mr Jonathan O'Dea MP summarised the ACPAC resolution:

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[477] http://www.dsd.gov.au/infosec/reportincident.htm accessed 21 May 2013

[478] http://www.cto.int/news/commonwealth-cybergovernance-model-proposed-at-the-commonwealth-cybersecurity-forum-2013/, accessed 13 May 2013

> We are inadequately protecting information, poorly co-operating and insufficiently auditing existing government controls in NSW and Australia. The results include a deep lack of public confidence and unacceptable risk to personal, state and national assets.[479]

6.52 Mr O'Dea cited US cyber risk concerns, declining trust in institutions and the low adoption rates for the Federal Government's new electronic health record system as evidence that governments need to do more. ACPAC also recognised the important role of Parliaments and Public Accounts Committees in 'ensuring that cyberspace is safe, secure and resilient. Parliaments need to be more agile and collaborative in responding to the public's needs in this area'.[480]

6.53 The Australian Prime Minister, The Hon Ms Julia Gillard, recently spoke about cyber security and the need to recognise it as a national security challenge.[481] An Australian Cyber Security Centre has been established to 'aggregate key capabilities in a single location.'[482] Cyber security is largely intangible, although in 2011-12 there were more than 400 cyber incidents against government systems requiring a significant response from the Cyber Security Centre.[483]

6.54 The centre will work closely with critical infrastructure sectors and industry partners to protect valuable networks and systems. The centre will also provide advice and support to develop preventative strategies to counter cyber threats. Under the Australian Government's Cyber Security Program there are a range of initiatives, including National Cyber Security Awareness Week, which is designed to help Australians understand cyber security and safety and the measures they can take to protect their personal and financial information.

6.55 There is also an online 'Stay Smart Online' alert service, managed by the Commonwealth Department of Broadband, Communications and the Digital Economy, which enables people to subscribe to receive alerts about current cyber security issues.[484]

6.56 A UK National Audit Office review of the Government's strategy for cyber security estimated that the cost of cyber-crime in the UK was between £18 billion and £27 billion.[485] The NAO identified six key challenges faced by the government in implementing its cyber strategy in a rapidly changing environment:

> These are the need to influence industry to protect and promote itself and the UK; to address the UK's current and future ICT and cyber security gaps; to increase awareness so that people are not the weakest link; to tackle cyber-crime and

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[479] Mr Jonathan O'Dea MP, Chair Public Accounts Committee, *Desperate need for government ICT action*, media release Monday 22 April 2013.

[480] Mr Jonathan O'Dea MP, Chair Public Accounts Committee, *Conference supports improved cyber security,* Wednesday 17 April 2013

[481] Sydney Morning Herald, *Getting our cyber security strategy right*, 5 March 2013

[482] Sydney Morning Herald, *Getting our cyber security strategy right*, 5 March 2013

[483] http://www.defence.gov.au/defencenews/stories/2013/Jan.htm accessed January 2013

[484] http://www.staysmartonline.gov.au/home accessed 21 May 2013

[485] UK National Audit Office, *The UK Cyber-Security Strategy Landscape Review,* January 2013

enforce the law; to get government to be more agile and joined up; and to demonstrate value for money.[486]

Reliance on ICT

6.57   Concerns about the reliance on ICT were considered by Mr O'Dea in the context of US cyber security concerns. US President Barack Obama's references to possible attacks on the national power grid, financial institutions and air traffic control highlight how ICT is central to our day to day activities. In Australia, hospital building systems have been reported as being vulnerable to hackers; with '653 Australian computer based building management systems connected to the internet.'[487]

6.58   Mr Peter Wells, Director, Customer and Compliance, Roads and Maritime Services (RMS) commented on the impact security has on large databases. Speaking about the DRIVES database managed by RMS, he commented that there were a number of principles with the very large databases:

> DRIVES can process in the order of 10,000 or more transactions per hour. For entities such as ourselves—and there are private sector people with whom I am in contact such as Westpac or Sony—they have large databases with private records and you have to manage them very carefully. A small error from my point of view might affect tens of thousands of customers, so a small error is not necessarily a small error when you are thinking of DRIVES.[488]

Committee Comments

6.59   It is important that government agencies and individuals feel able to disclose incidents of cyber-attacks, however currently there is only the federal government scheme for reporting incidents. The Committee believes that the current reporting in the Digital Information Security Policy could be extended to include reporting on actions taken to mitigate the risk of cyber-attacks.

6.60   As already stated the security of data is paramount and people will only engage with online systems when they have confidence in the security measures in place, to protect their personal information and data.

Recommendation 36

That the Department of Finance and Services review the Digital Information Security Policy and include reporting on actions taken to mitigate the risk of cyber-attacks.

Privacy and Records Legislation

6.61   Privacy and records legislation were developed before cloud based computing. Cloud computing usually involves the transfer of or the creation of content in data stores, which are maintained by a service provider and geographically remote from the customer. With the rapid take up and use of cloud, the

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[486] UK National Audit Office, *The UK Cyber-Security Strategy Landscape Review,* January 2013

[487] Sydney Morning Herald, *Hundreds of building systems are vulnerable to hackers,* 8 May 2013

[488] Mr Peter Wells, Report of proceedings before the Public Accounts Committee, Wednesday 28 November 2012, p. 19

legislation will need to be reviewed to ensure that it covers cloud computing, particularly where information is held outside of Australia.

6.62   The *Privacy and Personal Information Protection Act 1998* (NSW)(PIPPA) states that once agencies have formed the view that their ICT systems hold personal information they are required to protect that information. While this includes information that is held within the cloud, the current privacy legislation has a strong focus on protecting personal information held within a single jurisdiction.

6.63   Where official government business is undertaken using cloud computing, these data stores will contain State records and will therefore be subject of the *NSW State Records Act 1998*.[489]

6.64   State Records has approved the *General authority for transferring records out of NSW for storage with or maintenance by service providers based outside of the State* (GA35). This general authority gives approval for the transfer of records outside of NSW for storage with or maintained by service providers based outside the State. However, this permission is given on the condition that an appropriate risk assessment has been made and the records are managed in accordance with all the requirements applicable to State records under the *State Records Act 1998*.[490]

Committee Comments

6.65   NSW government must ensure that privacy protections are put in place for cloud implementations to ensure that agencies are able to meet their privacy obligations. Traditional privacy principals that control the level of access to personal information held in a single jurisdiction need to be updated to reflect the more complex systems that operate over more than one jurisdiction.

6.66   The Committee believes that NSW government should review privacy legislation in light of the possibility that personal information could be held in multiple jurisdictions. There have been attempts at the federal level to consider cross border privacy rules and the Committee believes that NSW government should consider the requirement for these when reviewing the existing privacy legislation.

Recommendation 37

That the NSW Government review existing privacy legislation to ensure that privacy principals are still relevant for personal information held in multiple jurisdictions.

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[489] http://futureproof.records.nsw.gov.au/wp-content/uploads/2010/06/Managing-recordkeeping-risk-in-the-cloud.pdf accessed 8 May 2013

[490] NSW State Records, http://www.records.nsw.gov.au/recordkeeping/government-recordkeeping-manual/guidance/recordkeeping-in-brief/recordkeeping-in-brief-62-faqs-about-cloud-computing, accessed 8 May 2013

Data centres

6.67   In the New South Wales Government, there are currently more than 130 data centres with various levels of reliability and energy efficiency. A Data Centre Reform Project is underway, consistent with a decision to relocate the dispersed data centre infrastructure into two 'fit-for-purpose leased facilities.'[491]

6.68   DFS advised that the NSW Government is currently constructing two new government-owned data centres:

> This will allow the virtualisation and physical consolidation necessary to support greater data sharing amongst agencies, and facilitate the development of multi-agency cloud services. Agencies may then use third party managed services providers.[492]

6.69   A contract has been signed with Metronode for the provision of capacity in two managed data centres in NSW - one located in Sydney's inner west and the other in the Illawarra region. When fully developed, each data centre will be capable of supporting up to 10MW of IT load. The contract has an initial ten year term and facilities are scheduled to be ready for service in mid-2013 and Q3-2013 respectively. NSW Health, the Department of Education and Communities, the Department of Finance and Services and Corrections NSW are the first agencies to sign up to use the facilities.

6.70   The Data Centre Reform Project's objectives are that all NSW government agencies must relocate their data centre and computer room infrastructure into the new data centres within four years of the facilities opening.[493]

6.71   In their submission, DFS commented on the benefits of the data centre reform. They stated that they provide a service orientation that opens up a broad range of other ways that ICT can be provided. These include 'virtualising servers to make more efficient use of hardware, consolidating physical servers in shared data centres, utilising third party managed service providers, and utilising cloud services.'[494]

6.72   Mr Miller commented on the benefits of information security at the new data centres. He stated that in his view, on-premises security (at the agency's offices) should be viewed as either the same or less secure than purpose built data centres. He concluded that 'the secure data centre will just logically win out through economies of scale.'[495]

6.73   An update on the progress of the project on the DFS website has stated that detailed technical workshops have begun, involving various technical resources

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[491] http://www.services.nsw.gov.au/inside-dfs/information-communications-technology/data-centre-reform, accessed 10 May 2013.

[492] Submission 17, Department of Finance And Services, p. 14

[493] Department of Finance and Services - C2012-1 Data Centre Reform Strategy, 2013

[494] Submission 17, Department of Finance And Services, p. 14

[495] Mr Anthony Miller, Report of proceedings before the Public Accounts Committee, Wednesday 28 November 2012, p. 43

across NSW Government Agencies. A Migration Committee has been established and invited industry experts to be involved. A list of Migration Specialists has been created to assist Agencies in selecting qualified partners to assist their migrations to the new facilities, and will be available in the Service Catalogue.[496]

Committee Comment

6.74   The Committee welcomes the establishment of the two data centres and the setting up of the Migration Committee. We believe that the success of this project will depend on the successful migration of the data. Having detailed and effective migration plans for each agency will help ensure there is no loss of data. It will also be important to effectively manage the transition of each of the agencies into the centres. This can be facilitated by having a formal change management strategy included in this project.

Social media

6.75   Social media is a varied set of internet-based tools that allow individuals to access engage and interact with others as and when they choose. Generally it can be accessed through any internet enabled device, including computers and increasingly through smartphones and tablet devices. Social media is designed to provide an interactive and bi-directional experience, although they are often used as a one-directional channel by many agencies, in order to 'push out' information.

6.76   The ICT strategy recognises the importance of social media as a key tool in modern communications, but it acknowledges that government has generally has been slow to embrace these tools. The strategy states that a whole of government policy, supporting the use of social media to enhance public engagement will be delivered by the end of 2012, along with guidelines for public sector employees on its use.[497]

6.77   DFS published the new NSW Social Media Policy and Guidelines on 24 May 2013.[498] It states that the aim of the policy is to 'encourage agencies to make greater use of social media and empower public sector staff to use these tools where it assists in improving service delivery. Agencies are to develop and implement targeted social media policies, governance structures and guidance to meet their business needs. These should reflect the guiding principles identified in this document.'[499]

6.78   Under the Premier's Memorandum on Open Government (M2012-10), NSW cluster agencies were required to develop an Open Government Plan for submission to the ICT Board by the end of 2012.[500] Included in the plan is a

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[496] http://www.services.nsw.gov.au/information-communications-technology/data-centre-reform-project-status accessed 16 May 2013

[497] NSW Government ICT Strategy, 2012, p. 13

[498] http://www.advertising.nsw.gov.au/strategic-communications/social-media-policy. Accessed 24 May 2013

[499] NSW Government, Social Media Policy and Guidelines, 2012, Draft for consultation, p. 3

[500] NSW Government, Social Media Policy and Guidelines, 2012, Draft for consultation, p. 3

description of how agencies will address six actions, one of which is making greater use of social media to communicate with staff, customers, and industry.

6.79 Agencies need to determine what form of social media is the most appropriate for them to use. Consideration needs to be given about the level of support that will be given to social media and what the approach will be (i.e. passive, active or engaged). Who the intended audience is and who are you trying to engage with is also an important consideration, as well as the overall aim of engaging through these channels.[501]

6.80 Mr Murphy advised the Committee that DFS were using social media as a tool to promote a program of engagement across government with agencies as well as with industry:

> … much of the output of these working groups is made available for public consultation. The current draft social media policy and guidelines are open now for public consultation. We maintain a website, a Twitter feed and a Facebook page through which we get questions and comments from the public, from community groups and industry on an ongoing basis.[502]

Open Data and Open Government

6.81 The NSW Government has stated that it is committed to Open Government, which will aim to provide better transparency of decision making, enable closer engagement with communities and industry and collaboration with communities and industry on service delivery and project implementation. [503]

6.82 The NSW Digital Economy Industry Action Plan states that open data will 'empower citizens and organisations to use public data to drive innovation and create new and unique solutions in areas such as transport and health.'[504]

6.83 The *OpenGov NSW* website has been relaunched on a new platform as a repository for government reports, statements, information, policies and applications based on government data. [505] It is now integrated to the Digital State Archives, and has improved functionality regarding searching and locating government information.

