Australian National Audit Office

IT Audit Capability and Resourcing

Report by the Independent Auditor

June 2012

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14 June 2012

Dear Mr President
Dear Madam Speaker

I have undertaken a performance audit of the Australian National Audit Office in accordance with the authority contained in the *Auditor-General Act 1997*.

Pursuant to *Senate Standing Order 166* relating to the presentation of documents when the Senate is not sitting, I present the report of this audit. The report is titled *IT Audit Capability and Resourcing.*

Following its presentation and receipt, the report will be placed on the Australian National Audit Office's Homepage - *http://www.anao.gov.au*.

Yours sincerely

Geoff Wilson
Independent Auditor
Appointed under Section 41 of
The Auditor-General Act 1997

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Abbreviations

AASG	Assurance Audit Services Group
the Act	*Auditor-General Act 1997*
ANAO	Australian National Audit Office
APS	Australian Public Service
ASAE	Australian Standards on Assurance Engagements
'Blue Book'	ANAO Annual Work Program
BPG	Better Practice Guide
Canadian OAG-BVG	Canadian Office of Auditor General - Bureau du Vérificateur Général du Canada
CFO	Chief Finance Officer
CMB	Corporate Management Branch
EBOM	Executive Board of Management
ED	Executive Director
EL	Executive Level
the Framework	The ANAO Strategic Planning Framework
FTE	Full Time Equivalent
GED	Group Executive Director
IT	Information Technology
ICT	Information and Communications Technology
ISACA	Information Systems Audit and Control Association
JCPAA	Joint Committee of Public Accounts and Audit
KPI	Key Performance Indicator

KRA	Key Result Area
NPP	New Policy Proposal
L&D	Learning and Development
PAM	Performance Audit Manual
PASG	Performance Audit Services Group
PBS	Portfolio Budget Statement
PSB	Professional Services Branch
SES	Senior Executive Staff

Summary

Summary

Introduction

1. The Australian National Audit Office (ANAO) assists the Auditor-General to provide an independent view of the performance and financial management of public sector entities. The *Auditor-General Act 1997* (the Act) sets out the Auditor-General's functions, mandate and powers. The Act establishes a unique, independent relationship between the Auditor-General and the Australian Parliament.

2. The Independent Auditor of the ANAO has led and undertaken a performance audit of the ANAO Information Technology (IT) audit capability and resourcing[1].

Background to this Performance Audit

3. IT audit services within the ANAO have been viewed as a support function to the financial statements and performance audits. The services provided by the IT Audit Branch, which is positioned within the Assurance Audit Services Group (AASG), include three broad functions:

i. provide full support and integration of IT elements to financial statements audits,

ii. provide support and integration of IT elements to performance audits, and

iii. conduct IT-focussed performance audits.

4. In 2009, a New Policy Proposal (NPP) was put forward by the ANAO seeking $6.6 million for IT audit enhancement over four years.

5. The NPP stated that "*agencies are placing ever increasing reliance on technology to achieve business outcomes and ANAO has experienced difficulty in responding to the significant growth and change in the IT environment within available funding. Many agencies have moved from having discrete systems to more complex, integrated solutions*"[2].

6. The ANAO identified four objectives to be achieved through this funding, being:

- increasing the number of permanent Australian Public Service (APS) staff,
- strengthening the methodology and integration with both financial statements and performance audits,

[1] Refer Chapter 1, paragraphs 1.22 and 1.23 for more information on the role of the Independent Auditor

[2] Page 1 of the New Policy Proposal (February 2009)

- acquiring additional hardware and analytical tools, and
- engaging IT audit specialists.

7. Trends in recent years have seen public sector entities placing increasing reliance on IT-enabled business processes and solutions to achieve business outcomes with many moving away from having discrete systems, to more complex integrated solutions, for example, online service-delivery to customers. With this trend likely to continue, public sector entities will become even more reliant on systems to process transactions in an accurate, complete and timely manner. IT audit involvement therefore becomes critical as the anticipated volume and associated dollar value of transactions will be increasing.

8. Under this environment IT audit capabilities are in even higher demand across the auditing profession, as business technology continues to see rapid development and new challenges.

Audit objective

9. The objective of this performance audit was to consider the ANAO's implementation of the IT audit capability enhancements enabled by the NPP. Using guidance from the Standard on Assurance Engagements: *Australian Standards on Assurance Engagements (ASAE) 3500–Performance Engagements*[3] and the Act, this performance audit examined:

- the linkages between planned and established processes to increase IT audit capability and the overall alignment with the ANAO's strategic plan and objectives,
- the assessment the ANAO undertakes to determine current versus future IT audit capability,
- the processes and procedures the ANAO has established in relation to sourcing additional IT audit capability through either recruitment or resource supplementation through contracts and panels including knowledge transfer between the specialist consultant and the ANAO, and
- the ANAO's approach to IT-focussed audits including how resources are applied in an efficient and effective manner.

10. This performance audit considered the IT audit capability and resourcing at the ANAO and included a high-level comparison against the Office of the Auditor-General of Canada (Canadian OAG-BVG)[4]. The audit also reviewed a sample of financial

[3] *Standard on Assurance Engagements ASAE 3500 – Performance Engagements* (July 2008). Issued by the Auditing and Assurance Standards Board

[4] Bureau du vérificateur général du Canada

statements and performance audits to examine the IT audit capability and resourcing approaches that were employed for individual audits. Further information in relation to the audit objectives and scope are outlined in **Chapter 1** of this report.

Summary of findings

Alignment with the ANAO's strategic plan and objectives (Chapter 2)

11. The ANAO has achieved three of the four NPP objectives. The element that remains outstanding is in relation to the objective of increasing the total number of permanent APS staff members in the IT Audit Branch.

12. The ANAO's objective to enhance its IT audit capability, as informed by the NPP, has been aligned with the ANAO Strategic Planning Framework and its various plans including the Portfolio Budget Statement (PBS), the ANAO Corporate Plan, Business Plans, and the IT Audit Branch Operational Plan. This alignment across the various plans is needed to ensure that the IT audit capability objectives have a consistent focus through the whole business and get the appropriate level of attention.

13. It was noted that, until April 2012 the IT Audit Branch did not have a separate business or operational plan that outlines its future direction nor how the NPP objectives are to be achieved, rather it was informed by the business plans of the AASG and the Performance Audit Services Group (PASG).

14. In April 2012, an IT Audit Branch Operational Plan was endorsed, however, it did not outline the timeframes within which the plans and initiatives are to be completed or the Key Performance Indicators (KPIs) that can be used to measure the achievement of these initiatives. In addition, there has been limited measurement and reporting of the achievement against the NPP objectives to enhance the IT audit capability.

ANAO current and future IT audit capability and sourcing additional IT audit resources through recruitment or contractors (Chapter 3)

15. Prior to August 2011, the IT Audit Branch undertook limited recruitment activities to build upon its capability and assess the current and future IT audit resourcing requirements which has resulted in a reliance on contractors. Since August 2011, the ANAO has re-focussed its efforts to enhance its IT audit capability through progressing a number of recruitment activities.

Approach to IT audits and how resources are applied in an efficient and effective manner in financial statements and performance auditing (Chapter 4)

16. The engagement and involvement between the IT Audit Branch and the AASG is mature and well documented, due to the structured nature of financial statements

auditing. A key element to this is the timing that surrounds IT audit involvement, which can be envisaged well in advance.

17. The engagement and involvement between the IT Audit Branch and the Performance Audit Services Group (PASG) has improved over the last three years, through creating the role of the IT Audit Liaison and including a step as part of the process of developing an Audit Work Plan[5]. However, this engagement and interaction can be further strengthened through formal planning sessions.

Recommendations

18. This performance audit has identified four recommendations to assist the ANAO achieve an enhanced IT audit capability in line with its stated objectives. These relate to:

i. ensuring that the IT Audit Branch reports, on a quarterly basis, to the ANAO Executive Board of Management (EBOM) on the progress against achieving the NPP objectives, the Key Result Areas (KRAs) and other relevant indicators;

ii. ensuring the development of a separate IT Audit Branch Operational Plan as a continuing practice. This plan should be reviewed and updated at least annually;

iii. identifying the specific KPIs and the timeframes to achieve each initiative and strategy within the IT Audit Branch Operational Plan; and

iv. ensuring that the IT Audit Branch is involved in all PASG planning sessions and discussions at both the group level and the branch level.

[5] In the *Performance Audit of the ANAO Planning and Scoping of Performance Audits by the PASG* (May 2011) a suggested improvement was made to include a specific step into the process of developing an Audit Work Plan to ensure that the PASG teams have consulted and engaged with the IT Audit Branch and that their input has been considered.

Summary Conclusion

19. Overall, the ANAO has achieved three of the four objectives identified in the NPP with the increasing of the number of permanent APS staff being behind schedule. While this has not prevented the ANAO from delivering on its business outcomes for financial statements and performance auditing, it has resulted in a reliance on contractors to supplement the permanent IT audit workforce of the IT Audit Branch at a ratio of 45:55 (contractor to permanent APS staff), a mix which exceeds the intent of the NPP.

20. Since August 2011, the ANAO has re-focussed its efforts to enhance IT audit capability through developing a new Operational Plan for the IT Audit Branch and undertaking a number of recruitment activities.

21. These recent activities along with the recommendations outlined in this report should assist the ANAO in achieving the remaining NPP objective relating to increasing the number of permanent APS staff and enhancing the IT audit capability.

ANAO response

22. The ANAO welcomes the audit report and its conclusion that the delivery of business outcomes for financial statements and performance audit has been achieved while the ANAO has been taking steps to increase in the number of permanent IT Audit staff. The IT Audit Branch is continuing its work to increase capability and support the delivery of ANAO outcomes. The ANAO accepts the recommendations made in the report to enhance current practice. Actions to address the recommendations have already commenced.