Apps4NSW

6.84 The public expects that services and information are available on mobile devices for access from any location and at any time. The government has responded with the development of new mobile apps that allow people to access public services, such as Live Traffic NSW, a SMS bus service, Police eyewatch and real–time hospital emergency information.

6.85 The *Apps4nsw* initiative challenges software developers to create new web and mobile applications using government data. These events offer opportunities

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[501] NSW Government, Social Media Policy and Guidelines, 2012, Draft for consultation, p. 7

[502] Mr William Murphy, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 13

[503] NSW Government ICT Strategy, 2012, p. 11

[504] NSW Digital Economy Industry Action Plan, p.3

[505] NSW Government ICT Strategy, 2012, p. 13

for NSW Government employees, industry representatives and citizen developers to come together to build innovative service delivery solutions. This is the first such initiative in Australian state government.

6.86   Hon. Greg Pearce MLC, Minister for Finance and Services said that the government was 'committed to working with industry and ICT developers to create new uses for government-held data to benefit the entire community and contribute to our local ICT industry.'[506]

6.87   The ICT strategy requires DFS to investigate opportunities to extend *Apps4nsw* to include cross-jurisdictional datasets and collaboration by the end of 2013.[507]

Committee Comments

6.88   The Committee is pleased to note the publication of the new Social Media Policy and Guidelines.

6.89   Improving transparency through the proactive publication of information is an important element of open government. The Committee believes that this is a positive move and it encourages government agencies and departments to use the *OpenGov NSW* website to publish information and data.

6.90   The Committee also welcomes the positive use of the government data for the development of apps and online tools.

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[506] Hon. Greg Pearce MLC, Minister for Finance and Services, *Apps4nsw to Improve Health Services* Thursday, 8 November 2012

[507] NSW Government ICT Strategy, 2012, p. 18

Chapter Seven – ICT Fraud, Corruption and Risk Management

7.1   This chapter will consider whether it's possible to fully gauge the extent of fraud and corruption in ICT projects and ICT procurement, looking at the findings of reports and investigations made by Independent Commission Against Corruption (ICAC) and the Auditor-General.   It will look at the causes and possible solutions going forward. It will also consider how effective agencies have been in implementing recommendations made by ICAC and the Auditor-General.

Introduction

7.2   The inquiry terms of reference identified the need for the Committee to consider the 'adequacy of risk management and corruption prevention strategies relating to ICT procurement and contract management'.[508]

7.3   The terms 'fraud' and 'corruption' are often used together and while they are related, they are different. Corrupt conduct is a deliberate or intentional wrong doing. Fraud is a crime involving the dishonest obtaining of a financial or other benefit by deception. The ICAC definition of corrupt conduct includes fraud. All crimes conducted by public officials acting in their official capacity constitute official corruption. When a fraud is perpetrated by, or with the assistance of, a public official it comes under the jurisdiction of the ICAC.[509]

7.4   Fraud and corruption are serious concerns that all government agencies and departments strive to prevent. ICAC has reported that undetected and unchecked corruption in the public sector can cause serious damage including undermined public trust in government, lead to inefficiencies and a waste of resources and money.[510]

7.5   The Auditor-General's 2012 Fraud Survey found that fraud control measures are improving, 'but there is more work to be done.'[511] While the following figures do not identify specific ICT fraud, they provide a clear picture of the current level of fraud in NSW public sector for the three year period 1 July 2009 to 30 June 2012.

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[508] http://www.parliament.nsw.gov.au/Prod/parlment/Committee.nsf

[509] ICAC, *Fighting Fraud, Guidelines for State and Local Government,* 2002, p.6

[510] ICAC, http://www.icac.nsw.gov.au/about-corruption/what-is-corrupt-conduct, accessed 5 May 2013

[511] NSW Auditor-General's Report to Parliament, Volume Seven 2012, 2012 Fraud Survey, p.30

Figure 3: NSW Public Sector Fraud Dashboard[512]

NSW Public Sector Frauds		
4,649 frauds*	$21 million lost*	48% of agencies*
90% of frauds involve internal perpetrator		
Largest Fraud = $840,000	18 frauds greater than $100,000	Less than 10% of losses from fraud recovered
10% of frauds in outsourced functions or non-government organisations		

*Frauds identified by all surveyed agencies – excludes universities and local government councils.

7.6   The Audit Office Fraud Survey only provides data on frauds identified by NSW government agencies. As the report to Parliament states, there is no accurate way of determining the total extent and cost of all frauds. The KPMG Fraud and Misconduct Survey 2012 found that the main fraud categories (by value) for the public sector were fraudulent tendering, theft of cash and payroll fraud.[513] This survey also estimated unidentified frauds in organisations are almost three times the number of identified frauds.[514]

Extent of the problem

7.7   As indicated in paragraph 7.5 it is impossible to accurately determine the total extent and cost of all frauds.   Dr Robert Waldersee, Executive Director, Corruption Prevention Division, ICAC, advised the Committee about the extent of corruption:

> …corruption in procurement has been a component of 30 per cent of all investigations undertaken by the Commission. In the past two years alone, three investigations have focused on IT contractors and IT issues.'[515]

7.8   Each year approximately 12 per cent of complaints received by ICAC include allegations of corruption in procurement. This is a significant percentage, given that ICAC have found in surveys conducted in the public sector that 60 per cent of respondents of operational staff reported that they were involved in procurement or purchasing.[516]

7.9   ICT projects are treated no differently from any other project in relation to corruption prevention.   Mr Anthony Lean, Deputy Director General, Department of Finance and Services (DFS), stated that there were policies and practices in place in NSW government to manage corruption prevention:

> In relation to corruption prevention, certainly in the case of the Department of Finance and Services, we have a fraud and corruption planning process which we go

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[512] NSW Auditor-General's Report to Parliament, Volume Seven 2012, 2012 Fraud Survey, p.30

[513] KPMG Fraud and Misconduct Survey 2012, p. 19

[514] KPMG Fraud and Misconduct Survey 2012, quoted in NSW Auditor-General's Report to Parliament, Volume Seven 2012, 2012 Fraud Survey, p.31

[515] Dr Robert Waldersee, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 16

[516] Dr Robert Waldersee, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 16

through regularly, and we update as well. We have policies around conflicts of interest. Obviously there are codes of conduct throughout the sector as well.[517]

7.10   The Auditor-General found that while fraud control in agencies is improving, his fraud survey had found that the 'incidence and magnitude of fraud may be growing.' He concluded that fraud controls need to be an ongoing commitment, beyond just having policies and procedures. However, he was concerned that some agencies simply 'tick-the-box' with only a small proportion of agencies keeping risk assessments and fraud control plans up to date.[518]

Causes of Fraud and Corruption

7.11   There a number of different causes of fraud and corruption. As Dr Waldersee advised the Committee, corruption appears to 'flourish in operations characterised by poor operational effectiveness with related waste, unaccountable managers, confused reporting lines, weaknesses in budget control, conflicting imperatives, low skills, and poor information systems.'[519]

7.12   The Auditor-General also found evidence of this in his 2012 Fraud Survey; he reported that twenty three per cent of frauds occurred because internal controls or processes were not followed.[520]

7.13   In January 2013 the *itnews* reported on the effects that corruption investigations have on the wider ICT industry in reinforcing the 'worst stereotypes of technology professionals for business leaders and politicians.' The article commented that business leaders often struggle to understand the complexities of the technology projects their IT departments engage in.[521] The article quoted Professor Richard Lucas, Head of the information systems at the University of Canberra who attributes corrupt activity to failures in education and accreditation processes:

> The IT industry is not regulated and there is no control over the quality of the education of the people employed. The obvious distinction between IT and regulated industries is that being a lawyer or a medic, you can lose your career over your lack of professionalism. In IT, you pack up and go somewhere else.[522]

7.14   This section will consider a number of possible causes of fraud and corruption, looking at project management, management of contractors, the restructure of the NSW public sector, procurement and the perception of corruption.

Project Management

7.15   Dr Waldersee set out the problems that ICAC had found at all stages of the project management process:

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[517] NSW Auditor-General, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 12

[518] NSW Auditor-General's Report to Parliament, Volume Seven 2012, 2012 Fraud Survey, p.31

[519] NSW Auditor-General, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 15

[520] NSW Auditor-General's Report to Parliament, Volume Seven 2012, 2012 Fraud Survey, p.30

[521] itnews for Australian Business, *IT Corruption and ethics*, 2 January 2013

[522] itnews for Australian Business, *IT Corruption and ethics*, 2 January 2013

> …beginning at the business needs scoping linkage, the make-buy decision in the government departments, the engagement of contractors, project management, specification and certification of deliverables, exiting contractors, as well as some problems where the entire project is outsourced.[523]

7.16   A good example of this is when agencies need to undertake the 'make-buy' decision. This is the decision making process when agencies decide if they are going to purchase an off the shelf product that then needs customising or develop and build a bespoke system in-house.[524] The concern is that the initial decision along with the financial complexity and risk is based on competencies that are available at that time. If the customisations become so complex that the deliverable is unknown, the total cost and the time it would take to complete the project become unclear and control is lost. ICAC have found that this practice is well known and suppliers 'tend to price their initial bids to gain access to the agency with some confidence that they will be engaged after the fact and then start to try to customise the bit of software'.[525] The agency then becomes increasingly dependent on the supplier.

7.17   Mr Randall Lumbewe, Managing Director, Syndeticom commented in his submission that he felt that public servants seem not to be accountable and this impacted on the detection and prevention of corruption. He suggested that they were not held accountable for wrong decisions that resulted in the increase cost of projects and time taken to deliver them; they were therefore unlikely to be found guilty of corruption.[526]

Management of Contractors

7.18   As the Committee has highlighted in chapter three, there are concerns about the level of knowledge and expertise of senior managers, when acting as project sponsors. Dr Waldersee, in his briefing to the Committee, commented about the 'vulnerability of managers when they bring in contractors to manage scope'.[527] This resulted in senior managers not being able to properly assess the technical proposals put before them, resulting in them becoming reliant on the knowledge of the contractor. A lack of understanding of the scope of projects can allow contractors to gain an advantage, leading to them having considerable power to manipulate the project. ICAC found that any subsequent attempts to manage scope costs and final acceptance became difficult:

> The inefficiency and the corruption risk become the same. If you cannot understand what the scope was, what it should have cost, whether the deliverable came, you have a waste problem and you have got a corruption opportunity as well.[528]

7.19   The Auditor-General also raised concerns regarding the out-sourcing of functions; frauds identified in this area have increased, growing from eight per cent of all frauds in 2009-10 to 14 per cent in 2011-12.[529]

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[523] Dr Robert Waldersee, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 19

[524] Dr Robert Waldersee, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 20

[525] Dr Robert Waldersee, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 20

[526] Submission 2, Mr Randall Lumbewe, p. 2

[527] Dr Robert Waldersee, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 19

[528] Dr Robert Waldersee, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 20

7.20   In its investigation into *alleged fraud on the former NSW Department of Education and Training, ICAC* found that poor controls in the recruitment process had enabled an IT project manager to recruit five employees from his own private company. The investigation report made a number of recommendations including reviewing the number of contractors used compared to permanent staff, ensuring that candidates had the requisite skills for the position and conducting periodic audits of compliance with its recruitment procedures.[530]

7.21   Another investigation into *the recruitment of contractors and other staff by a University of Sydney IT Manager* also found that a manager of an IT unit had used a recruitment agency where his wife was an employee and he had an interest. Recommendations in this report focused on establishing a governance framework to ensure recruitment decisions were transparent.[531]

Restructure of NSW government

7.22   The St James Ethics Centre, in an ethics stocktake of the NSW Public Sector prepared for the Public Service Commission (PSC), suggested that restructuring of agencies in the NSW public sector has had a range of effects on ethical culture.[532] For example, a public servant reported that several new systems had been in the process of implementation when the agencies were amalgamated. The report suggested that the pressure for change on top of the regular implementation of new ICT had created new corruption risks:

> Reforms are under way, but in one area a new computer system is being implemented without checks and balances and it appears that some of the staff may be using information they are gaining from the system to operate an outside business. An Audit can't observe and get into the back end of the system without being noticed, so there is no effective way of checking. Often these things happen when there is significant change happening.[533]

7.23   This is supported by evidence from the Auditor-General who highlighted the effect the current financial climate may have, with budget and staffing cuts creating an environment where the risk of fraud may increase:

> Employees may be motivated to commit fraud if they fear losing their job, promotion opportunity or wage increase. Budgetary and staff cuts may lead to less effective internal controls because segregation of duties becomes harder to maintain and fewer people are available to monitor controls and identify suspicious transactions or activities.[534]