Recommendations

Recommendation No. 1

Para. 2.17

For greater visibility and transparency, it is recommended that the IT Audit Branch reports, on a quarterly basis, to the EBOM on the progress of achieving the goals of the NPP against the KRAs and other relevant indicators.

ANAO response

Agreed. Enhanced IT Audit Branch reporting to EBOM commenced in March 2012 and a quarterly reporting regime has been implemented.

Recommendation No. 2

Para. 2.19

Although the IT Audit Branch's strategy and plan are considered a component of the AASG and the PASG business plans, it is recommended that the ANAO ensures the development of a separate IT Audit Branch Operational Plan as a continuing practice, ensuring it is reviewed and updated annually. This will ensure that the IT Audit Branch sets clear goals, targets and initiatives to continually enhance its function and operations.

ANAO response

Agreed. The IT Audit Branch Operational Plan will be reviewed and updated on an annual basis to ensure ongoing alignment with AASG and PASG business requirements.

Recommendation No. 3

Para. 2.33

To allow the ANAO and the Executive team to better measure the success and the timeliness of achieving the initiatives, within the IT Audit Branch Operational Plan, and the overall enhanced IT audit capability it is recommended that the ANAO identifies in its IT Audit Branch Operational Plan the specific Key Performance Indicators and the timeframes for each initiative and strategy.

ANAO response

Agreed. As part of the ongoing review of the IT Audit Branch Operational Plan, specific Key Performance Indicators and timeframe will be developed for each initiative and strategy.

Recommendation No. 4

Para. 4.27

To further strengthen the engagement and integration between the IT Audit Branch and the PASG, it is recommended that the IT Audit Branch's ED and/or the IT Audit Liaison are involved in all PASG planning sessions and discussions at both the Group and Branch level.

ANAO response

Agreed. The IT Audit Branch is involved in planning sessions at the Group level and in some Branch level planning sessions. This will be expanded to include the IT Audit Branch in all Branch level planning sessions.

Audit Findings and Conclusions

Introduction

This chapter provides background to the ANAO's IT Audit Branch capability and resourcing. It also outlines the objectives, scope and methodology for this audit.

Background

1.1 The primary client of the ANAO is the Australian Parliament. The ANAO's main point of contact with Parliament is the Joint Committee of Public Accounts and Audit (JCPAA), although interaction does occur with other parliamentary committees and parliamentarians to support parliamentary priorities, public administration matters and the outcomes of audit coverage.

1.2 The ANAO's purpose is to provide Parliament with an independent assessment of selected areas of public administration, and assurance about public sector financial reporting, administration, and accountability. This function is delivered through the AASG and the PASG. The Professional Services Branch (PSB), through the provision of technical assistance, and the Corporate Management Branch (CMB), through the provision of practice management related services, supports the two 'operational' areas of the ANAO.

1.3 The ANAO has two outcomes as outlined in its PBS for the year 2011-12.

1.4 The first outcome relates to "*providing assurance on the fair presentation of financial statements of Australian Government entities by providing independent audit opinions and related reports for the information of Parliament and the Executive*".

1.5 The main activity that contributes to this outcome is the auditing of annual financial statements of Australian Government entities and the annual Consolidated Financial Statements of the Australian Government. These audits are designed to give assurance to stakeholders that an entity's financial statements fairly represent its financial operations and financial position at year-end. The ANAO makes recommendations for improvements in financial administration[6].

1.6 The ANAO's target for the year 2011-12 is to issue 250 financial statements audit opinions, in addition to another 81 assurance products.

1.7 The second outcome relates to "*improving the efficiency and effectiveness of the administration of Australian Government programs and entities by undertaking a*

[6] Australian National Audit Office, Portfolio Budget Statement 2011-12

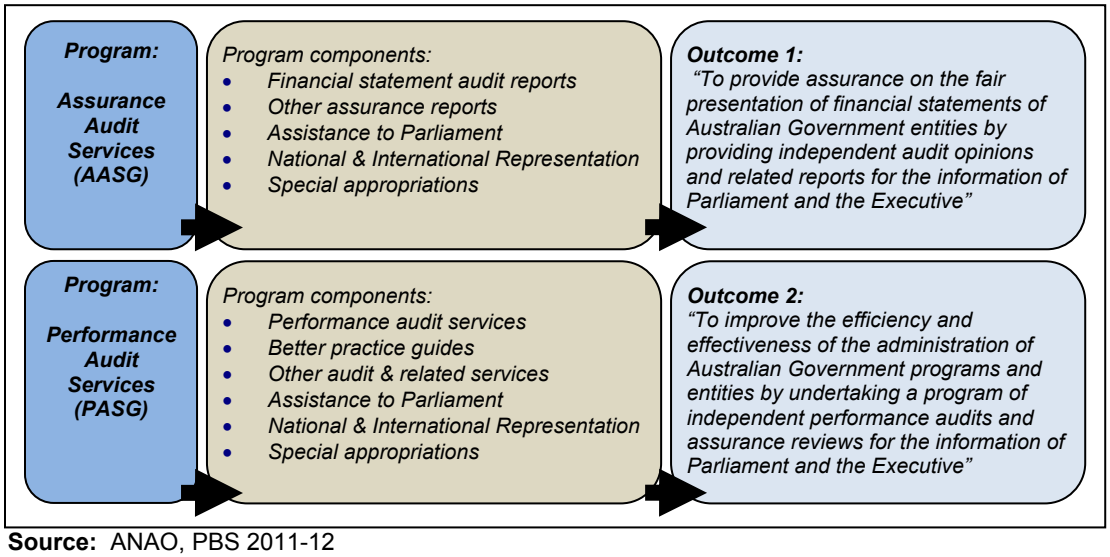
program of independent performance audits and assurance reviews for the information of Parliament and the Executive" [7].

1.8 The major contribution to this outcome is the conduct of performance audit services. The ANAO's performance audit and audit-related activities include the review of all or part of an entity's operations to assess its efficiency or administrative effectiveness. The ANAO also contributes to improvements in Commonwealth public administration by identifying and promoting better practice, which assists Australian government entities to perform efficiently and effectively, and add value to their outputs and services.

1.9 The ANAO's target for the year 2011-12 is to produce 55 performance audit reports, one report on the review of Defence Materiel Organisation Major Projects, and five Better Practice Guides[7].

1.10 Diagram 1-1 below illustrates the Program components contributing to the planned two Outcomes of the ANAO in 2011-12.

Diagram 1-1: Program Components contributing to planned outcomes in 2011-12



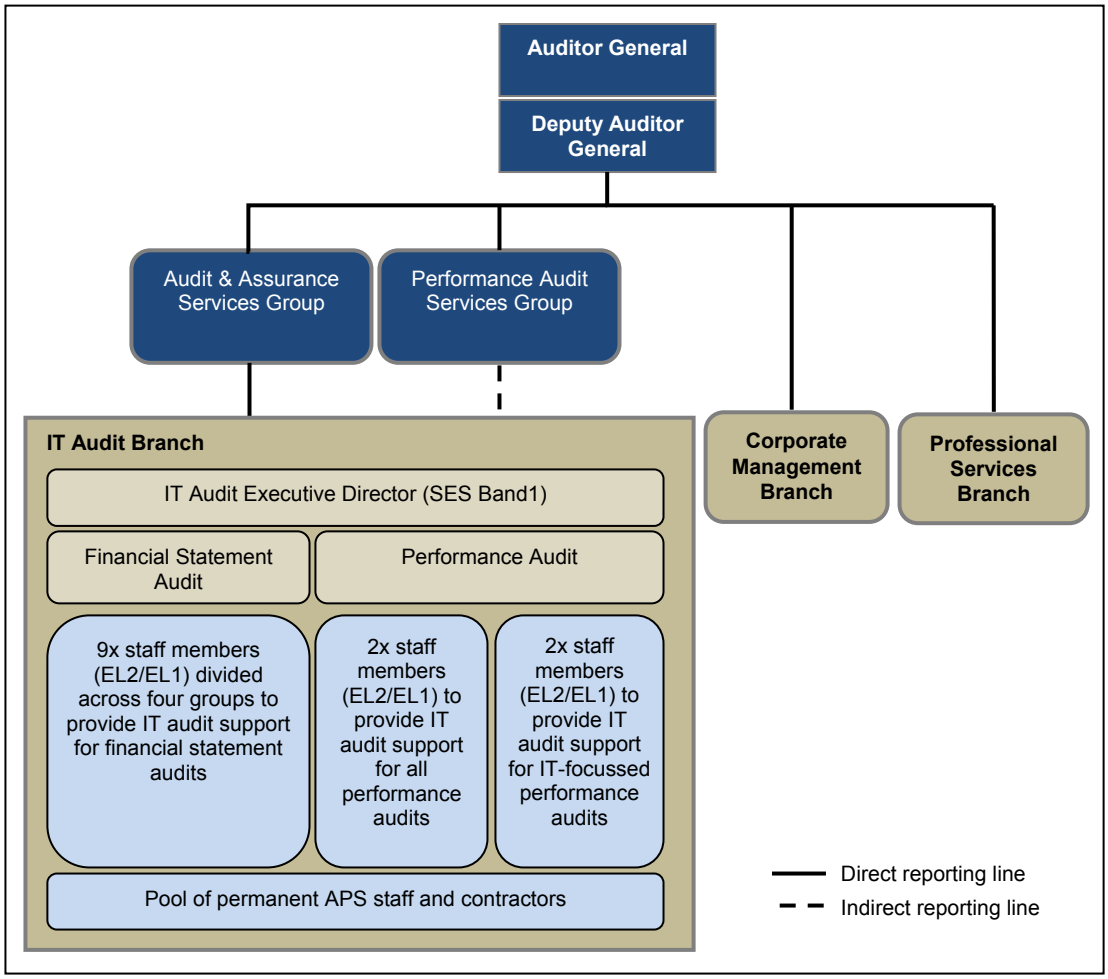
Source: ANAO, PBS 2011-12

1.11 The IT Audit Branch sits, structurally, within the AASG and is led by an Executive Director (ED) who, in turn, operationally reports to the Group Executive Director (GED) of the AASG. The IT Audit Branch's objectives are informed by both, Outcome One and Outcome Two.