7.24   ICAC has raised concerns about the impact a high turnover of staff has on maintaining procurement competencies. They recommended that 'a plan, a set of tools or a skills audit may help track weaknesses in competencies as they

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[529] NSW Auditor-General's Report to Parliament, Volume Seven 2012, 2012 Fraud Survey, p.35

[530] ICAC, Investigation into *alleged fraud on the former NSW Department of Education and Training*, 2012, p.7

[531] ICAC, Investment into the *recruitment of contractors and other staff by a University of Sydney IT Manager*, 2013, p. 5

[532] St James Ethics Centre, *NSW Public Sector Ethics Stocktake*, 17 September 2012, p. 23

[533] St James Ethics Centre, *NSW Public Sector Ethics Stocktake*, 17 September 2012, p. 23

[534] NSW Auditor-General's Report to Parliament, Volume Seven 2012, 2012 Fraud Survey, p.38

develop over time. Allocation of responsibility and accountability to specific roles is more likely to result in action being taken.'[535]

7.25   ICAC also found that the absence of competence or expertise around procurement can lead to inappropriate behaviour. They concluded that the 'risk of corruption lies more in the unpredictability of procurement expertise across the public sector, than in an absolute absence of skills.'[536]

Procurement

7.26   Procurement is a difficult environment for government, as Dr Waldersee commented it is often 'high volume, high value for an individual but not for the agency, so it tends to go under the radar.'[537]   However, Dr Waldersee stated that it is the management of the procurement processes and the lack of controls that create an environment where corruption can occur:

> what we see is that the operational design of the procurement function is generally weak at lower levels, where we are seeing most corruption—from poor budget control, unclear accountabilities, poor integration of financial systems, through to decisions to outsource, at a point that is most difficult to control.[538]

7.27   Dr Waldersee advised the Committee that the surveys conducted by ICAC found that the operational design of procurement is weak at the lower levels, where corruption is being seen due to 'poor budget control, unclear responsibilities, poor integration of financial systems, through to decisions to outsource, at a point that is most difficult to control.'[539]

7.28   Findings from ICAC investigations support this; they have found that corrupt individuals took advantage of structures that had multiple lines of authority and multiple points of accountability. For example, oversight of ICT procurement was structured to involve ICT managers and end user managers. Corruption occurs in such circumstances as the corrupt individual can seek sign off from different managers.[540]

7.29   Conflict of interest in procurement processes was raised as the primary ethical issue in many of the focus groups and interviews conducted during the St James Ethics Centre stocktake.[541]   Relationship management and confidentiality of commercial-in-confidence information such as contracts can become complex and a challenge when determining what information could be disclosed.

7.30   Dr Waldersee advised that he felt that the 'proposed (procurement) reforms should address most of the recommendations (in the *Corruption Risks in NSW Government Procurement* report) in some way or another.'[542]   He was also

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[535] ICAC, *Corruption Risks in NSW Government Procurement, The Management Challenge*, December 2011, p. 24

[536] ICAC, *Corruption Risks in NSW Government Procurement, The Management Challenge*, December 2011, p. 22

[537] Dr Robert Waldersee, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 16

[538] Dr Robert Waldersee, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 17

[539] Dr Robert Waldersee Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 16

[540] ICAC, *Corruption Risks in NSW Government Procurement, The Management Challenge*, December 2011, p. 8

[541] St James Ethics Centre, *NSW Public Sector Ethics Stocktake*, 17 September 2012, p. 27

[542] Dr Robert Waldersee, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 16

'pleased that there seemed to be clear leadership in the form of NSW Procurement.'[543]

7.31   The need for increased professionalism in procurement is general recognised and has been discussed in this report. Formal procurement training in NSW government is provided by DFS (via IPAA) through its Procurement Certification Training Program.[544] During its investigations, a number of agencies advised ICAC that they had developed in-house competency levels and minimum standards for key procurement positions and included procurement processes as part of their induction programs.[545]

Perceptions of fraud and corruption

7.32   ICAC has examined the relationship between public officials and suppliers. They have found that contact with suppliers created uncertainty in the minds of public officials:

> …because they were worried about conflicts of interest, unsolicited gifts and/or benefits and whether they are being groomed to participate in future improper activities.
>
> On the other hand, some suppliers – receiving no clear directions about engagement with the public sector and only small windows of opportunity to have contact with public officials – respond by using every precious opportunity to offer gifts or hospitality and to pump officials for information.[546]

7.33   Suppliers sometimes think corruption has occurred because they did not win a contract. Some suppliers will complain loudly that it was wrong that they did not win a contract, that it was not fair or even that it was corrupt. In his briefing, Dr Waldersee discussed the issues regarding the supplier's perception. He commented that he had found a high level of perceived corruption amongst those supplying to government, but this probably exceeded the objective reality of the corruption:

> The high level of perceived corruption amongst those supplying to government probably exceeds the objective reality of the corruption that is occurring; so they are seeing more than there probably is. As we understand from talking to suppliers, they are concerned about lack of feedback. They do not know why tenders are being given the way they have, and they immediately suspect corruption; or they just did not win it, and think they should have. The reality for them is that they see a corrupt system, and that is a concern, because if people believe the system is corrupt they will either withdraw or they will engage in corruption.[547]

7.34   Dr Benjamin Marx, Principal Officer, ICAC, in his evidence to the Committee, identified why the perception of corruption was something that needed to be considered:

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[543] Dr Robert Waldersee, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 16

[544] DFS, http://www.procurepoint.nsw.gov.au/support-and-self-help/training/procurement-certification-training, accessed 5 May 2013

[545] ICAC, *Corruption Risks in NSW Government Procurement, The Management Challenge*, December 2011, p. 23

[546] ICAC, *Corruption Risks in NSW Government Procurement, The Management Challenge*, December 2011, p. 27

[547] Dr Robert Waldersee, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 17

> That is dangerous because, if they really want the business, they may conclude, "Next time, this is what I have to do to get it." One of the things very strong throughout the perceptions was that people are not talking to them about the process, about the outcome, about what they want, and everything else; and some of them are filling the void with perceptions of corruption.[548]

7.35   ICAC have made a number of recommendations regarding improving communications with the suppliers, using mechanisms which would inform the market about what agencies are looking at doing:

1. Public tender briefings
2. Industry forums
3. Regular performance feedback
4. Centralised internet access to information about all procurement
5. Seminars/training for suppliers about agency procurement selection processes
6. Supplier's guide to procurement
7. Supplier charter that specifies standards required of suppliers and contracting authorities, or distributing a statement of business ethics
8. Tender debriefs for all unsuccessful tenders, as a regular part of contract management.[549]

7.36   On reviewing the implementation of the procurement reforms, a number of the recommendations listed above have been implemented. Of the list shown at paragraph 7.35 above, the ProcurePoint website contains information relating to items 2, 4, 5, 6 and 7. The Committee has recommended in chapter five that performance feedback be given to suppliers and believes that tender de-briefs will provide an excellent opportunity to reduce the level of perceived corruption (see recommendation 40)

Fraud and Corruption Prevention Strategies

7.37   ICAC concluded that there was no single method of corruption control and reliance on policies, codes and training will only control a small proportion of corruption:

> There are many factors that create relatively unique sets of risks within each public agency. These factors may include the culture and history of the organisation, the industry and markets it operates in, its structural arrangements, budget and management skills, the procurement expertise available, and so forth. As such, these factors require unique responses, which may include an array of approaches working in concert and tailored to the diagnosed risks.[550]

7.38   Dr Waldersee advised the Committee that most public sector agencies have some fraud and risk management procedures in place:

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[548] Dr Benjamin Marx, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 17

[549] ICAC, *Corruption Risks in NSW Government Procurement, The Management Challenge*, December 2011, p. 28

[550] ICAC, *Corruption Risks in NSW Government Procurement, The Management Challenge*, December 2011, p. 34

> The public sector has changed significantly over the past decade. Our research and our observations show that almost all agencies now have their own governance units responsible for risk identification and treatment. Almost all State agencies have internal audits, codes of conduct, training and principles of good governance are widely accepted and in place.[551]

7.39   Prevention is the most effective way of combating fraud and corruption. Collaboration and the sharing of information would enable agencies to gain a better understanding of fraud issues being faced by other agencies and learn about what prevention strategies are being used across all sectors. While the St James Ethics Centre ethics stocktake recommended establishing a cross-agency collaboration and support network for ethics across the public service,[552] this type of collaboration could also be used to create a support network for fraud and corruption prevention.

7.40   ICAC believe that making managers responsible and accountable is key to having effective procurement processes in place. They found that some managers pay little attention to their procurement responsibilities. They recommend that having 'key performance indicators and measures, and accountability with consequences can help focus the attention of the manager on both the corruption risk and achievement of value for money.'[553]

7.41   Ms Judy Hurditch, Managing Director, Intermedium, commented in her submission that public scrutiny of agency procurement outcomes is a crucial component of the corruption prevention strategies, which she considered is embedded in the procurement policies of most jurisdictions in Australia, including NSW. However, she felt that the Procurement Reform Strategic Directions Statement only 'tangentially touches on the publication of contracts data as an accountability measure'.[554]

7.42   In his submission, Mr Andrew Watt, Project Director, Public Service Ethics Australia, talked about a role for Parliament in the scrutiny of project delivery:

> If the expectation is that the public service delivers efficient, effective and corruption free services and projects, then oversight and accountability must come from elsewhere within government and not from the Public Service Commission or the HR area of the Agency.

> Accordingly although public service ethics is expressed in the performance of the public servant's role, it is generally manifest within the context of "government as a business". In that sense the accountability and oversight of public service ethics for efficient, effective and corruption free services and projects should come from Parliament. Such an approach facilitates oversight of systemic or governance failure within agencies and across government.[555]

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[551] Dr Robert Waldersee, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 15

[552] St James Ethics Centre, *NSW Public Sector Ethics Stocktake*, 17 September 2012, p. 6

[553] ICAC, *Corruption Risks in NSW Government Procurement, The Management Challenge*, December 2011, p. 26

[554] Submission 20, Ms Judith Hurditch, p. 1

[555] Submission 14, Public Service Ethics Australia, p. 16

7.43   In its *Managing Corruption Risks in NSW Public Sector Procurement* report, ICAC recommended that the Government establish a leadership role for procurement, simplify the regulatory framework, improve procurement information, advice and support, build procurement competence and oversee policy compliance.[556]

7.44   The Auditor-General reported that he did not consider the current decentralised approach adequately protected agencies against fraud and he recommended a whole of government approach:

> I believe that fraud control would be significantly improved if NSW adopted a whole-of-government fraud control policy framework which establishes mandatory minimum standards. The framework needs to be flexible enough so its application meets individual needs and give responsibility for developing policy and monitoring results to key agencies.[557]

7.45   The Auditor-General recommended the appointment of a lead agency to develop a fraud control policy framework. He recommended that agencies would be able to determine their own specific plans and processes to manage the 'prevention, detection and investigation of fraudulent activity', but individuals and agencies would have a legal obligation to comply with the requirements set out in the guidelines, with breaches attracting a range of criminal, civil, administrative and disciplinary remedies.[558]

7.46   Mr Lean advised the Committee that the recommendations made by ICAC and the Auditor-General had been considered in detail and used to inform the procurement reform program. He confirmed that the procurement reforms have included the development of a 'single, clear and consistent policy framework, which has been recommended by the ICAC. We want to make the rules simple and clear for agencies.'[559]

7.47   DFS also acknowledged the recommendations of ICAC in its submission to the inquiry, in particular that Government establish a leadership role for procurement in NSW, simplify the regulatory framework, improve procurement information, advice and support, build procurement competence and oversee policy compliance:

> These recommendations are now being implemented as part of the procurement reform initiatives. The PSEM Act establishes clear roles and responsibilities with respect to procurement. As noted above, it outlines the leadership role of the NSW Procurement Board, as well as new agency obligations. The PSEM Act requires both the NSW Procurement Board and agencies to develop procurement policy, and conduct procurement, consistent with the principles of probity and fairness.[560]

7.48   DFS advised that the Agency Accreditation Framework for Goods and Services also requires agencies to have risk-based contract management plans in place.

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[556] Submission 17, Department of Finance and Services, p. 12

[557] NSW Auditor-General's Report to Parliament, Volume Seven 2012, 2012 Fraud Survey, p.31

[558] NSW Auditor-General's Report to Parliament, Volume Seven 2012, 2012 Fraud Survey, p.45

[559] Mr Anthony Lean, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 1

[560] Submission 17, Department of Finance and Services, p. 13

Agencies must demonstrate that there are appropriate guidelines in place to address probity issues.[561]

Committee Comments

7.49   Prevention, not detection or punishment is the most efficient way to combat fraud loss. However the Committee believes that prevention and combating fraud will be difficult without a clear understanding of the scale of the problem. Agencies need to measure fraud loss and properly assess their fraud risk. Agencies then need to understand their fraud risk in the context of the overall public sector fraud threat to determine the appropriate response. The Committee believes that sharing intelligence on known frauds is an important tool to fighting fraud. It breaks down silos and enables agencies to be aware of issues sector wide.