1.12 Diagram 1-2 illustrates the structure of the ANAO, including where the IT Audit Branch is positioned.

[7] Australian National Audit Office, Portfolio Budget Statement 2011-12

Diagram 1-2: ANAO Organisational Structure as at April 2012



Source: Analysis of ANAO data

1.13 The IT audit capability at the ANAO supports the effective execution of both performance and financial statements audits. The IT Audit Branch is also responsible for the continuous improvement of the ANAO's IT audit capabilities. The IT Audit Branch consists of specialists who evaluate the design and effectiveness of IT systems and processes that support key government entities' business processes.

1.14 Given that the business processes that underpin financial statements preparation and reporting require the support of IT systems, these processes form a key component of Australian government entities' control environments. IT audit forms a core component of the overall financial statements auditing process to provide an evaluation of the IT control environment. The IT Audit Branch within the ANAO reviews both IT

general controls[8] and application controls[9] within these environments as part of its annual financial statements audits.

1.15 The IT Audit Branch provides IT audit support to performance auditing by undertaking business process and system reviews, application controls testing and various data analytics and data mining.

1.16 The level of involvement with the PASG varies depending on the extent to which a performance audit topic is focussed on IT.

1.17 When undertaking an IT-focussed performance audit, the IT Audit Branch works closely with the PASG and provides significant input into the audit. When undertaking a performance audit or preparing a better practice guide that is completely IT-focussed, the IT Audit Branch has significant responsibility for the delivery of these products, for example, the *Performance Audit of the Portable Storage Devices (December 2011)* and the *Better Practice Guide on Human Resource Information Systems (April 2011).*

1.18 In 2009, in response to the NPP submitted by the ANAO, Parliament provided the ANAO with additional funding to "*respond to workload changes requiring enhanced IT and other specialist audit capabilities".*

1.19 The NPP further stated that "*agencies are placing ever increasing reliance on technology to achieve business outcomes and ANAO has experienced difficulty in responding to the significant growth and change in the IT environment within available funding. Many agencies have moved from having discrete systems to more complex, integrated solutions and a limited investment will be directed at extending capacity to undertake structured data analysis in support of ANAO's performance audit program, with the majority of funding sought concentrating on the financial statements practice*"[10].

1.20 Specifically, the total additional IT audit funding received for the five-year period 2009-10 to 2012-13 was $6.6 million. The specific objective relating to this funding was to "*enable the ANAO to respond to significant growth and change in the IT environment*"[11].

1.21 The ANAO has identified the following four objectives associated with this additional funding[12]:

[8] IT general controls are agency-wide structures, policies, procedures, and standards applied to information systems that support accounting and business processes. Effective operation of these controls helps make sure IT application controls work as intended throughout the financial year.

[9] IT application controls operate at the accounting and business process level, consisting of access, configuration, and reporting controls. Reliance on the effective operation of these controls provides a means to confirm the accuracy and integrity of agencies financial statements, particularly high transaction volume accounts.

[10] Page 1 of the New Policy Proposal (February 2009)

[11] Ibid.

[12] Ibid.

- Enhance the IT audit capability and capacity from 22 to 34 permanent APS staff members to enhance IT audit services provided to both financial statements and performance audit. Also, increasing IT audit involvement with PASG's products.

- Strengthen the methodology support and integration with both financial statements and performance audits.

- Explore the use and acquisition of additional hardware and analytical tools to gain greater audit coverage more efficiently.

- Engage specialists to provide expert IT audit and other advice.

The audit

The Independent Auditor

1.22 Mr Geoff Wilson, the Independent Auditor for the ANAO, has led and undertaken this Performance Audit.

1.23 Pursuant to Schedule 2[13] of the Auditor-General's Act, the Independent Auditor is appointed by the Governor-General for a term of at least three years and not more than five years. Mr. Geoff Wilson was re-appointed as the Independent Auditor of the ANAO on the 24th April 2009.

Audit objectives

1.24 The objective of this performance audit was to consider the ANAO's implementation of the IT audit capability enhancements enabled by the NPP. Using guidance from the Standard on Assurance Engagements *ASAE 3500–Performance Engagements*[14] and the Act, this performance audit examined:

- the linkages between planned and established processes to increase IT audit capability and the overall alignment with the ANAO's strategic plan and objectives,

- the assessment the ANAO undertakes to determine current versus future IT audit capability,

- the processes and procedures the ANAO has established in relation to sourcing additional IT audit capability through either recruitment or resource supplementation through contracts and panels including knowledge transfer between specialist consultants and the ANAO, and

[13] Section 1, Schedule 2 of the Auditor-General's Act 1997

[14] *Standard on Assurance Engagements ASAE 3500 – Performance Engagements* (July 2008). Issued by the Auditing and Assurance Standards Board.

- the ANAO's approach to IT-focussed audits including how resources are applied in an efficient and effective manner.

Audit scope

1.25 The scope for this performance audit was developed after consultation with key stakeholders and consideration of a number of ANAO IT audit related documents.

1.26 Key stakeholders interviewed or contacted as part of the scoping process are outlined below at Paragraph 1.30.

1.27 The planning process identified that the scope for this performance audit would consider:

- how IT audit resources were applied and allocated to financial statements audits and recent performance audits;
- the annual planning process for the development of the ANAO's Annual Work Program, which is also known as the "Blue Book", for 2010-11 and 2011-12; and
- the sourcing strategies and processes to identify and secure relevant IT audit resources.

1.28 This performance audit did not:

- consider the adequacy and outcomes of audits conducted by the ANAO;
- extend to a quality assurance assessment of ANAO audit's including working papers and reports;
- undertake a cost–benefit analysis of sourcing solutions (e.g. outsource versus internal capability). However such analysis undertaken by the ANAO to determine the most effective and value-for-money sourcing strategy was considered; and
- consider the broader ANAO's IT infrastructure and systems, however IT applications and systems used in the conduct of IT audits will be considered.

Audit methodology

1.29 This performance audit was conducted in accordance with Australian Auditing and Assurance Standards, specifically relating to Performance Engagements (ASAE 3500)[15]. To conclude on the objectives of the performance audit, it was undertaken in accordance with an audit program.

[15] *Standard on Assurance Engagements ASAE 3500 – Performance Engagements* (July 2008). Issued by the Auditing and Assurance Standards Board.

1.30 During the course of the audit, interviews were held with:

- Auditor-General and Deputy Auditor-General;
- the ANAO Audit Committee;
- the Secretary of the JCPAA;
- the ED of the IT Audit Branch, the AASG;
- GEDs within the PASG and the AASG;
- the ED of the PSB;
- the ANAO Chief Finance Officer (CFO);
- Business Managers within the AASG and the PASG; and
- The AASG and the PASG audit managers responsible for managing the three selected ANAO financial statements audits and the one selected performance audit.

1.31 The focus of interviews and the review of key documentation was to:

- determine and assess the ANAO's progress to date towards its intended objectives to enhance the IT audit capacity and capability, and the benefits that have been realised to date as a result of the investment from the recent NPP funding;
- understand the current strategies around future planning for IT audit capabilities;
- consider the alignment between IT audit plans against the ANAO Corporate Plan and the AASG and the PASG Business Plans;
- analyse the current and future IT audit capability with regard to staff skill levels and experience; staff numbers, capacity and percentage of time spent on IT audit related components; and staff resource type (permanent APS staff members versus contractors); and
- understand the ANAO's recruitment activities and resourcing strategies including the use of contractors to supplement resource needs, training programs and continuing professional development initiatives, and knowledge transfer between contractors and ANAO permanent APS staff members.

1.32 Four individual audits were selected in order to examine and understand the ANAO's framework and approach to planning and applying IT audit resources to audits

in an effective and efficient manner, and how this process is undertaken as part of the broader financial statements and performance audits.

1.33 The selection of four audits is not representative of all the audits and products produced by the ANAO. They have been used to assist in understanding and examining the ANAO's approach to applying IT audit resources when undertaking audits.

1.34 Information and detail in relation to the four selected audits is included in **Chapter 4, Table 4-2 and Table 4-3.**

Report structure

1.35 The audit report is structured as follows:

Chapter 2 **Alignment of the ANAO strategic plan and objectives to the IT audit capability enhancements enabled by the NPP**	Examines the NPP that was agreed in 2009 and how it relates to the broader ANAO strategic planning framework. The Chapter focuses on: • ANAO strategic planning framework; • NPP objectives; • Reporting and monitoring of NPP spend; and • Measurement of enhanced IT audit capability.
Chapter 3 **Current and future planning of IT audit resource capability**	Examines the way in which the ANAO considers current and future IT audit capability, including the following: • IT audit capability requirements; • IT audit capability statement; • Training and recruitment; • Use of contractors for resource supplementation; and • Comparative analysis with the Canadian OAG-BVG.
Chapter 4 **Engagement of IT audit resources in financial statements audits and performance audits**	• Examination of the ANAO's approach to planning and applying IT audit resources to financial statements and performance audits.

2. Alignment of the ANAO strategic plan and objectives to the IT audit capability enhancements enabled by the NPP

This chapter describes the strategic planning framework for the ANAO and its linkages to the NPP received to enhance its IT audit capability.

ANAO Strategic Planning Framework

2.1 The ANAO's Strategic Planning Framework (the Framework) facilitates the ANAO's governance and business planning. The primary focus of the Framework is the ANAO's commitments to Parliament as set out in the 2011-12 PBS in the form of two outcomes:

- "*providing assurance on the fair presentation of financial statements of Australian Government entities by providing independent audit opinions and related reports for the information of Parliament and the Executive*", and
- "*improving the efficiency and effectiveness of the administration of Australian Government programs and entities by undertaking a program of independent performance audits and assurance reviews for the information of Parliament and the Executive*"[16].

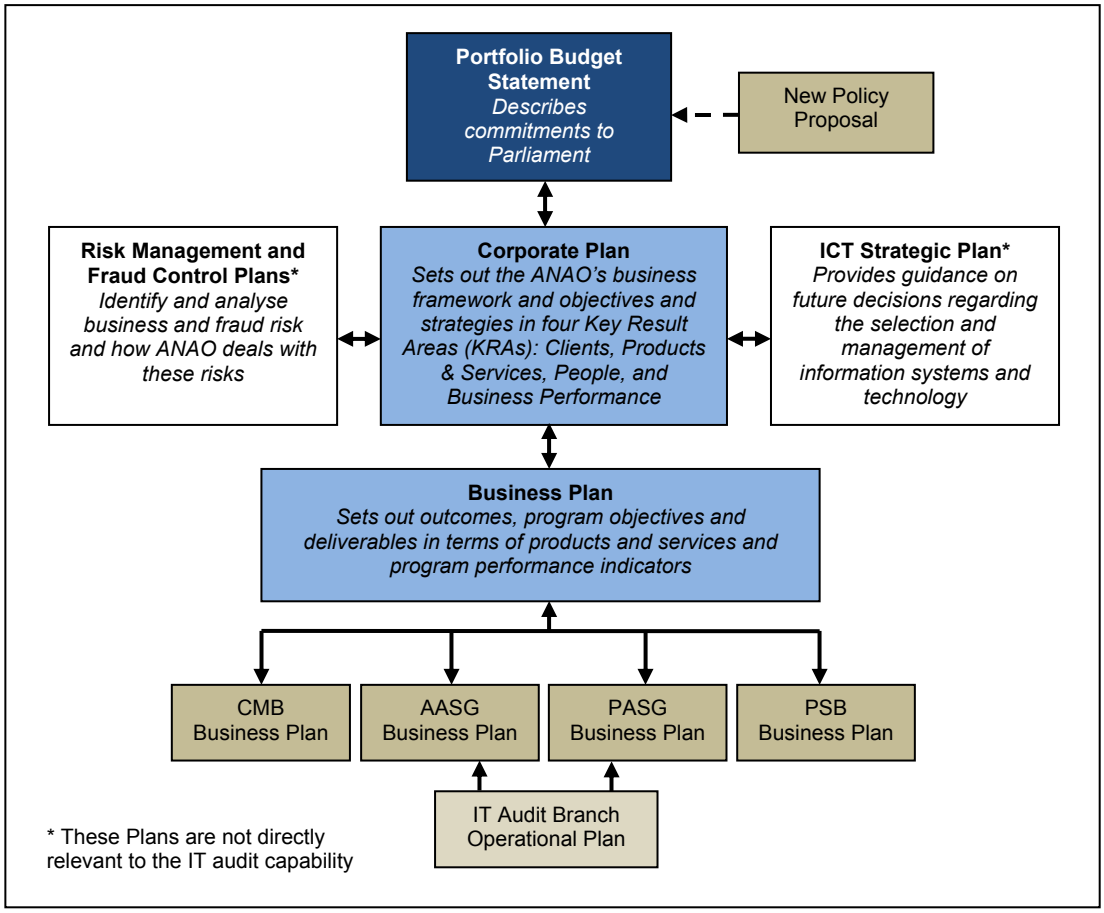
2.2 The Framework consists of a number of plans that, together, outline the overarching elements of the ANAO's business and set the key objectives and strategies. These plans are the ANAO's:

- PBS,
- Corporate Plan,
- Information and Communications Technology (ICT) Strategic Plan,
- Risk Management and Fraud Control Plans,
- Business Plan, and
- The AASG and the PASG Business Plans.

2.3 **Diagram 2-1**, overleaf, illustrates the high-level Framework that supports strategic planning for the ANAO.

[16] Australian National Audit Office, Portfolio Budget Statement 2011-12

Diagram 2-1: ANAO Strategic Planning Framework



Source: Analysis of ANAO data

2.4 Further detail in relation to the PBS, the ANAO Corporate Plan, the ANAO Business Plan, and the Groups' Business Plans can be found at **Appendix 1**.

IT Audit Branch Operational Plan

2.5 Prior to April 2012, the IT Audit Branch did not have a separate business or operational plan. It was considered to be a component of each of the AASG and the PASG business plans. In April 2012, a decision was made to separately develop an operational plan that sets the strategies and initiatives that IT Audit Branch needs to undertake to address its IT audit capability gaps.

2.6 The *IT Audit Branch Operational Plan (April 2012)* describes the IT Audit Branch's commitment to support the delivery of both financial statements and performance audits, including the delivery of IT-focussed performance audits and its objectives to provide timely and quality services with a skilled workforce, in alignment with the KRAs outlined in the AASG and the PASG Business Plans. The Plan also

outlines the IT audit capability profile and the investment initiatives in people, processes and technology to enhance the current capability. These initiatives are summarised in **Table 2-1** below.

Table 2-1: Initiatives to enhance IT audit capability as outlined in the IT Audit Branch Operational Plan (April 2012)

Priority	People	Processes	Technology
Enhance our IT Audit capability for servicing AASG and PASG needs and maintaining strong relationships	• Staff profile of 80% permanent APS staff and 20% contractors, consisting of specialists in IT audit, IT governance, security and infrastructure, and business process and data analysis	• Contribute to the identification of opportunities / topics for additional Performance Audits in the Blue Book • Establish client relationship model to maximise engagement with stakeholders	• Develop and deliver introductory courses on IT systems for performance and assurance audit staff
Strengthen the capability of our people, processes and technology to deliver value-added services and high quality products	• Engage quality contractors, including specifying skills-transfer requirements to ANAO IT Audit staff	• Integrated IT Audit methodology with AASG and PASG	• Procurement of supporting IT software and hardware to provide better structured data interrogation and analysis tools and support
Develop, nurture and value staff from APS through to EL	• Develop training programs to help decrease the reliance on contractors and external expertise	• Increase intake of undergraduates and graduates	• Establish an IT Audit team for researching analytical tools
Effective management and development of IT Audit processes and technology	• Management structure consists of specific IT Audit teams, Client Managers and Data Analysis Specialists	• Develop IT Audit Manual to assist with assurance and performance audits	• Develop IT Audit knowledge base to support the review of specialised applications, infrastructure and complex IT systems

Source: ANAO's IT Audit Operational Plan (April 2012)

NPP Objectives

2.7 As part of the additional funding received by the ANAO through the NPP submitted in 2009, a total amount of $6.6 million was allocated to IT audit for the five-year period 2009-10 to 2012-13 in order for the ANAO to "*enhance its IT audit capability*"[17].

2.8 Specifically, the ANAO has internally identified the following four objectives to be achieved through this additional funding:

- Enhance the IT audit capability and capacity from 22 to 34 permanent APS staff members to enhance IT audit services provided to both financial statements and performance audit. Also, increasing IT audit involvement with PASG's products.
- Strengthen the methodology support and integration with both financial statements and performance audits.
- Explore the use and acquisition of additional hardware and analytical tools to gain greater audit coverage more efficiently.
- Engage specialists to provide expert IT audit and other advice.

2.9 **Table 2-2** below provides an overview of the split of the funds over the years from 2009-10 to 2012-13 and allocation of funds to each of the objectives of the NPP.

Table 2-2: Overview of IT Audit Branch budgeted spend of NPP funds over the four year period of the NPP

	2009-10	2010-11	2011-12	2012-13	Total
Funds received for the year	$0.9 million	$1.3 million	$2.2 million	$2.2 million	**$6.6 million**
Percentage allocated to remuneration for additional permanent APS staff members: Objective 1	77%	100%	64%	64%	**73%**
Percentage allocated to capital expenditure (tools): Objective 2	23%	0%	0%	0%	**3%**
Percentage allocated to expert advice (including methodology enhancement): Objectives 3 and 4	0%	0%	36%	36%	**24%**

Source: ANAO data in relation to the NPP

[17] Page2 of the New Policy Proposal (February 2009)