7.50   The Committee supports the recommendations made by the Auditor-General in the 2012 Fraud Survey and believes that the introduction of a fraud control policy framework will provide agencies with a sound framework on which to develop or improve their own policies and procedures.

7.51   The Committee supports the ICAC recommendation regarding improving the accountability of managers and believes that NSW government should consider the introduction of key performance indicators and measures for the management of both the corruption risk and the achievement of value for money.

7.52   The Committee recommended in chapter five that the NSW government move to performance-based contracting model and that agencies provide performance feedback about suppliers and contractors.   ICAC have recommended that as well as this performance feedback, agencies should hold tender de-briefs for all unsuccessful tenders. The Committee believes that this would help deal with the current high level of perceived corruption by suppliers and make the tendering process more transparent.

7.53   The lack of expertise of project managers and project sponsors has been a reoccurring issue in this report. Some agencies do not have the capability to understand the technical specifications for ICT systems. As Dr Waldersee comments, this may 'lead to the final sign-off by senior management of a technical specification based ICT contract that is out of their depth. They do not know what they are signing.'[562] The Committee recommended in chapter three that that there needs to be a focus on improving the skills of project sponsors and the government should consider the possibility of introducing accreditation for project managers.

Recommendation 38

That the NSW Government considers the options for cross-agency collaboration establishing a support network for fraud and corruption prevention.

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[561] Submission 17, Department of Finance and Services, p. 13

[562] Dr Robert Waldersee, Report of proceedings before the Public Accounts Committee, 26 October 2012, p. 21

Recommendation 39

That the NSW Government implement the ICAC recommendation in the *Corruption Risks in NSW Government Procurement, The Management Challenge* report to improve the accountability of managers.

Recommendation 40

That the NSW Government implement the ICAC recommendation to hold tender de-briefs for all tenders with unsuccessful tenderers.

Risk Management

7.54   Risk management is integral to good governance and good management. It is also required by NSW legislation such as the *Public Finance and Audit Act 1983*, *Work Health and Safety Act 2011*, *Environmental Planning and Assessment Act 1979*, and *Protection of the Environment Operations Act 1997*.

7.55   DFS acknowledges that the cost-effective management of risk is essential if a project is to achieve its stated deliverables and outcomes.[563] Effective management of risk will usually require a balanced approach between the scope, timeframe and cost of the project.[564]

7.56   In his submission, Mr Joseph Rayment, Account Manager, Ethan Group stated that with regards to risk management, 'unintentional non-delivery of goods can be a serious issue. While risk cannot be eliminated entirely, a proactive approach to managing the inevitable goes a long way toward minimizing the amount of risk incurred.'[565]

7.57   The Treasury Policy Paper 09-5 *Internal Audit and Risk Management Policy* outlines risk management and corruption prevention measures that must be applied.[566]   The policy requires departmental heads to attest and report on compliance with a prescribed set of core requirements annually:

- establish and maintain an Internal Audit function.
- establish and maintain an Audit and Risk Committee.
- Committee must appoint an independent chair and majority of independent members.
- maintain governance arrangements that ensure real and perceived independence of the Committee and the rigour and quality of its oversight and monitoring role.
- implementation of a risk management process appropriate to the needs of the department or statutory body and consistent with the current risk standard, ISO 31000:2009 *Risk Management – Principles and Guidelines*.

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[563] Department of Finance and Services, Project Risk Management Guidelines, 2011, p.6

[564] Department of Finance and Services, Project Risk Management Guidelines, 2011, p.8

[565] Submission 5, Mr Joseph Rayment, Ethan Group, p. 1

[566] Submission 17, Department of Finance and Services, p. 12

Standards Australia has adopted this standard, which it has titled 'AS/NZS ISO 31000:2009 (ISO 31000)'

- operation of the internal audit function is consistent with Institute of Internal Auditors International Standards for the Professional Practice of Internal Auditing.[567]

7.58   NSW Treasury has also produced a Risk Management Toolkit.[568]   Volume 1 of this toolkit contains guidance to help agencies develop and implement a risk management framework and process. Volume 2 contains templates and a case study with examples to help agencies implement ISO 31000.

7.59   Agencies are able, under the pre-qualification scheme, to access a list of pre-qualified independent chairs and members to serve on audit and risk Committees.   Individuals pre-qualified as a member will possess a range of skills and experience including:

- extensive senior level experience in governance and management of complex organisations and a capacity to understand the ethical requirements of government
- functional knowledge in a range of business areas
- a capacity to form independent judgments and a willingness to constructively challenge.

7.60   Individuals prequalified as a chair, in addition possess leadership and communication abilities along with knowledge of governance, internal audit and risk management.[569]

7.61   While risk cannot be eliminated entirely, proactively managing ICT projects will minimise the exposure to risk. In his report to Parliament, Volume One 2013, the NSW Auditor-General commented on his assessment of ICT risk management for 91 NSW agencies. He identified 'four core IT areas where the management of IT risks plays a crucial role in service delivery and financial reporting to the people of NSW.'[570] These were General Computing Controls, Application Control Environment, IT Project Governance and System Migration and Shared Services.[571]

7.62   Overall, the Auditor-General found that agencies needed to enhance ICT risk management and governance. He made the following recommendations aimed at minimising risk:

- establishing an appropriate information security management framework, including segregation of duties and automated controls

[567] Submission 17, Department of Finance and Services, p. 19

[568] NSW Treasury, http://www.treasury.nsw.gov.au/Publications/treasury_policy_papers/2012-TPP/tpp_12-03/tpp_12-03_risk_management_toolkit, accessed 1 May 2013

[569] DFS, http://www.procurepoint.nsw.gov.au/before-you-supply/prequalification-schemes/audit-and-risk-Committee-independent-chairs-and-members , accessed 15 May 2013

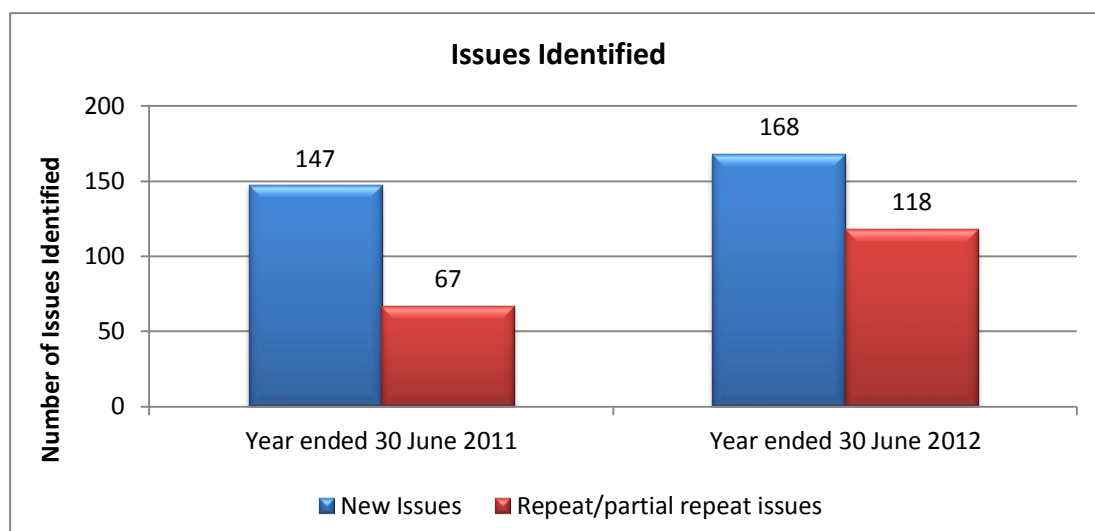[570] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 26

[571] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 26

- ensuring financial systems continue to support business processes in the event of a disaster
- establishing better IT project management practices for effective and reliable systems implementations.[572]

7.63   The report to Parliament also found that agencies were not resolving ICT issues previously reported by the Auditor-General, leading to a '76 per cent increase in repeat issues in 2012', illustrated in Figure 4.[573] The Auditor-General found that the primary repeat item was related to information security, which had a big impact on risk:

> By not addressing these issues in a timely manner agencies are not effectively managing their IT risk which could result in data or systems integrity issues.[574]

Figure 4: Auditor-General – ICT New and Repeat issues 2011-2012[575]

7.64   The Auditor-General also raised concerns about the risks involved in managing shared services. He commented in his 2013 report to Parliament that shared service providers continue to bring agencies on board for back office processing functions such as finance, payroll and IT, without understanding their respective responsibilities and accountabilities; especially in managing risks in shared service arrangements.[576]

7.65   The Auditor-General raised specific concerns about the lack of a clear direction to address risks associated with maintaining ageing platforms for those transitioning to shared services, existing IT controls not being applied to agencies' legacy systems supported by shared service providers and the

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[572] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 26

[573] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 28

[574] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 28

[575] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 28

[576] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 37

absence of controls such as disaster recovery testing for a number of agencies' older systems.[577]

7.66   As discussed in the previous chapter, there are inherent risks in having data and systems held outside of Australia. The Auditor-General reported that he had found an agency was not monitoring services provided by shared service providers where the agencies' data was being off-shored to a storage and processing sites outside of Australia. The Auditor-General recommended that NSW government, agencies and shared service providers:

- establish common guidelines on shared service transition
- identify control gaps at both the agency and shared services levels, and implement appropriate mitigating controls
- review Service Level Agreements to ensure they better reflect their business requirements and establish appropriate service performance monitoring processes
- develop risk management strategies and procedures to manage all data and systems that are managed outside of Australia.[578]

Risk Mitigation Strategies

7.67   Risk management, at an agency level should be designed to meet the specific needs of the agency or department. The NSW Treasury Toolkit provides advice on the various elements of ISO 31000 so a risk management framework appropriate to the agency's own needs can be developed.

7.68   The assessment and the measurement of ICT project risk and potential loss must be assessed before projects and programs are under way. In order to create a culture that imbeds risk prevention measures into project methodologies, when vulnerabilities are detected as part of a risk assessment, they should be mitigated before the project proceeds. It is then vital that as new risks arise they are dealt with effectively through the project governance structure.

7.69   The role of audit and risk committees is crucial to ensuring effective risk management.   The availability under the pre-qualification scheme, of a list of prequalified independent chairs and members to serve on audit and risk committees assists agencies to have an independent committee with experienced members.

7.70   Risk assessment has also been included in the process of selecting a set of suppliers to engage. A Risk Assessment Guide has been developed by NSW Procurement to help determine whether the scope of the sourcing activity is

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[577] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 37

[578] NSW Auditor-General's Report to Parliament, Volume One 2013, Overview of 2012, p. 37

high or low risk. The guide advises that prequalified suppliers should be engaged for all high risk sourcing activities.[579]

Committee Comments

7.71   On 9 May 2013, the Committee resolved to seek information about agencies' responses to the repeat recommendations made in the Auditor-General's Financial Audit Reports to Parliament during 2012. These recommendations have been identified as being of high priority based on an assessment of their importance to the relevant agency and to the public sector as a whole.

7.72   The Committee welcomes the availability under the pre-qualification scheme of qualified independent chairs and members to serve on audit and risk Committees. It believes this provides added assurance and enables agencies to obtain independent advice and guidance and believes agencies should be encouraged to use the list.

Recommendation 41

That NSW Treasury and NSW Procurement encourage agencies to use the prequalified list of independent chairs and members for audit and risk committees.

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[579] NSW Procurement http://www.procurepoint.nsw.gov.au/before-you-buy/prequalification-schemes-0/prequalification-scheme-its-2573-operational-0-0-0 accessed 15 May 2013

Appendix One – Press Release

COMMITTEE TO EXAMINE ICT PROCUREMENT

23 August 2012

The NSW Parliament's Public Accounts Committee has commenced an inquiry into the procurement and management of Information and Communication Technology Services in the NSW public sector, the Committee's Chair, Mr Jonathan O'Dea MP, announced today.

"The Auditor-General has repeatedly raised issues relating to the procurement and management of ICT project by NSW government agencies," Mr O'Dea said. "Too often, ICT projects have been hamstrung by poor project management, poor contract management and poor system migration and data conversions."

"This is a priority area that the Committee has decided to follow up," said Mr O'Dea. "The Committee will be looking at measures to improve project and contract management, and long term planning to meet the ICT needs of the public sector and ensure value for money."

Submissions are requested by 31 October, with public hearings to be conducted shortly thereafter. All written submissions should be forwarded to: The Public Accounts Committee, Parliament House, Macquarie Street, SYDNEY NSW 2000

Further information can be obtained by visiting the Committee website at http://www.parliament.nsw.gov.au/publicaccounts or by contacting Mr Jonathan O'Dea, Chairman, on (02) 0418 241 500.