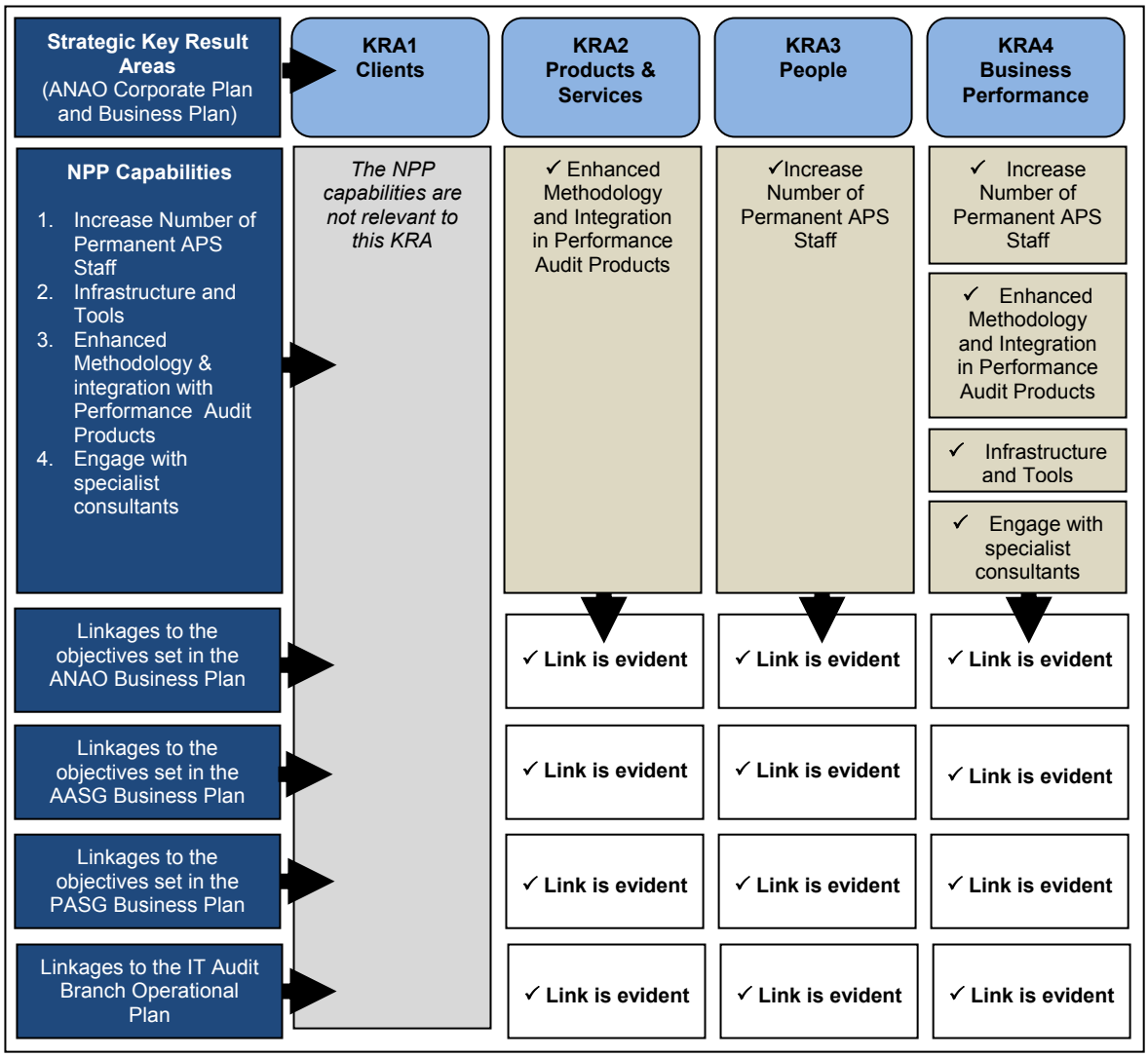
Assessing the linkages between the NPP objectives and the KRAs

2.10 By assessing the linkages between the various ANAO plans and strategies including the four KRAs to the objectives of the NPP, the following has been noted:

- The ANAO PBS for the years 2009-10 and 2010-11 have noted the objective to "enhance IT audit capability", however the 2011-12 PBS did not.
- The Corporate Plan and the ANAO Business Plan had high-level linkages with the NPP goals through KRA2 *Products and services*, KRA3 *People*, and KRA4 *Business Performance*.
- The AASG Business Plan linked the KRA2 *Products and Services* to the NPP goals through one aspect of "*strengthening the financial statements audit integration with IT Audit and Professional Services Branch"*.
- The PASG Business Plan aligned the NPP initiatives with KRA4 *Business Performance* by outlining strategies for IT audit integration and capability building support via "*improving visibility of office investment in IT audit capability to support the PASG"*.
- As outlined earlier in **Table 2-1**, the IT Audit Branch Operational Plan was aligned with the NPP goals through KRA2 *Products and services*, KRA3 *People*, and KRA4 *Business Performance*. However, the Plan does not identify the timeframes within which the various initiatives and strategies are to be completed.

2.11 **Diagram 2-2** below illustrates the linkages between the various plans, the KRAs and the NPP goals.

Diagram 2-2: Linkages between the various plans, the KRAs and the NPP goals



Source: Analysis of ANAO data

2.12 This alignment across the various plans and KRAs is needed to ensure that the IT audit capability objectives have a consistent focus through the whole business and get the appropriate level of attention.

Reporting and monitoring of the NPP spend

2.13 Generally speaking, the reporting and monitoring of the NPP expenditure can occur at two levels. The first, internally within the ANAO, through reporting progress to the EBOM and to individual members of the Executive team. The second, externally through reporting in annual reports or reporting to senate estimates or enquiries. It should be noted that external reporting of NPP spend is not required, however it is considered better practice and supports greater transparency.

2.14 The ANAO CFO monitors the overall ANAO expenditure of the various groups and branches including the IT Audit Branch and reports regularly to the EBOM. Nevertheless, specific internal reporting on the IT Audit Branch's use of the NPP funds has not been undertaken regularly.

2.15 The ANAO's external reporting has been limited. The ANAO Annual Report includes a commentary on receiving the additional funding. The ANAO has also reported against the status of implementing the NPP initiatives at Additional Estimates in February 2010 and noted[18]:

- "*Allocation of $200,000 for procurement of supporting IT software and hardware;*
- *Allocation of $50,000 for the procurement of specialised consultancy services to deliver data analysis training;*
- *Allocation of $200,000 for the provision of specialised IT audit resources to deliver two technical IT audits;*
- *Outposting of three senior and experienced IT auditors with experience in performance audit;*
- *IT audit involvement in audit products in the year to date amounted to ten; and*
- *Other current IT audit engagements such as the Better Practice Guide on Security and Controls for Human Resource Systems*".

[18] Page 1 of the ANAO submission to the Additional Estimates (February 2010)

2.16 Upon reviewing key documentation, it has been identified that the ANAO's internal and external reporting on progressing the NPP initiatives, since 2009, has been limited and ad-hoc. Limited documented plans were in place in relation to building IT audit capability until the recent development of the IT Audit Branch Operational Plan (April 2012) which focuses on addressing the IT audit capability objectives.

Recommendation No. 1

2.17 For greater visibility and transparency, it is recommended that the IT Audit Branch reports, on a quarterly basis, to the EBOM on the progress of achieving the goals of the NPP against the KRAs and other relevant indicators.

ANAO response

2.18 Agreed. Enhanced IT Audit Branch reporting to EBOM commenced in March 2012 and a quarterly reporting regime has been implemented.

Recommendation No. 2

2.19 Although the IT Audit Branch's strategy and plan are considered a component of the AASG and the PASG business plans, it is recommended that the ANAO ensures the development of a separate IT Audit Branch Operational Plan as a continuing practice, ensuring it is reviewed and updated annually. This will ensure that the IT Audit Branch sets clear goals, targets and initiatives to continually enhance its function and operations

ANAO response

2.20 Agreed. The IT Audit Branch Operational Plan will be reviewed and updated on an annual basis to ensure ongoing alignment with AASG and PASG business requirements.

Measurement of enhanced IT audit capability

2.21 There has been no formal measurement, through the use of KPIs, to measure the progress towards enhancing IT audit capability and achieving the NPP initiatives including the use of funds.

2.22 The IT Audit Branch has experienced several changes in the leadership at the ED level over the past three years. This has impeded the ANAO from building its IT audit capability to desired levels and decreasing reliance on contractors.

2.23 Since the appointment of the current ED of the IT Audit Branch in August 2011, the focus given to enhancing IT audit capability and the building of sustained IT audit resources has improved. This is reflected in the construction of the *IT Audit Branch Operational Plan (April 2012)* and a number of recruitment activities undertaken to date.

2.24 The *IT Audit Branch Operational Plan (April 2012)* aims to align IT audit initiatives with the enhancement of IT audit capability through the following elements:

- Increase in number of permanent APS staff,
- Increase the level of integration between IT Audit with the AASG and the PASG, and
- Increase IT audit involvement in PASG's products and IT-focussed performance audits.

2.25 Considering each of the elements outlined above with respect to the NPP goals, ANAO has made progress in three out of the four NPP initiatives. The assessment against the NPP initiatives is captured in **Table 2-3** overleaf.

Table 2-3: Assessment of ANAO achievement of NPP initiatives

Initiative 1: Increase the number of APS permanent staff	Not achieved	The NPP envisaged a progressive increase in the number of APS permanent IT audit staff to 34. This has not been achieved to date with only 16 APS permanent IT audit staff.
Initiative 2: Enhance methodology	Achieved	The ANAO has undertaken methodology improvement exercises that have benefited the efficiency and effectiveness of financial statements audits. The IT Audit Involvement Memo was introduced as a step to further enhance the integration of IT audit with financial statements and performance audits and to incorporate the approach to implementing IT audit components into the methodology for both financial statements and performance audits. This is a continuing focus area for the ANAO given that technology is continually evolving and improvements are continuously sought.
Initiative 3: Engage with specialist consultants	Achieved	Funds to engage with consultants have not been spent as the IT Audit Branch was able to utilise the expertise of specialists from a government agency to assist with technical components of financial statements and performance audits. As required, the ANAO will continue to seek the advice of specialists from other government agencies or from specialist consultants.
Initiative 4: Acquire tools and systems	Achieved	The ANAO has implemented new IT infrastructure as demonstrated by the acquisition of new tools and servers. As required, the ANAO will continue to assess acquiring new tools and systems that could enhance the efficiency and effectiveness of its IT audit processes and capability.

Source: Analysis of ANAO data

2.26 Since the NPP funding commenced in 2009, the IT Audit Branch has had 10 APS staff members at the Executive Level (EL) separate from the ANAO. However over this period, the IT Audit Branch has undertaken limited recruitment activity and has not recruited graduates.

2.27 The NPP envisaged an increase in APS permanent staff however the ANAO has not been able to achieve the desired level. It is predicted that with a target number of 34 resources, the IT Audit Branch would have sufficient permanent APS resources to support both outcomes of the ANAO. Current practice is to run business-as-usual at the current level of permanent APS staff and supplement peak periods with the use of contractors.

2.28 In light of this practice, the IT Audit Branch presently employs 16 APS staff and 13 contractors. The current 45:55 mix of contractors to APS staff has contributed to the IT Audit Branch being reliant on contractors to deliver outcomes and meet demand in both financial statements and performance audits as well as the demand for IT-focussed performance audits. The shortage of staff was exacerbated by the lack of recruitment activities undertaken for graduates since 2005, and the limited recruitment of experienced staff.