Media Contact: Mr Jonathan O'Dea MP
Committee Chair

Appendix Two – List of Submissions

1	Tasmanian Audit Office
2	Name withheld
3	Mr John Blunt
4	Name withheld
5	Ethan Group
6	NSW Department of Education and Communities
7	Wot-Link.com
8	Australian National Audit Office
9	Mr David Jordan
10	Name withheld
11	Ceebron Pty Ltd
12	Transport RailCorp NSW
13	Auditor-General, South Australia
14	Public Service Ethics (PSE) Australia
15	Telstra
16	Australian Information Industry Association
17	Department of Finance and Services
18	Ovum
19	Public Service Commission
20	Intermedium
21	Sydney Water
22	HealthShare NSW

Appendix Three – List of Witnesses

Thursday 18 October, Macquarie Room, Parliament House

Witness	Position and Organisation
Mr Peter Achterstraat	NSW Auditor-General
Mr Scott Stanton	Assistant Auditor-General
	Audit Office of NSW

Friday 26 October, Macquarie Room, Parliament House

Witness	Position and Organisation
Mr Anthony Lean	Deputy Director General
Mr William Murphy	Executive Director, ICT Policy
Mr Paul Dobing	Acting Executive Director, NSW Procurement
	Department of Finance and Services
Mr Philip Minns	Deputy Director General, Government Group
Mr David Schneider	Chief Information Officer
	Department of Premier and Cabinet
Dr Robert Waldersee	Executive Director, Corruption Prevention Division
Mr Benjamin Marx	Acting Principal Officer, Policy Research and Analysis
Mr Stephen Quain	Corruption Prevention Officer
	Independent Commission Against Corruption

Wednesday 28 November, Macquarie Room, Parliament House

Witness	Position and Organisation
Mr Mark Paterson	Director General
Mr David Kennedy	Chief Information Officer
	Department of Trade and Investment
Mr Peter Duncan	Chief Executive
Mr Peter Wells	Director Customer and Compliance
Mr Paul Hesford	Director Corporate
Ms Sandra Coleman	Chief Information Officer
	Roads and Maritime Services

Mr Athol Chalmers	Federal Government and Industry Adviser
	Australian Computer Society
Mr Peter Riordan	Deputy Director General
Mr Michael McMahon	General Manager, Learning Management and Business Reform program
	Department of Education and Communities
Mr Dylan Jay	Director and Chief Technology Officer
Ms Virginia Choy	Director and Business Development Manager
	Preta Web Pty LTD
Mr Randall Lumbewe	Managing Director
	Syndeticom Electrical and Communications
Mr Joseph Rayment	Account Manager
	Ethan Group
Mr Anthony Miller	Managing Director
	Wot-Link Pty Ltd
Ms Margaret O'Tarpey	Chief Executive Officer
Mr Christopher Mansfield	NSW Chapter President
Mr Mike Kano	NSW State Councillor
Mr David Hudson	National President
	Australian Institute of Project Management
Ms Suzanne Campbell	Chief Executive Officer
	Australian Information Industry Association

Monday 18 March, Jubilee Room, Parliament House

Witness	Position and Organisation
Mr Peter Riordan	Deputy Director General
Mr Michael McMahon	General Manager, Learning Management and Business Reform program
	Department of Education and Communities
Mr Paul Dobing	Acting Executive Director, NSW Procurement
	Department of Finance and Services
Mr Peter Achterstraat	NSW Auditor-General
	Audit Office of NSW

Appendix Four – Review of ICT Strategies from other jurisdictions

Objectives / Outcomes identified in NSW strategy	Victoria 2013 – 2014	South Australia 2013 – position paper and *Ask Just Once* strategy	Queensland 2009 – 2014 and ICT Industry Development Strategy	Federal 2012-2015
Purpose / Drivers for change	• Changes in citizen expectations of government services • Advances in technology • Current gaps in ICT leadership, governance and skills ICT provides the channels for government to connect with business and the community. Experience of 'expensive failures in ICT enabled business change projects….The answer is not avoid them but to address the past failures through a more rigorous and considered approach.' [580]	Philosophy of the *Ask Just Once* strategy was to transform the delivery of Government services so that citizens and businesses only had to Ask Just Once to get what they need from their Government.[581] The new draft Connections strategy looks to embed a new culture of innovation between government agencies, the government and industry. Using ICT to break down barriers. 'To improve the ability to innovate and work more closely with industry to develop a practical and sensible	No doubt that the age of digital economy has arrived. 'Information and communication technology (ICT) plays an increasingly important role in assisting the Queensland Government to deliver its services across this vast state.'[583] 'Our citizens expect services to be delivered in an efficient, effective and consolidated manner that respond to their changing lifestyle and communication methods.'[584] Increasing demand for new and innovative on-demand ways for the community to access information, transact and	• Use ICT to drive better service delivery • Improve government operations • Drive productivity • Engage with people, the community and business. • More accessible government services for people, when and how it suits them. 'ICT has profoundly changed almost all aspects of society. It is now central to how people communicate, interact, make decisions and do business.' [585] 'The Strategy is built on a vision that our interactions with

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[580] Victorian Government ICT Strategy 2013, p. 7

[581] South Australian Government, *Ask Just Once*,

| | | framework for introducing new technologies into government.' [582]

The paper addresses the theme of connecting through five perspectives:

• Serving people
• Securing resilience
• Improving delivery
• Working together
• Innovating now.

The overall aim is to provide SA government with the agility it will need to respond to future challenges. | interact. | people, businesses and the community will occur seamlessly as part of everyday life. People will easily access and automatically receive a range of services streamlined from across government and tailored to their individual needs and preferences.' [586]

'Other developments include the unparalleled spread and influence of social media and the increased use of mobile services, broadband and cloud computing. Such changes can profoundly influence government and industry choices about investing in ICT and delivering government services.' [587] |

[583] Queensland Government, *Towards Q2 through ICT,* The Queensland Governments' strategy for government ICT, 2009-2014, p.2

[584] Queensland Government, *Towards Q2 through ICT,* The Queensland Governments' strategy for government ICT, 2009-2014, p.3

[585] Australian Public Service, Information and Communications Technology Strategy, 2012-2015, p. 5

[582] South Australia, Connected Ready for the Future (Consultation Draft), 2013, Forward from Premier.

[586] Australian Public Service, Information and Communications Technology Strategy, 2012-2015, p. 5

[587] Australian Public Service, Information and Communications Technology Strategy, 2012-2015, p. 8

| Leadership / Governance | Strong executive business level sponsorship is needed. Government structure can lead to optimisation within and not across agencies.

Victoria ICT Advisory Committee (VICTAC) has been created with representation from industry and the Government.

New cross government Chief Technology Advocate will provide coordination and strengthen reporting.

Establish annual ICT planning processes.

Agencies to submit annual ICT plans for assessment by VICTAC.

Develop a whole of government ICT governance and guidelines framework. | The agencies will use the *High Performance Framework* [588] to self-assess their maturity and capability to deliver against the strategy. When areas for improvement are identified, the CIO and the Department of Treasury and Finance will provide support to improve capabilities.

The proposal set out in the paper sets out a strategy that clearly states the government's broad aspirations as well as the target areas on which agencies should focus.

The strategy will also define the principles and rules that will guide all decision making in respect of ICT. The strategy will not identify too many specific actions. | Effective government – supporting front line service delivery through the provision of leadership in whole-of-government ICT directions, successful ICT governance.

'The new approach will require an economically responsible approach that:
• Focuses on informed and sound investment decisions
• Pursues effective ICT enabled solutions that deliver real and tangible benefits
• Supports the delivery of "one government' outcomes
• Ultimately delivers better decisions and outcomes for Queensland.'[589]

Develop ICT with an appropriate and manageable risk profile. | Priority areas:
• Deliver better services
• Improve the efficiency of government operations
• Engage openly

The Secretaries' ICT Governance Board (SIGB) will support the Government and agencies on whole-of-government ICT priorities, investment and arrangements.

The Chief Information Officer reports to the SIGB.

ICT matters that span jurisdictional boundaries will be governed by the Cross Jurisdictional Chief Information Officers' Committee (CJCIOC).

Implementation Plan identifies the timeframes and expected outcomes. |

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[588] South Australia, Connected Ready for the Future (Consultation Draft), 2013, p. 12

[589] Queensland Government, *Towards Q2 through ICT,* The Queensland Governments' strategy for government ICT, 2009-2014, p.4

				Australian Government Information Management Office provides advice and services on ICT.
Innovation / Advances in technology	High-speed broadband will open up opportunities for video conferencing and remote services. Government will make its information and services easier to access and use through digital channels such as smart phones and social media. Systems able to interoperate allowing citizens and businesses to innovate and build new solutions. Develop an innovative culture that manages risk while delivering productivity and better services. Government will empower staff to innovate, take measured risks and try new approaches for the benefit of Victorians.	The strategy will set out some specific initiatives, processes and support for innovation. The Codesign Interchange, an initiative with the AIIA will provide opportunities for industry and other sectors to 'unleash the innovative capacity of the ICT industry.'[590] The model for the Codesign Interchange will be designed in collaboration with stakeholders, such as the AIIA and industry groups.	Accessible government – delivering easy to access, customer focused services and information through ICT innovation.	Services are localised and personalised, reflecting individual and community needs and interests. Policy makers understand and take advantage of technology to improve policy and service. Technology underpins agile government responses to policy needs and events based on open standards. Generate ideas through challenges and competitions to create opportunities for external and internal ICT innovation. Promote agency based innovation communities of practice so new technologies and ideas can be deployed

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[590] South Australia, Connected Ready for the Future (Consultation Draft), 2013, p. 23

			rapidly and assessed for their business use.
Product viability	Technology will be trialled so that government can explore options and take advantage of new technologies at lower risk. Improve and clarify scope and outcomes of ICT enabled project business cases.	The SA government will establish DemoLab, 'a virtual laboratory for conducting trials and experiments in collaborative democracy.' [591] Project teams will spend no more than 30 days developing small scale operational prototypes of their solutions. This concept, also known as innovation labs is used by major high-technology companies such as Google, IBM and Microsoft.	'Share before buy before build' philosophy.	APS, in partnership with industry and other stakeholders will use technology demonstrator bubs to build and trial innovative services and processes to address complex service delivery challenges.
Working with Industry	Government will analyse the market's capability to deliver value for money and innovative solutions that improve the delivery of services. Engage with ICT industry to establish the feasibility, risk and most cost effective technology solutions options.		Early engagement with industry to support effective government. The Strategy states that by 2010, on all ICT projects worth $2 million or more, or of high complexity, the government will collaborate with industry subject matter experts in concept, feasibility,	Industry and other stakeholders are significant contributors to innovation solutions for government service delivery. Build the channels need for government to collaborate with partners in industry, academia and the community, not-for-

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[591] South Australia, Connected Ready for the Future (Consultation Draft), 2013, p. 24

			design and project approach stages. Government will present an annual portfolio forward plan and analysis to industry to allow active engagement and consideration of appropriate participation. Developing a mature industry/government relationship where ICT is deployed to help solve contemporary challenges. Innovative partnerships with the ICT industry will play an important role in helping the government to tackle issues with new and creative solutions.	profit sector and brokers of government services to inform policy advice and options for service delivery.
Service orientation / Cloud computing	The speed, flexibility and economies of scale offered by cloud computing are prompting organisations to rethink what needs to be delivered in house.			Cloud computing will be used where appropriate, consistent with privacy and security considerations to add new capability and capacity as well as drive down costs. New business models enabled by technologies such as cloud computing and the National

				Broadband Network, will be used to build efficient, flexible and responsive systems to deliver innovative services to people, communities and business. Consider the development of a Government community cloud approach
Open Government / Open Data	Moving to open data access which will allow industry and the public to build new products and services based on data 'we all own.' [592] Information and data will be shared across government, subject to privacy, security and other statutory obligations. Progressive release of datasets on data.vic.gov.au Develop mandatory standards and guidelines to support the DataVic Access Policy, issued in 2012.	SA.gov.au provides a single entry point for government information and services. Real time passenger information provided to customers via desktop browsers and smartphone apps. Agencies are the custodians of data and will be responsible for improving access. 'Improving access means moving the government from "retailing" to "wholesaling" data.' [593]	Information which is accessible and available to the community contributes to informed debate on key community issues. By 2014, the community will be able to access government information and services through single entry points across multiple channels.	Services will be available through fewer websites with Australia.gov.au a primary online entry point and data.gov.au as the central place to explore and visualise government information. Use high quality government data to inform agencies and identify innovative approaches to public policy. Develop standards and strategies for using location aware information across agencies.

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[592] Victorian Government ICT Strategy 2013, p. 7

[593] South Australia, Connected Ready for the Future (Consultation Draft), 2013, p. 14

| | | | | Continue the Gov 2.0 public release of government data for wider use, to share information and knowledge resources and unlock economic and social value.