2.29 In the six months since the current ED of the IT Audit Branch has commenced, two recruitment rounds have been undertaken and an additional four are planned over the coming 12 months. The IT Audit Branch has commenced activity to recruit graduates with the first intake in early 2013.

2.30 It should also be noted that IT audit resources are scarce across the industry which places a greater importance on the ANAO to be proactive in its recruitment and retention strategies in order to maintain a competitive edge in the industry. Recruitment and retention are further discussed in **Chapter 3**.

2.31 The IT Audit Branch aspires to achieve an 80:20 mix of permanent APS staff to contractors.

2.32 The recently developed IT Audit Branch Operational Plan identifies the ANAO's strategies to achieve an enhanced IT audit capability, however, it does not specify the measurements and timeline to achieve these initiatives and the overall enhanced capability.

Recommendation No. 3

2.33 To allow the ANAO and the Executive team to better measure the success and the timeliness of achieving the initiatives, within the IT Audit Branch Operational Plan, and the overall enhanced IT audit capability it is recommended that the ANAO identifies in its IT Audit Branch Operational Plan the specific Key Performance Indicators and the timeframes for each initiative and strategy.

ANAO Response

2.34 Agreed. As part of the ongoing review of the IT Audit Branch Operational Plan, specific Key Performance Indicators and timeframe will be developed for each initiative and strategy.

Conclusion

2.35 The ANAO's objective to enhance its IT audit capability, as informed by the NPP, has been largely aligned with the ANAO Strategic Planning Framework and its

various plans including the PBS, the ANAO Corporate Plan, Business Plans, and the IT Audit Branch Operational Plan.

2.36 Until April 2012, the IT Audit Branch did not have a business or operational plan of its own. Also, there is limited reporting and measurement against the achievement to enhance the IT audit capability.

2.37 While the ANAO's plans are in line with the NPP to build its IT audit capability, it is behind the progress anticipated at the outset of the NPP for increasing the number of permanent APS staff.

3. Current and future planning of IT audit resource capability

This chapter describes the processes and procedures that are undertaken to understand current and future IT audit resource capability. It also describes the ANAO IT Audit Branch's recruitment, training and continuing professional development initiatives, and sourcing of additional IT audit resources through contractors.

IT Audit capability requirements

3.1 The current *capability framework* at the ANAO consists of six skills and behaviours. This capability framework is used during recruitment activities to reconcile potential candidates' competencies to ANAO's capability needs.

3.2 The skills and behaviours consist of five generic APS requirements and an additional requirement specific to the ANAO relating to the application of technical proficiencies. This information is supplemented with the individual capability, competency and behavioural indications to assess suitability of candidates.

3.3 The ANAO identifies, through the fifth element of "technical proficiency", the specific technical capabilities required, such as, technical writing, IT auditing, financial statements auditing, and performance auditing.

3.4 The ANAO acknowledges that the *capability framework* could be further enhanced by assessing whether it is contemporary and meets the ANAO's capability needs in the current and future environment. The AASG aims to develop an improved capability framework which would be available for distribution across the ANAO.

3.5 Currently, the IT Audit Branch's capability statement for the IT Audit Branch Senior Executive Service (SES) ED, which sets the specific duties and expectations of this position, only describes the responsibilities to AASG and financial statements audits with no reference to performance auditing, IT-focussed performance audits or Better Practice Guides. However, the capability statements for other positions within the IT Audit Branch specify the duties and expectations of these positions relating to both financial statements and performance auditing. It is acknowledged that the ANAO is undertaking a review of all capability statements to ensure they are up to date and meet the workforce planning and capability requirements for both the AASG and the PASG.

3.6 The *performance assessment scheme* is another tool which the ANAO uses to build capability within the APS context. The scheme aligns individual goals and career aspirations with ANAO's strategic direction to achieve an outcome beneficial to both parties.

Training and Learning and Development

3.7 The current allocation in the ANAO's budget for IT Audit relating to professional development of staff is $110,000. This equates to about $3,000 to $4,000 per permanent APS staff member.

3.8 The ANAO Learning and Development (L&D) Calendar (2012) covers ANAO's training arrangements in relation to all permanent APS staff members. It includes detail on the courses offered and the target audience.

3.9 The ANAO's training requirements in relation to the IT Audit Branch are considered to be best served through external courses due to their specialised and technical nature. This includes training provided by the Information Systems Audit and Control Association (ISACA) and other external training providers. The ANAO IT auditors also attend any financial statements mandatory training offered internally within the ANAO as well as report writing workshops run by the PASG.

3.10 In relation to graduate staff members, they are inducted through the AASG and the PASG programs and are exposed to work experience in the IT Audit Branch during a one-off three to six monthly rotation period. While graduates are subject to training sessions offered by the two ANAO groups (AASG and PASG), they are supplemented by IT audit training depending on whether a particular need has been identified.

3.11 Introductory IT audit training is offered initially as part of the induction program upon commencing employment with the ANAO, which includes training on stakeholder engagement and analytical procedures in auditing.

3.12 Further, permanent APS staff members are encouraged to undertake tertiary studies and pursue other professional qualifications as part of the ANAO's Enterprise Agreement and the newly updated Studies Assistance Policy. This new policy promotes a three-tiered level of support for further education and qualifications, including:

- Tier 1: Professional qualifications (Chartered Accountant, Certified Practising Accountant and Certified Information Systems Auditor) including external IT specialised courses.
- Tier 2: Accredited tertiary and graduate education.
- Tier 3: Broader APS relevant education.

3.13 The ANAO reimbursement of study costs varies depending on the tier the particular qualification falls within. Tier 1 qualifications are fully supported whereas Tier 2 and Tier 3 are partially supported. Staff members aspiring to EL positions are highly encouraged to pursue Tier 1 studies.

Recruitment

3.14 As noted earlier, the IT Audit Branch presently employs 16 APS staff and 13 contractors. The current 45:55 mix of contractors to APS staff has contributed to IT Audit Branch being reliant on contractors to deliver outcomes and meet demand in both financial statements and performance audits as well as the demand for IT-focussed performance audits. The shortage of staff was exacerbated by the lack of recruitment activities undertaken for graduates since 2005, and the limited recruitment of experienced staff.

3.15 In the six months since the current ED of the IT Audit Branch has commenced, two recruitment rounds have been undertaken and an additional four are planned over the coming 12 months. The IT Audit Branch has commenced activity to recruit graduates with the first intake in early 2013.

3.16 The latest recruitment round run by the ANAO yielded four recruits out of multiple responses for the IT Audit Branch with hopes that another four would be recruited in the next round.

3.17 The current IT Audit Branch ED aims to run recruitment rounds quarterly to reach the goal of adding 15 recruits to the current IT auditors' cohort in the next 18 months. This would be a result of the more aggressive advertising and networking currently undertaken to target high quality candidates.

Use of contractors for resource supplementation

3.18 The purpose of the IT Audit Branch is to manage IT audit resources across all products – that is financial statements audit and performance audits. As a result, the IT audit resourcing requirements depend heavily on the demand from both the AASG and the PASG.

3.19 In order to generate demand and raise greater awareness of IT audit capability, the IT Audit Branch has implemented an approach to establish strong engagement between the IT Audit Branch and the two service groups by creating a liaison role for IT audit. It is envisaged that increased demand generated by the role of the IT Audit liaison will be met with additional recruitment rounds as discussed earlier.

3.20 The demand from the PASG for IT audit resources is currently on an as-need basis, which is difficult to predict. In contrast, demand from the AASG is generally anticipated and planned in advance due to the structured nature of the financial statements audits.

3.21 The AASG utilises the *Benchmark Profile* to identify resourcing requirements with reference to permanent APS staff and contractors. The *Benchmark Profile* sets out

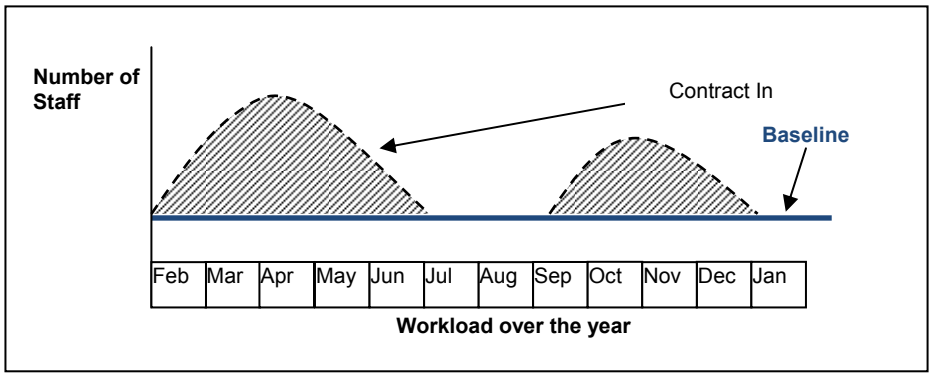
the appropriate mix of contractors and permanent APS staff and captures ANAO's aspirations of moving to an 80:20 model. The *Benchmark Profile* is a result of a baselining exercise undertaken by the AASG to focus funds on utilisation of permanent APS staff rather than contractors.

3.22 The AASG experiences two defined peaks in its workload due to the requirements of the financial statements audit cycle. Since the AASG does not resource to peaks, the gaps in resources are supplemented with contractors engaged through a current panel arrangement. This practice is commonly referred to as "contract-in" and comprises part of the budget for each audit. In contrast, "contract-out" is the practice of outsourcing the entire audit to a service provider or a contractor. The intent of this practice is that it be undertaken for financial statements audits requiring highly specialised skills. As part of the process, the AASG undertakes monthly monitoring of the gap and runs recruitment activities accordingly.