Develop a strategy for Big Data to enhance cross agency data analytic capability. |
|---|---|---|---|---|
| Skills / Capabilities | Demand for skilled labour continues to exceed supply. The problem of attracting and retaining skilled ICT workers is compounded by an inability to match industry rates in specialised areas. [594]

ICT needs to be managed holistically; the government workforce needs to be appropriately skilled and needs to build on the capabilities already in place.

Develop and implement a Victoria Public Service ICT capability framework by March 2014. | ICT is now part of everyone's job but there is a need to develop new competencies to meet the challenges of new technologies.

The strategy will call for a sector wide application of the *Skills Framework for the Information Age* (SFIA) as a prerequisite to ensuring that staff are acquiring the right skills at the right levels. | The strategy aimed by 2010 to develop and commence implementing an ICT capability framework to improve the capacity, capability and sourcing of the government's ICT professional resource base.

A centralised register of industry expertise and government partnerships /experience. | The public sector offers careers for ICT professionals.

Improving ICT knowledge skills and capacity across the APS to deliver more efficient, effective and improved services. |

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[594] Victorian Government ICT Strategy 2013, p. 7

	Skills identified include: • Project and program management • Change management • Procurement, vendor management and commercial engagement • Business analysis and engagement • ICT architecture • Information management • Customer service channels			
Customer interactions	87% of Australian internet users accessed government services/information online. [595] Increase use of mobile devises such as smart phones has created demand for location based services. Mobile devices comprised 10.5% of Victorian Government website traffic in May 2012, up 256% from May 2011. [596]	'Serving People' Services – digital by default. Agencies will need to consider how best to engage with the public for policy-making, using co-design and co-production approaches. As services move more online, need to make sure no one is excluded.	Making services and information more accessible and providing simpler, streamlined interfaces for the community to engage with government. Moving to a customer-focused approach and moving away from an agency focussed approach, recognising that the customer should not need to know their way around the government entities to access	Simpler and easier to access and use government services, where and when people want them as part of everyday activities. People will be able to consent to agencies sharing data, within security and privacy constraints to enable a 'tell us once' approach. Over time this will enable service delivery across Australian jurisdictions over

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[595] *The Australian Online Consumer Report 2012*, February 2012, p. 186, quoted in Victorian Government ICT Strategy 2013, p. 6

[596] Victorian Government ICT Strategy 2013, p. 6

	Government will consult and involve citizens in the design and production of policy and service delivery programs.

Using interactive or social technologies to engage with citizens and businesses in co-design and co-production projects.

Agencies to transition key services online and complete transition of frequent transaction services online by end of 2014. | Policy developers and decision makers are expected to connect with citizens and the community.
Government will make community participation and collaboration a regular part of the way policy and decisions are developed and become part of 'business as usual.' | services and information.

Must keep pace with an increasingly digital aware population that is 'tech-savvy and expects the capability to transact and interact on a secure anytime, anywhere basis.' [597]

By 2012, Queenslanders will be able to conduct 50% of all government service interactions online. | time. [598]

Australian businesses will have online access to a wider range of government transactions using published standards and protocols that simplify their dealings with government.

Consultation processes supported by a variety of technologies allow people and communities to be actively involved in designing and developing policy and services.

Actively participate in external blogging forums to promote wide community engagement. |
| Social Media | Social Media interactions can be analysed so see new connections and insights. | Tools such as social media are no longer simply interesting they are essential. The strategy will make it easier for agencies to use them. | | Increase agency awareness of the benefits of social media. |

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[597] Queensland Government, *Towards Q2 through ICT,* The Queensland Governments' strategy for government ICT, 2009-2014, p.5

[598] Australian Public Service, Information and Communications Technology Strategy, 2012-2015, p. 17

| Whole of Government & Collaboration | Develop an enterprise architecture and interoperability framework.

Develop a whole of government approach to privacy.

Identify opportunities for service integration across service clusters.

Service interoperability project will commence in July 2014.

Develop a cross-government register of existing services and applications. | Agencies developing and implementing ICT plans and help develop new rules for using ICT in government and agencies will then be held to account for complying to those rules.

'There are a myriad business models and agencies have different customer needs, resourcing and technical issues.' [599]

Although the sector is broad and diverse, there are points of intersection – where there are common problems, the strategy will find ways to share solutions.
Will use the same technologies across government, including email, networking and other services and infrastructure.

State CIO will publish across government material for easy access. | Efficient government – adopting a 'one government' ICT approach across government agencies to improve service delivery and information access and reduce the cost of government operations.

Pursue standardisation and consolidation opportunities as a matter of priority.

Ongoing plan and roll out of standardised, shared and efficient core ICT infrastructure that supports a connected government culture and service delivery across the state.

Enabling the government to perform successfully as a single enterprise rather than separate departments requires a portfolio management approach to ICT investments. This needs to provide the right information to analyse the performance of current and planned ICT investments. | Government services are joined up with other services received from private and community sectors.

Where the APS has ICT capability, this capability will be available to other agencies to avoid duplication and rework.

APS investments in ICT are delivered on time, at cost, to expected outcomes and reflect a whole of government view of ICT activities and capabilities.

APS back office functions will be more standardised and efficient.

Create capability within government to capture, share as appropriate and analyse customer information to better identify trends and inform policy development.

Build collaboration capability across government. |

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[599] South Australia, Connected Ready for the Future (Consultation Draft), 2013, p. 11

		The concept is to link together everything agencies need, to ensure they have access to the rules and the tools to do their work more effectively. ICT amplifies the ability to collaborate. The strategy will seek to support both formal and informal networking, including improvements in the capability of platforms such as the *South Australian Government Exchange.* [600] The Commonwealth-States *National Information Sharing Strategy* identifies the need to ensure that collaborating agencies establish sharing protocols.		
Engagement with SMEs			*ICT SME participation scheme* introduced in 2009, provides the policy framework to assist SMEs gain greater access to the government market. All agencies must ensure that	Establish IT Supplier Advocates to champion industry development activities with SMEs in the IT industry.

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[600] South Australia, Connected Ready for the Future (Consultation Draft), 2013, p. 21

			for winning tenders, the nominated level of SME participation is indicated on the Chief Procurement Officer eTendering website. Agencies are required to undertake a market assessment to identify appropriate SMEs and are required to obtain offers from a least two SMEs. A capability register is being developed to assist agencies identify appropriate SMEs. SME participation levels will be calculated on the net proportion of the contract. For all purchases the SME participation score will contribute 10% to the final tender score. e.g. The tender = $90,000 The SME contribution = $9,000 SME participation level = 10%	
Dealing with legacy systems	ICT systems will be designed and upgraded to encourage reuse and interoperability. Agencies will reuse and share solutions and engage in joint procurement	'Ripping out and replacing systems may seem like a straightforward and strategic response to dealing with so called legacy systems. In fact		

| | where required.

Look first to ICT options already owned or have access to, to provide the required benefits. | history teaches us that we may be just creating a legacy for the next generation to worry about.' [601]
Over time, data and processes can be progressively shifted to newer and more efficient platforms, an approach which will see legacy systems atrophying and eventually being phased out. | | |
|---|---|---|---|---|
| Procurement reforms | Develop new Victorian Government Purchasing Board Procurement Policy Framework to support more flexible procurement practices.

Transition to an eServices Register.
Review of major ICT contracts to ensure a holistic and strategic view is taken across major ICT services and products. | | Review of procurement processes and practices to streamline them.

Implement a simplified procurement process for low risk projects under $2 million. | The APS uses its buying power to procure technology at the best value for money.

APS will continue to its advantage as a large scale purchaser of ICT to reduce duplication of agency procurement efforts, simplify suppliers' involvement in procurement and realise value for government. |
| Information security / Privacy | Development of an identity management framework to enable access to government services simply and securely. | 'Securing Resilience'.

Agencies have established Information Technology | At the heart of improved service delivery is the management and security of information. | Quickly adopt new ICT models through a risk-based approach that balances issues of performance, usability, |

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[601] South Australia, Connected Ready for the Future (Consultation Draft), 2013, p. 19

| | Implementation of information security standards. | Security Advisers (ITSAs) to provide professional support and advice to senior managers on the security measure required to protect information and compliance with Information Security Management Framework.

Security, with a view to resilience will be a higher priority of the coming strategy. 'It is defined as our ability to recover from the unpredictable but inevitable challenges we face.' [602]

'The confidentiality, integrity and availability of the government's ICT infrastructure is essential for the physical, social and economic wellbeing of this state.'[603] | | security, privacy and investment. |
| Project management | Projects with significant ICT requirements will be designed, delivered and measured based on clear business benefits clearly | There will be a focus on extending and further development of the sector's ability to streamline processes. | Working within a framework of early industry engagement and effective procurement and project delivery methods, will | ICT Two Pass Review provides a two stage process to evaluate ICT enabled proposals to inform government decisions |

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[602] South Australia, Connected Ready for the Future (Consultation Draft), 2013, p. 17

[603] South Australia, Connected Ready for the Future (Consultation Draft), 2013, p. 17

	defined accountability. Large projects will be broken into smaller more manageable stages. Improve project delivery by adopting sound project management methodologies, improving skills and capabilities of project management staff. Manage risk through the High Value High Risk (HVHR) assurance process, Gateway Reviews and project approval requirements. Provide advice on the selection and use of project management methodologies. Establish a public facing ICT enabled status dashboard to increase accountability and transparency. Establish an education program for ICT enabled project sponsors and business executives	The only kind of projects are those which deliver new capabilities and services, none of these are ICT projects. 'In the future, projects will be designed from the outset by multi-disciplinary teams to ensure that people and process issues are given at least as much attention as technology issues.'[604]	enable the government to optimise the design, sourcing, delivery, transparency and monitoring of ICT enabled business outcomes. Development and implementation of a whole-of-government portfolio management approach and standard approaches for successful project delivery. Implementation of policy will be supported by the provision of associated tools and resources to help enable the successful delivery of ICT projects and initiatives. Whole-of-government implementation of standardised Project, Program and Benefits Management Methodologies. Education, training and engagement of project managers and key business stakeholders.	on major investments. The Risk Potential Assessment Tool assists government to determine the potential risks involved in proposals and identify if additional risk assurance is required.

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[604] South Australia, Connected Ready for the Future (Consultation Draft), 2013, p. 19

			Effective post implementation reviews mechanisms to share lessons learned and promote successful outcomes.	
Reporting	Enhance real time reporting and business intelligence capacities. Agencies to describe their business performance measures and related source data. Agencies to commence implementation of an analytics capability by 2014.	The SA.gov.au webpages will include links, maintained by the agencies to all (subject to privacy & security issues) agency standards, policies, planned/active/archived projects and progress reports.		Annual ICT benchmarking analysis of agency ICT expenditure, based on common efficiency and effectiveness metrics.

Appendix Five – Extracts from Minutes

Minutes of Proceedings of the Public Accounts Committee (no. 29)
Friday 20 July 2012
6.15 pm
Comfort Inn, Tamworth

Members Present

Mr O'Dea, Mr Bassett, Mr Daley and Mr Torbay.

Apologies

Apologies were received from Dr Lee and Mr Williams

1. **Confirmation of minutes of previous meetings**

    Resolved, on the motion of Mr Torbay, seconded by Mr Bassett: That the minutes of the meeting of 21 June 2012 be confirmed.

    ***

4. **Inquiry into the procurement and management of ICT services**
    Resolved, on the motion of Mr Bassett, seconded by Mr Torbay: That the Committee adopt the draft Terms of Reference for the Inquiry into the Procurement and Management of ICT services, table the Terms of Reference in the first sitting week in August, issue a media release and call for submissions by mid-October 2012.

    ***

6. **Next meeting**
    The Committee adjourned at 7.20pm until 9.45am on Thursday 16 August 2012.

Minutes of Proceedings of the Public Accounts Committee (no. 30)
Thursday 16 August 2012
9.45am
Room 1043, Parliament House

Members Present

Mr O'Dea, Dr Lee, Mr Bassett, Mr Daley, Mr Torbay and Mr Williams.

Apologies

Mr O'Dea advised that he may arrive late.

The meeting opened at 9.45am. As Mr O'Dea was not present, Dr Lee took the Chair.

1. **Confirmation of minutes of meeting of 20 July 2012**

Resolved, on the motion of Mr Torbay, seconded by Mr Bassett: That the minutes of the meeting of 20 July 2012 be confirmed.

***

4. **Inquiry into procurement and management of ICT services**

Mr O'Dea advised that he is seeking advice from the Clerk Assistant – Committees regarding the Terms of Reference and anticipated tabling amended Terms of Reference at next week's meeting.

***

7. **Next meeting**

The Committee adjourned at 10.55am until 9.45am on Thursday 23 August 2012.

Minutes of Proceedings of the Public Accounts Committee (no. 31)

Thursday 23 August 2012
9.50am
Room 1043, Parliament House

Members Present

Mr O'Dea, Mr Bassett, Mr Daley, and Mr Torbay.

1. **Confirmation of minutes of meeting of 16 August 2012**

Resolved, on the motion of Mr Bassett, seconded by Mr Torbay: That the minutes of the meeting of 16 August 2012 be confirmed.

***

3. **Inquiry into procurement and management of ICT services**

Resolved, on the motion of Mr Torbay, seconded by Mr Bassett: That the Committee adopt the following Terms of Reference for the Inquiry into procurement and management of ICT services, and that the Chair announce the Inquiry in the House:

> The Public Accounts Committee will inquire into and report on issues arising from reports by the Auditor-General on the procurement and management of Information and Communication Technology (ICT) by NSW government agencies. In doing so, the Committee will have regard to recent procurement reforms and the three major weaknesses identified by the Auditor-General as leading to failure in ICT project delivery and ongoing project management: deficient project management; poorly guided and managed system migration and data conversions; and poor contract management. The inquiry will focus on:

> vi.   Measures to improve ICT project and contract management in the public sector, in particular in relation to contract negotiation and on-going contract management;

vii.   The efficacy of central agency policies and strategies that guide ICT projects in the public sector;

viii.   The adequacy of risk management and corruption prevention strategies relating to ICT procurement and contract management;

ix.   Long-term planning to meet the ICT needs of the public sector and ensure the best value for money in the procurement of government ICT products and services; and

x.   Any other related matters.

        ***

5.   Next meeting

The Committee adjourned at 10.15am until 9.45am on Thursday 6 September 2012.

Minutes of Proceedings of the Public Accounts Committee (no. 32)

Thursday 6 September 2012
9.45am
Room 1043, Parliament House

Members Present

Mr O'Dea, Mr Bassett, Mr Daley, Dr Lee and Mr Torbay.

1.   Confirmation of minutes of meeting of 23 August 2012

Resolved, on the motion of Mr Torbay, seconded by Mr Bassett: That the minutes of the meeting of 23 August 2012 be confirmed.

        ***

3.   Inquiry into procurement and management of ICT services

        xi.   Inquiry arrangements

Resolved, on the motion of Mr Daley, seconded by Dr Lee: That the Committee advertise the Inquiry and call for submissions by 31 October 2012.

Resolved, on the motion of Mr Daley, seconded by Mr Torbay: That the Committee seek a briefing regarding procurement and management of ICT services and invite the following agencies to provide briefings:

•   Audit Office of NSW

•   Department of Finance and Services

•   Department of Premier and Cabinet

- ICAC

Mr Bassett also suggested Mr Tony Miller.

***

6.   Next meeting

The Committee adjourned at 10.08 am until 9.45am on Thursday 13 September 2012.

Minutes of Proceedings of the Public Accounts Committee (no. 33)
Thursday 13 September 2012
9.45am
Room 1043, Parliament House

Members Present

Mr O'Dea, Mr Bassett, Mr Daley, Dr Lee, Mr Torbay and Mr Williams.

1.   Confirmation of minutes of meeting of 6 September 2012

Resolved, on the motion of Mr Bassett, seconded by Dr Lee: That the minutes of the meeting of 6 September 2012 be confirmed.

***

3.   Inquiry into procurement and management of ICT services

i.   Briefing re: NSW Government procurement

The Committee noted the briefing paper on NSW Government procurement issues.

ii.   List of stakeholders

Resolved, on the motion of Mr Williams, seconded by Mr Bassett: That the Committee write to the following agencies to invite them to make a submission to the Inquiry:

- NSW Government agencies
- Relevant federal Government agencies
- Other jurisdictions - Audit Offices
- Other jurisdictions - Procurement Offices
- Relevant industry associations
- Current ICT Goods and Services Suppliers
- Suppliers not on current government list
- Relevant individuals/academics

iii.   Briefing from Auditor-General

Resolved, on the motion of Mr Daley, seconded by Dr Lee: That the Committee invite the Auditor-General to provide a briefing at its next meeting on 20 September 2012, and invite stakeholders to provide briefings on Friday 26 October 2012, from 9.00am to 1.30pm.

***

5.   Next meeting

The Committee adjourned at 10.45 am until 9.45am on Thursday 20 September 2012.

Minutes of Proceedings of the Public Accounts Committee (no. 34)

Thursday 20 September 2012
9.45am
Room 1043, Parliament House

Members Present

Mr O'Dea, Mr Bassett, Mr Daley, Mr Torbay and Mr Williams

Apology

An apology was received from Dr Lee

1.   Confirmation of minutes of meeting of 13 September 2012

Resolved, on the motion of Mr Torbay, seconded by Mr Williams: That the minutes of the meeting of 13 September 2012 be confirmed.

***

5.   Inquiry into procurement and management of ICT services

i.   Library Research Paper – ICT Procurement

Resolved, on the motion of Mr Bassett, seconded by Mr Williams: That the Committee note the research paper. The Committee requested that staff re-circulate the paper and previous briefing in preparation for the Auditor-General's briefing on 18 October 2012 and agency briefings on 26 October 2012.

***

8.   Next meeting

The Committee adjourned at 10.07 am until 9.45am on 16 October 2012.

Minutes of Proceedings of the Public Accounts Committee (no. 35)

Thursday 18 October 2012
9.45am
Macquarie Room, Parliament House

Members Present

Mr O'Dea, Mr Bassett, Dr Lee, Mr Torbay and Mr Williams

1.   Confirmation of minutes of meeting of 20 September 2012

     Resolved, on the motion of Dr Lee, seconded by Mr Torbay: That the minutes of the meeting of 20 September 2012 be confirmed.

2.   Correspondence

     Resolved, on the motion of Dr Lee, seconded by Mr Bassett:

     **

     xii. Letter from Mr Tony Ferrall, Acting Secretary, Department of Treasury and Finance, Tasmania, re: Inquiry into the procurement and management of ICT services, dated 27 September 2012.

     ***

     ix. Letter from Mr Philip Gaetjens, Secretary, NSW Treasury, advising that the Department of Finance and Services is preparing a submission to the Inquiry into ICT Procurement, dated 15 October 2012.

     ***

4.   Inquiry into procurement and management of ICT services

     Resolved, on the motion of Mr Torbay, seconded by Dr Lee: That the Committee acknowledge the submission from Mr Mike Blake, Auditor-General, Tasmanian Audit Office, dated 24 September 2012, and publish it on its website.

     ***

10. Next meeting

     The Committee adjourned at 10.00 am until 9.45am on 25 October 2012.

Minutes of Proceedings of the Public Accounts Committee (no. 36)

Thursday 25 October 2012
9.45am
Room 1043, Parliament House

Members Present

Mr O'Dea, Mr Bassett, Dr Lee, Mr Daley, Mr Torbay and Mr Williams

1. **Confirmation of minutes of meeting of 18 October 2012**

   Resolved, on the motion of Dr Lee, seconded by Mr Bassett: That the minutes of the meeting of 18 October 2012 be confirmed.

   ***

3. **Inquiry into procurement and management of ICT services**

   Resolved, on the motion by Dr Lee, seconded by Mr Bassett: That the closing date for submissions be extended to Wednesday 14 November 2012.

   Resolved, on the motion of Mr Bassett, seconded by Dr Lee: That the Committee accept Submission 2 from Syndeticom Electrical and Communications Pty Ltd, dated 16 October 2012, and publish it on the Committee's website.

   ***

6. **Next meeting**

   The Committee adjourned at 10.03 am until 9.15am on 26 October 2012.

Minutes of Proceedings of the Public Accounts Committee (no. 37)

Friday 26 October 2012
9.15am
Macquarie Room, Parliament House

Members Present

Mr O'Dea, Mr Bassett, Mr Daley, Mr Torbay

Apologies

Dr Lee and Mr Williams

1. **Background briefings – Inquiry into procurement and management of ICT services in NSW public sector**

   Briefings commenced at 09:20 a.m.

   The following people provided a briefing

   Mr Anthony Lean, Deputy Director General, Department of Finance and Services

   Mr William Murphy, Executive Director, Department of Finance and Services

   Mr Paul Dobing, Acting Executive Director, Procurement NSW

   Mr Philip Minns, Deputy Director General, Department of Premier and Cabinet

   Mr David Schneider, Chief Information Officer, Department of Premier and Cabinet.

   Briefing concluded and witnesses withdrew

The Committee adjourned for morning tea at 10:45 a.m.

The Committee reconvened at 10:55 a.m.

The following people provided a briefing

Mr Robert Waldersee, Executive Director, the Independent Commission against Corruption (ICAC)

Mr Benjamin Marx, Acting Principal Officer, ICAC

Mr Stephen Quain, Corruption Prevention Officer, ICAC

Briefing concluded and witnesses withdrew

The Committee adjourned at 11:48 a.m.

***

3.   Next meeting
The Committee adjourned at 11.48am until 9.00am on 15 November 2012.

Minutes of Proceedings of the Public Accounts Committee (no. 38)

Friday 15 November 2012
9.00am
Room 1043, Parliament House

Members Present

Mr O'Dea, Dr Lee, Mr Bassett, Mr Daley, Mr Torbay and Mr Williams

1.   Confirmation of minutes of meetings of 25 October and 26 October

Resolved, on the motion of Dr Lee, seconded by Mr Williams: That the minutes of the meeting of Thursday 25 October 2012 be confirmed.

Resolved, on the motion of Mr Torbay, seconded by Mr O'Dea: That the minutes of the meeting of Friday 26 October 2012 be confirmed.
***

3.   Inquiry into procurement and management of ICT services – agency briefings

   i.   Submissions received:

   - Submission 3, Mr E. John Blunt, received on 26 October 2012
   - Submission 4, (Partially confidential)
   - Submission 5, Ethan Group, received on 29 October 2012
   - Submission 6, Department of Education and Communities, received on 1 November 2012

- Submission 7, Wot-Link.com, received on 31 October 2012
- Submission 8, Australian National Audit Office, received on 31 October 2012
- Submission 9, Mr David Jordan, received on 31 October 2012
- Submission 10, (Partially confidential)
- Submission 11, Ceebron Pty Ltd, received on 26 October 2012
- Submission 12, Transport RailCorp NSW, received on 2 November 2012
- Submission 13, South Australia Auditor General, received on 2 November 2012
- Submission 14, Public Service Ethics Australia, received on 30 October 2012
- Submission 15, Telstra, received on 8 November 2012

Resolved, on the motion of Dr Lee, seconded by Mr Williams: That the Committee accept submission nos. 3, 5, 6, 7, 8, 9, 11, 12, 13, 14 and 15 and publish them on its website, and also accept submission nos. 4 and 10 and publish them on its website subject to removal of names and identifying information.

ii.   Submission 2, (Partially confidential)

Resolved, on the motion of Dr Lee, seconded by Mr Williams: That the Committee agree to the author's request to suppress the name and any identifying information in Submission 2, which the Committee resolved to publish at its meeting on 25 October 2012.

iii.   Transcript of briefings 26 October 2012

Resolved, on the motion of Mr Bassett, seconded by Mr Torbay: That the Committee publish the transcript of the briefings received from the Department of Premier and Cabinet and the Department of Finance and Services on 26 October 2012 on its website, subject to agreement of agencies and any corrections made by members.

***

10.   Next meeting

The Committee adjourned at 10.25am until 9.45am on 22 November 2012.

Minutes of Proceedings of the Public Accounts Committee (no. 39)

Thursday 22 November 2012
9.00am
Room 1043, Parliament House

Members Present

Mr O'Dea, Mr Bassett, Mr Daley, Mr Torbay

Apologies

Mr Williams, Dr Lee

***

2.   Confirmation of minutes of meetings of 15 November 2012

Resolved, on the motion of Mr Bassett, seconded by Mr Torbay: That the minutes of the meeting of Thursday 15 November 2012 be confirmed.

***

4.   Inquiry into procurement and management of ICT services

iv.   List of attendees and schedule for the public hearing on 28 November 2012.

Resolved on a motion by Mr Daley, seconded by Mr Bassett: That the Committee invite the attendees to attend the hearing on 28 November 2012.

v.   Submissions received:

Submission 16, Australian Information Industry Association, received on 19 November 2012

Submission 17, Department of Finance and Services, received on 20 November 2012

Resolved, on the motion of Mr Torbay, seconded by Mr Daley: That the Committee accept the submissions and publish them on its website.

vi.   Questions on notice to government agencies responsible for ICT projects reviewed in the Auditor-General's financial reports.
-   Department of Finance and Services (Government Licensing Project)
-   Sydney Water (Field Resources Management and Maximo Projects)
-   Department of Attorney General and Justice (JusticeLink)

Resolved, on the motion of Mr Torbay, seconded by Mr Daley: That the Committee write to the agencies requesting a response by 21 December 2012.