The IT Audit Branch utilises the "contract-in" approach to supplement its current permanent workforce with contractors in order to meet increased demand for IT audit work during peak periods. However, "contract-out" is not undertaken for any IT audit product or service.

3.23 The following **Diagram 3-1** is a visual representation of the Benchmark Profile:

Diagram 3-1: The AASG Benchmark Profile



Source: Data provided by the ANAO

3.24 While the Benchmark Profile does not include the IT Audit Branch resources, the IT Audit Branch uses the Benchmark to plan and ascertain the demands from the AASG for providing IT audit support for financial statements auditing.

3.25 The IT Audit Branch is building upon its internal capability through recruiting EL staff and graduates. However, given that investment in capability building would require a long time to yield its benefits, the IT Audit Branch is currently in a position where the most practical approach to deliver its products is to supplement its current workforce with additional contractors. This also applies to major IT-focussed

performance audits, where the current Full Time Equivalent (FTE) is not sufficient to meet workload demands.

3.26 It is important to note that while the ANAO has sufficient funds to supplement its workforce with contractors, this approach is not sustainable in the long term given that the cost of engaging a contractor is higher than that of a permanent APS staff member.

3.27 The IT Audit Branch's ED indicated that the use of contractors is a short term solution to the resourcing issue but in the current circumstances there are no other alternatives available due to the limited recruitment activities undertaken for experienced IT audit staff and graduates for a number of years.

3.28 It is acknowledged that the new IT Audit Branch's ED has taken a number of steps to address this issue, one of which is undertaking a number of recent recruitment activities, as noted earlier.

Knowledge Transfer

3.29 Given that the IT Audit Branch currently uses a large number of contractors who are engaged on a temporary basis, the transfer and retention of knowledge should be a key focus for the IT Audit Branch.

3.30 The transfer of knowledge from contractors to permanent APS staff is managed through permanent APS staff working with the contractors to ensure that knowledge of the audit topics and entities is being retained within the ANAO.

3.31 In addition the transfer of knowledge is focused on well-documented work papers prepared by the contractor and the audit team. The contractors also meet with the permanent APS audit manager and the ED to provide them with regular status updates and briefing in relation to the audits they are undertaking.

3.32 The processes employed by the IT Audit Branch to retain and transfer the knowledge from contractors to permanent APS staff members are effective.

International Comparison of the IT audit resourcing and capability between the ANAO and the Canadian Office of the Auditor General[19]

3.33 The following **Table 3-1** provides a high-level comparison between the ANAO and the Canadian OAG-BVG in relation to the IT audit capability and resourcing. This has been provided for elaboration purposes only as differences exist between the ANAO

[19] Bureau du vérificateur général du Canada

and the Canadian OAG-BVG. It should be noted that not all Audit Offices internationally have adopted international auditing standards in the undertaking of performance audit activities, as have the ANAO and the Canadian OAG-BVG.

3.34 At a high-level, it can be observed that both offices are aligned.

Table 3-1: High-level comparison of the IT audit capability between the ANAO and the Canadian OAG-BVG

ANAO	Canadian OAG-BVG
IT Audit Structure	
• Supports performance audits • Supports financial statements audit • One team to deliver support for different functions	• Supports performance audits and special examinations • Supports annual audits • Separate teams to support different functions
The ANAO and Canadian OAG-BVG are aligned	
Resourcing Arrangements	
• Permanent employees with a mix of backgrounds including both accounting and IT specific skills • Supplemented by contractors	• Permanent employees with a mix of backgrounds including both accounting and IT specific skills
The ANAO and Canadian OAG-BVG are aligned	
IT Audit Involvement	
• Involvement in audits is based on nature and extent of IT complexity • Integrated in financial statements audits • Involved in performance audits • Delivers IT specific performance audits and better practice guides	• Involvement in audits is based on nature and extent of IT complexity • Working towards integration in annual audits • Involved in performance audits and special examinations • Delivers IT specific performance audits
The ANAO and Canadian OAG-BVG are aligned	
Tools	
• Use data analytic tools • Use electronic working papers • Methodology aligned to the COBIT better practice methodology	• Use data analytic tools • Use electronic working papers • Methodology review is currently underway
The ANAO and Canadian OAG-BVG are aligned	

Source: www.oag-bvg.gc.ca, official website of the Office of the Auditor General of Canada / Bureau du vérificateur général du Canada (May 2012)

Conclusion

3.35 In the absence of achieving the NPP objective to increase the number of permanent APS staff members, the ANAO has adopted resource supplementation, i.e. using contractors, to ensure that the IT Audit Branch continues to support both outcomes for financial statements and performance auditing.

3.36 Prior to August 2011, the IT Audit Branch undertook limited recruitment activities to build upon its capability. However, since August 2011, the ANAO has re-focussed its efforts to increase the number of permanent APS staff members through progressing a number of recruitment activities, including graduates.

3.37 This performance audit has not identified any recommendations or suggested improvements for the training, recruitment or resource supplementation processes.

4. Engagement of IT audit resources in financial statements audits and performance audits

This chapter describes the approach and related processes around how IT audit resources are being applied in an effective and efficient manner to financial statements audits and performance audits.

4.1 IT Audit engages with both the AASG and the PASG to support the delivery of ANAO's business outcomes. It is the responsibility of the *IT Audit Branch Liaison Officer* to build the relationship and facilitate the engagement between the IT Audit Branch and the relevant PASG and AASG audit managers. This practice is aiming for the IT Audit Branch to achieve a seamless interaction and integration with financial statements and performance audits.

4.2 The AASG and the PASG use the *IT Audit Involvement Memo* to establish the requirements of IT audit in the delivery of an audit. The *IT Audit Involvement Memo* documents the planning process for the interaction between the audit team and IT audit. It includes details on the following sections:

- Scope and IT Audit Specifications and Deliverables.
- Estimated Budget.
- Timeframes.
- IT Audit work plan.

4.3 Upon examination of a sample of three financial statements audits and one performance audit, it was noted that the approach to integration with IT audit differs across the two Service Groups. This is further explained below.

IT Audit Branch involvement with the AASG

4.4 The IT Audit Branch is involved in approximately 40[20] financial statements audits to a significant extent through either providing permanent APS IT audit resources, or contracted IT audit resources.

4.5 The AASG follows a structured and consistent process in engaging IT audit on financial statements audits. As part of the interim audit, IT audit staff members are expected to assess the design and effectiveness of key IT controls, including general controls and application controls. The results of the assessment are then used to determine the impact of IT controls on the integrity of financial information presented in the financial statements.

4.6 The process, as documented in the IT Audit Involvement Memo, begins with a planning discussion held between the IT Audit Branch and the AASG audit managers which eventuates into the scoping document. Once complete, the IT Audit Involvement Memo is signed off by the relevant stakeholders. At the completion of the engagement, the IT Audit Branch provides a summary of findings to the financial statements audit team for inclusion into their testing approach.

4.7 The AASG adjusts the anticipated IT audit hours each year depending on the results of the prior year audit. The use of IT audit contractors is heavily reserved for specialised audits due to the nature and complexity of the systems involved as well as the experience of the contractor.

4.8 At the conclusion of an audit, the AASG utilises a *Completion Memo* to provide feedback and evaluation to the audit team and reflect on areas for future improvement. This process involves the IT Audit Branch team members.

4.9 It was noted that the interaction between the IT Audit Branch and the AASG, including the identification and implementation of lessons learnt in the *Completion Memo,* is a mature and well-documented process, further supported by the notional location of the IT Audit Branch within the AASG.

[20] These financial statements audits represent the material agencies and other key agencies. The number varies from one year to another depending on any changes to agencies' materiality profile or any significant changes such as Machinery of Government. In 2010-11 the IT Audit Branch was involved in 43 financial statements audits and in 2011-12 the Branch was involved in 41 financial statements audits due to Centrelink, Medicare and the Department of Human Services merging into one agency.

Analysis of a sample of selected financial statements audits

4.10 The following **Table 4-2** summarises the data for the sample of three financial statements audits selected:

Table 4-2: Analysis of a sample of selected financial statements audits

	Small financial statements audit			Medium financial statements audit			Large financial statements audit		
Year	**2011-2012**	**2010-2011**	**2009-2010**	**2011-2012**	**2010-2011**	**2009-2010**	**2011-2012**	**2010-2011**	**2009-2010**
Total Audit Hours	2,400	3,253	2,711	3,300	2,788	2,924	27,400	29,701	29,779
Percentage of IT Audit Hours	10%	6%	7%[21]	26%	29%	18%[22]	15%	13%	8%[23]
Percentage of IT Audit Contractor[24]	0%	0%	0%	76%	0%	67%	33%	44%	48%
IT Audit Involvement	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Source: Analysis of data provided by the ANAO

4.11 Examination of this sample indicates that the IT Audit Branch has been involved in financial statements audit across the spectrum. The percentage of time spent by IT audit resources is indicative of the IT audit effort, hence it is unreasonable to expect a diverse range of percentages of time spent across these audits which is reflective of a number of factors such as the size of the entity's operations, the complexity of entity's IT environment, and whether new technologies have been introduced by the entity.

IT Audit Branch involvement with the PASG

4.12 Generally, the trend in IT audit hours for performance audits has been increasing over the years since 2009. IT audit contributes to 20% of performance audits. **Table 4-1** below outlines the number of performance audits in which the IT Audit Branch has provided IT audit support over the past three years.

4.13 Performance audits are scoped on an individual basis given the specific audit topic to be examined. The current practice is for PASG to approach the IT Audit Branch once a requirement for IT audit services has been identified in the planning stage of the audit.

[21] For 2009-10 financial year information before February 2010 is unavailable.
[22] Ibid.
[23] Ibid.
[24] IT Audit Contractor component is part of the overall IT Audit hours.

4.14 The IT Audit Involvement Memo sets out PASG's requirements along with a proposed distribution of effort for each element of the performance audit. At the end of each engagement, the IT Audit Branch provides the PASG with an evaluation summary outlining the issues and preliminary analysis undertaken.

4.15 In the past, the involvement of the IT Audit Branch in performance audits was minimal, and the interactions between the IT Audit Branch and the PASG was informal and ad-hoc.

4.16 In 2011, the PASG updated its PAM to add a compulsory step through which the performance audit teams must consult with the IT Audit Branch as part of the planning of any performance audits.

4.17 The emphasis placed on the importance of the IT Audit Branch and the PASG to constantly engage together has resulted in an increase in the number of performance audits and better practice guides that the IT Audit Branch has been involved in.

4.18 The IT Audit Branch has provided IT audit support to, and also led, a number of performance audits and better practice guides, which had a specific IT focus.

Table 4-1: Number of performance audits where IT Audit Branch was engaged (2009-12)

	2009-10	2010-11	2011-12
Number of IT-focussed performance audits or IT specific Better Practice Guides	0	2	2
Number of performance audits where IT audit support was provided	10	10	15[25]
Total Performance Audits and Better Practice Guides completed	53	60	61[26]

Source: Data provided by the ANAO, April 2012

4.19 In addition to the above, it was also noted that:

- of the 219 performance audit topics included in the 2011-12 annual Audit Work Program (the Blue Book), 44 topics (20%) involve the IT Audit Branch, or predict some level of IT audit involvement if the topic is to commence.
- of the 31 performance audit reports tabled as at 1 May 2012, six performance audits (19%) involved the IT Audit Branch.
- of the 44 performance audits currently in progress, 12 performance audits (27%) involved the IT Audit Branch, some of which are scheduled for tabling in Parliament in the year 2012-13.

[25] Does not include performance audits that are scheduled for tabling in 2012-13.
[26] This is budgeted figure as per the ANAO, Portfolio Budget Statement 2011-12.

4.20 The PASG utilises the *Lessons Learnt Report* which is prepared by the audit team to identify opportunities to improve PASG's collective capability. The purpose of the Lessons Learned Summary Report is "*to bring together any lessons learned during the audit that can be usefully applied to other audits*"[27].

4.21 At the close of the audit, the audit team meets to discuss lessons learned throughout the audit in order to inform the preparation of the summary report. Issues arising from the use of analytical tools and methods are documented. The team discussions are focussed on constructive feedback, successes as well as areas for improvement.

Analysis of the selected performance audit

4.22 One IT-focussed performance audit was selected for examination to consider and assess the involvement of the IT Audit Branch. The performance audit is the *ICT Security – Management of Portable Storage Devices (December 2011).*

4.23 **Table 4-3** below summarises the results of the consideration of IT audit involvement in the performance audit, including the number of hours spent on the audit:

Table 4-3: Analysis of the selected performance audit

	Management of Portable Storage Devices (2011)
Total Audit Hours	2,547
Percentage of IT Audit Hours	49%
Percentage of IT Audit Contractor	0%
IT Audit Involvement	Yes

Source: Analysis of data provided by the ANAO

4.24 As part of the selected performance audit, one IT audit staff member was seconded to the PASG for six months where he worked alongside the PASG team members to complete the audit. As a result of the secondment, the number of hours attributed to IT audit was almost half of the total hours of the audit.

4.25 The integration between the IT Audit Branch and the PASG has improved since 2009. Further focus and effort is required to ensure a fully integrated and seamless engagement between the IT Audit Branch and the PASG is achieved.

4.26 The PASG involves and engages with the IT Audit Branch at the program level for the whole-of-Group planning of the Blue Book, and also in planning discussions for one or two PASG branches, but no all eight branches.

[27] Policy 61 of the PASG Performance Audit Manual (March 2011).

Recommendation No. 4

4.27 To further strengthen the engagement and integration between the IT Audit Branch and the PASG, it is recommended that the IT Audit Branch's ED and/or the IT Audit Liaison are involved in all PASG planning sessions and discussions at both the Group and Branch level.

ANAO Response

4.28 Agreed. The IT Audit Branch is involved in planning sessions at the Group level and in some Branch level planning sessions. This will be expanded to include the IT Audit Branch in all Branch level planning sessions.

Conclusion

4.29 The engagement and involvement between the IT Audit Branch and the AASG is mature and well documented, and is being undertaken in an effective and efficient manner.

4.30 In the *Performance Audit of the ANAO Planning and Scoping of Performance Audits by the PASG (May 2011)* a suggested improvement was made to ensure a specific step is built into the process of developing an Audit Work Plan to ensure that the PASG teams have consulted and engaged with the IT Audit Branch and that their input has been considered [28].

4.31 The engagement and involvement between the IT Audit Branch and the PASG has improved over the last three years through creating the role of the IT Audit Liaison and including a step as part of the process of developing an Audit Work Plan, however this engagement can be further strengthened through the IT Audit Branch being more involved in the planning process for the development of the Audit Work Program (the Blue Book).

[28] This was a result of a suggested improvement raised in the *Independent Performance Audit of the ANAO Planning and Scoping of Performance Audits by the PASG (May 2011), page 39.*

Appendix

Appendix 1: Detail of ANAO Plans

This Appendix provides detail in relation to the PBS, the ANAO Corporate Plan, and the ANAO Business Plan.

Portfolio Budget Statement

- The ANAO's PBS describes the ANAO's commitment to the Australian Parliament including outcomes, program deliverables and KPIs.

ANAO Corporate Plan

- The Corporate Plan sets the ANAO's business framework for a three-year period from 2010 to 2013 and includes the vision, environment, values and behaviours, and objectives and strategies in the ANAO's four KRAs.

- The four KRAs describe the strategies and objectives, of which their implementation and achievement would facilitate the ANAO meeting its outcomes.

  i. KRA1 relates to ANAO's clients, in particular ANAO's professional relationships with the Parliament and other public sector entities.

  ii. KRA2 focuses on ANAO's products and services as they relate to value adding public sector auditing and the potential users.

  iii. KRA3 intends to assist ANAO in building a professional motivated and productive workforce that sustains organisational capability.

  iv. KRA4 captures ANAO's strategic focus on effective processes, systems and management practices to achieve business outcomes.

ANAO Business Plan

- The ANAO's Business Plan sets the outcomes, program objectives and deliverables in terms of products, services and program performance indicators. It describes the specific initiatives to implement the Corporate Plan strategies under each KRA and sets out performance targets and measures of success for each initiative[29]. Also, it includes the strategic workplace planning priorities.

Groups' Business Plans

- Each of the service groups, the AASG and the PASG, has its own business plan which is derived from the ANAO's business plan and describes the specific group's actions to implement the strategies and initiatives under each of the KRAs. It also

[29] Performance against these outcomes, objectives, initiatives and KRAs is reported in the ANAO's Annual Report.

describes the specific products, services and resources required and indicators to measure the group's performance.

Appendix 2: Key ANAO documents and external references

In addition to the internal ANAO documentation reviewed, the following documents were referred to in completing this audit:

Key ANAO related documents[30]

- Australian National Audit Office, *Audit Work Program* – July 2011 and July 2010.
- Australian National Audit Office, *Performance Audit Manual* – March 2011.
- Australian National Audit Office, *Corporate Plan 2010-13*.
- Australian National Audit Office, *Business Plan 2011-12*.
- Australian National Audit Office, *Assurance Audit Services Group Business Plan 2011-12*.
- Australian National Audit Office, *Performance Audit Services Group Business Plan 2011-12*.
- Australian National Audit Office, *Annual Report 2010-11*.
- Australian National Audit Office, *Interim Phase of the Audit of Financial Statements of Major General Government Sector Agencies for the year ending 30 June 2011 (Controls report)* – June 2011
- Australian National Audit Office, *Risk Management Plan 2011-12* – February 2011.
- Australian National Audit Office, *ICT Strategic Plan 2009-12* – April 2009.
- Australian National Audit Office, *Performance Assessment Scheme 2011-14* – June 2011.
- Australian National Audit Office, *Fraud Control Plan 2010-12* – April 2011.
- Australian National Audit Office, *Fraud Control Policy 2010-12* – February 2010.
- Australian National Audit Office, *Studies and Assistance Policy & Guidelines* – April 2012.

[30] All key ANAO related documents were sourced during the fieldwork phase of this performance audit. (December 2011 to May 2012).

- Australian National Audit Office, *Learning and Development Calendar 2012* – June 2011.
- Australian National Audit Office, *Positions Duty Statements* – June 2011.
- Australian National Audit Office, *Executive Board of Management Meeting Minutes* – February 2009 to February 2012.
- Australian National Audit Office, *Organisational Chart* – November 2011
- Australian National Audit Office, *Principles and Concepts for Data Analytics* – November 2010.
- Australian National Audit Office, *Understanding Computer Systems: An Auditor's Perspective* – 2011.
- Australian National Audit Office, *Stages and Key Processes in the Lifecycle* – June 2010
- Australian National Audit Office, *Data Analytical Methodology* – June 2010
- Australian National Audit Office, *Data Analysis Quality Assurance Framework* – June 2010
- Australian National Audit Office, *NPP Implementation: Enhanced IT Audit Capability (Additional Estimates)* – February 2010
- Australian National Audit Office, *Attachment A: 2009-10 NPP - Standard Departmental Costing Template* – February 2010
- Australian National Audit Office, *IT Audit Branch Operational Plan* – April 2012
- Australian National Audit Office, *Resource Allocation Schedule* – April 2012
- Australian National Audit Office, *IT Audit Team Structure and Audit Allocation 2011-12* – November 2011.

External References

- Auditing and Assurance Standards Board, Standard on Assurance Engagements ASAE 3500 – Performance Engagements – July 2008.
- Australian National Audit Office Portfolio Budget Statements for 2009-10, 2010-11 and 2011-12 Financial Years.