***

10.   Adjournment

The Committee adjourned at 10.10am until 9.00am on 28 November 2012.

Minutes of Proceedings of the Public Accounts Committee (no. 40)

Wednesday 28 November 2012
08:45 am
Macquarie Room, Parliament House

Members Present

Mr O'Dea, Dr Lee, Mr Bassett, Mr Daley, Mr Torbay

Apologies

Mr Williams

1.   Confirmation of minutes of meetings of 22 November 2012

Resolved, on the motion of Dr Lee, seconded by Mr Bassett: That the minutes of the meeting of Thursday 22 November 2012 be confirmed.

***

3.   Inquiry into procurement and management of ICT services

Resolved on a motion by Mr Lee, seconded by Mr Torbay: That the Committee authorised the:

   i.   Admission of the media, including audio-visual recording, photography and broadcasting in accordance with the guidelines for coverage of proceedings for parliamentary committees;

   ii.   Return date for answers to questions on notice be 14 days from the date sent by the Committee secretariat; and

   iii.   Publication of transcript of hearing 28 November 2012 on its website once members and witnesses have had an opportunity to make corrections.

***

7.   Public Hearing - Inquiry into procurement and management of ICT services in NSW public sector

Witnesses and the public were admitted.

Evidence commenced at 09:00 a.m.

Mr Mark Paterson, Director General, Department of Trade and Investment, was affirmed and examined; Mr David Kennedy, Chief Information Officer, Department of Trade and Investment, was sworn and examined.

Evidence concluded and witnesses withdrew.

Mr Peter Duncan, Chief Executive, Roads and Maritime Services was sworn and examined; Mr Peter Wells, Director, Customer and Compliance, Roads and Maritime Services, Mr Paul Hesford, Director Corporate, Roads and Maritime Services, and Ms Sandra Coleman, Chief Information Officer, Roads and Maritime Services were affirmed and examined.

Evidence concluded and witnesses withdrew.

Mr Athol Chalmers, Australian Computer Society was sworn and examined.

Evidence concluded and witness withdrew.

Mr Peter Riordan, General Manager LMBR, Department of Education and Communities and Mr Michael McMahon, Deputy General, Corporate, Department of Education and Communities were sworn and examined.

Evidence concluded and witnesses withdrew.

Ms Virginia Choy, Director and Business Development Manager, Preta Web Pty Ltd; Mr Dylan Jay, Director and Chief Technology Officer, Preta Web Pty Ltd; and Mr Randall Lumbewe, Managing Director, Syndeticom Electrical and Communications were affirmed and examined.

Mr Joseph Rayment, Account Manager, Ethan Group and Mr Anthony Miller, Managing Director, Wot-Link Pty Ltd were sworn and examined.

Evidence concluded and witnesses withdrew.

Ms Margie O'Tarpey, CEO, Australian Institute of Project Management; Mr Chris Mansfield, NSW Chapter President, Australian Institute of Project Management; and Mr Mike Kano, Chapter Counsel, Australian Institute of Project Management were affirmed and examined.

Mr David Hudson, National President, Australian Institute of Project Management was sworn and examined.

Evidence concluded and witnesses withdrew.

Ms Suzanne Campbell , Chief Executive Officer, Australian Information Industry Association was examined via a teleconference link to Canberra.

Evidence concluded and witness withdrew.

8.   Tabled documents

Resolved, on the motion of Dr Lee, seconded by Mr Bassett: That the Committee accept and publish the tendered document from Mr Lumbewe.

9.   In Camera Session

Resolved, on a motion of Dr Lee, seconded by Mr Bassett: That the Committee hear the evidence from ▮▮▮▮▮▮▮▮▮▮ In Camera.

▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ was affirmed and examined.

▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ was sworn and examined.

▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮ agreed to take questions on notice and forward answers to the Committee.

Evidence concluded and witness withdrew.

10. Adjournment

The Committee adjourned at 4.45 p.m. until 9.45 a.m. on Thursday 21 February 2013.

Minutes of Proceedings of the Public Accounts Committee (no. 41)

Thursday 21 February 2013
9.45am
Room 1043, Parliament House

Members Present

Mr O'Dea, Mr Bassett, Mr Daley, Mr Williams, Dr Lee

Apologies

Mr Torbay

1. Confirmation of minutes of meetings of 28 November

Resolved, on the motion of Mr Daley, seconded by Mr Bassett: That the minutes of the meeting of Thursday 28 November 2012 be confirmed.

2. Correspondence

***

iii.   Letter from Mr Peter Achterstraat, Auditor-General, re: Answers to questions taken on notice at Inquiry into the procurement and management of ICT services in the NSW public sector in relation to disaster recovery plans, dated 14 December 2012.

Resolved, on the motion of Mr Williams seconded by Dr Lee: That the Committee write to the Auditor-General suggesting that this may be an appropriate subject for a future audit.

***

v.   Letter from Mr Peter Achterstraat, Auditor-General, re: Response to evidence provided to Public Accounts Committee by Mr Michael McMahon, General Manager, Learning Management and Business Reform Project (LMBR) re: Inquiry into the procurement of ICT services in the NSW Public Sector, dated 22 January 2013.

Resolved, on the motion of Mr Bassett seconded by Mr Daley: That the Committee invite the Department of Education and Communities and the Auditor-General to a hearing to answer questions about the financial reporting of the LMBR project.

***

8. Inquiry into procurement and management of ICT services

    i. Submission 22, Healthshare, received 22 January 2013

Resolved, on the motion of Dr Lee, seconded by Mr Williams: That the Committee accept the submission and publish on its website.

    ii. Update from Department of Trade and Investment

Resolved, on the motion of Dr Lee, seconded by Mr Williams: That the Chair write to the Department of Trade and Investment seeking an update on the implementation of the Cloud SAP Finance and Human Resources project.

***

11. Adjournment

The Committee adjourned at 10.40am until 9.45am on Thursday 28 February 2013.

Minutes of Proceedings of the Public Accounts Committee (no. 42)

Thursday 22 February 2013
9.45am
Room 1043, Parliament House

Members Present

Mr O'Dea, Mr Bassett, Mr Daley, Mr Williams

Apologies

Dr Lee, Mr Torbay

1. Confirmation of minutes of meetings of 21 February 2013

Resolved, on the motion of Mr Daley, seconded by Mr Williams: That the minutes of the meeting no 41 on Thursday 21 February be confirmed.

***

4. Inquiry into the Procurement and Management of ICT Services in the NSW Public Sector

    i. Public hearing, Monday 18 March 2013

Resolved, on the motion of Mr Daley, seconded by Mr Bassett: That the Committee note the proposed schedule for the public hearing on Monday 18 March.

***

10. Adjournment

The meeting closed at 11.00am.

The next meeting will be on Thursday 14 March 2013, at 9.45am in Room 1043

Minutes of Proceedings of the Public Accounts Committee (no. 43)

Thursday 14 March 2013
9.45am
Room 1043, Parliament House

Members Present

Mr O'Dea, Mr Bassett, Mr Daley, Mr Williams, Dr Lee, Mr Torbay

1.   Confirmation of minutes of meetings of 28 February 2013

Resolved, on the motion of Mr Bassett, seconded by Mr Williams: That the minutes of the meeting of Thursday 28 February 2013 be confirmed.

***

9.   Inquiry into procurement and management of ICT services

Briefing on Department of Education and Communities Learning Management and Business Reform (LMBR) project.

Resolved, on the motion of Mr Torbay seconded by Dr Lee: that the Committee send the briefing prepared by the secretariat to the Auditor-General and the Department of Education and Communities as background information for the hearing on Monday 18 March 2013

***

9.   Adjournment

The Committee adjourned at 10.17am until 10:30am on Monday 18 March 2013.

Minutes of Proceedings of the Public Accounts Committee (no. 44)

Monday 18 March 2013
10:30 am
Jubilee Room, Parliament House

Members Present

Mr O'Dea, Dr Lee, Mr Bassett, Mr Daley, Mr Williams

Apologies

Mr Torbay

1.   Public hearing: inquiry into procurement and management of ICT services and follow up of the Auditor-General's Performance Audits April 2011 - September 2011

Resolved on the motion of Mr Bassett, seconded by Mr Daley: That the Committee authorised the admission of the media, including audio-visual recording, photography and broadcasting in accordance with the guidelines for coverage of proceedings for parliamentary committees.

Resolved on the motion of Mr Williams, seconded by Mr Daley: That the return date for answers to questions on notice be 14 days from the date questions are sent by the Committee secretariat.

Resolved on the motion of Mr Bassett, seconded by Mr Daley: That the Committee authorise the publication of transcript of hearing 18 March 2013 on its website once members and witnesses have had an opportunity to make corrections.

The Chair opened the public hearing. Witnesses and the public were admitted.

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Mr Peter Riordan, General Manager LMBR, Department of Education and Communities, Mr Michael McMahon, Deputy General, Corporate, Department of Education and Communities and Mr Peter Achterstraat, NSW Auditor-General were examined under their former oaths, as part of the Committee's inquiry into the procurement and management of ICT services.

Evidence concluded and witnesses withdrew.

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3.   Adjournment
The Committee adjourned at 14:20 p.m. until 9.45 a.m. on Thursday 21 March 2013.

Minutes of Proceedings of the Public Accounts Committee (no. 45)

Thursday 21 March 2013
4.00pm
Room 1036, Parliament House

Members Present

Mr O'Dea, Dr Lee, Mr Bassett, Mr Daley, Mr Piper

1.   Committee Membership

The Chair welcomed Mr Piper as a member of the Committee, in place of Mr Torbay (resigned).

2. Confirmation of minutes of meetings of 14 March 2013 and 18 March 2013

Resolved, on the motion of Dr Lee, seconded by Mr Bassett: That the minutes of the meetings of Thursday 14 March 2013 and Thursday 18 March 2013 be confirmed.

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4. ICT Inquiry

a) Letter from Mr Les Wielinga, Director-General, Transport for NSW re: Response to Questions on Notice on T-Card project, received 14 March 2013

b) Email from Mr Mark Paterson, Department of Trade and Investment re: Update on the progress of the Cloud SAP implementation, received 15 March 2013

Resolved, on the motion of Mr Bassett, seconded by Mr Daley: That the Committee accept and publish answers to questions on notice received from Transport for NSW and Department of Trade and Investment.

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9. Adjournment

The Committee adjourned at 4.17pm until Wednesday 27 March 2013 at 9.45am in Room 1043

Minutes of proceedings of the Public Accounts Committee (No. 47)

Thursday 2 May, 2013
9.45 am
Room 1043, Parliament House

Members present

Mr O'Dea (Chair), Dr Lee (Deputy Chair), Mr Bassett, Mr Daley, Mr Piper, Mr Williams

Officers in attendance

Rachel Simpson, Pauline Painter, John Miller, Sasha Shevtsova, Jenny Gallagher

The Chair commenced the meeting at 9.50 am.

1. Confirmation of minutes

Resolved, on the motion of Mr Williams, seconded by Mr Piper: that the minutes of the meeting held on 27 March 2013 be confirmed.

2. Correspondence received

i.   Response from Department of Finance and Services to Questions on Notice: Inquiry into Procurement and Management of ICT Services in the NSW Public Sector, dated 27 February 2013.

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vi.   Letter from Mr Philip Gaetjens, Secretary, NSW Treasury re: Treasury's response to questions regarding ICT procurement savings, dated 10 April 2013.

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Resolved, on the motion of Mr Bassett, seconded by Mr Piper: That the Committee note the correspondence.

3. ICT inquiry

Committee staff provided an update on the progress of the inquiry.

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The committee adjourned at 11.03 am until 9.45 am on Thursday, 9 May 2013.

DRAFT Minutes of proceedings of the Public Accounts Committee (No. 50)

Thursday 30 May 2013
9.49am
Room 1043, Parliament House

Members Present

Mr O'Dea (Chair), Mr Bassett, Mr Daley, Dr Lee, Mr Piper, Mr Williams

Officers in Attendance

Rachel Simpson, Pauline Painter, Emma Wood, Jenny Gallagher, Sasha Shevtsova

1. Confirmation of Minutes

Resolved, on the motion of Mr Piper, seconded by Dr Lee: That the minutes of meeting No 49 held on 23 May 2013 be confirmed.

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4. Inquiry into the procurement and management of ICT services in the NSW Public Sector – consideration of Chair's draft report

The Chair's draft report, having been previously circulated, was taken as read.

Resolved, on the motion of Mr Daley, seconded by Mr Piper: That:
- the report be the report of the Committee and that it be signed by the Chair and tabled in the House
- the Chair and Secretariat be permitted to correct any stylistic, typographical and grammatical errors and make changes of a non-substantive nature
- once tabled, the report be published on the Committee's website.

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The committee adjourned at 10.24am until 9.45am on Thursday 20 June 2013.