

Audit Report No. 13, 1999-2000

Management of Major Equipment Acquisition Projects

Department of Defence

Introduction

- 2.1 The issue of the high-level management of major acquisition projects by Defence has been the subject of Committee concern and gave rise to the *Auditor-General's Report No. 13, 1999-2000, Management of Major Equipment Acquisition Projects, Department of Defence*.
- 2.2 The audit report aimed to 'formulate practical recommendations that would both enhance Defence's management of major acquisition projects and provide a degree of assurance about its ongoing apparent capacity to do so efficiently and effectively.'¹
- 2.3 Defence is currently implementing a new 'seamless management' concept that aims to improve the management of acquisition projects and ensure greater cohesion and integration between all Defence groups.² This new concept of 'seamless management' coupled with the Government's accrual-based budgeting and outcomes and outputs framework should significantly improve Defence's overall management of major acquisitions. A diagram of the Defence output management framework is provided at Appendix B.

1 *Audit Report No. 13, 1999-2000*, p. 14.

2 *Audit Report No. 13, 1999-2000*, p. 18.

- 2.4 Defence manages extensive resources and assets amounting to 'over 200 major acquisition projects with a total estimated cost of some \$43 billion.'³ Therefore, it is essential for Defence to demonstrate that it is managing Commonwealth funds in an efficient and effective manner.
- 2.5 This chapter outlines the findings of the ANAO report and addresses the main issues discussed at the public hearing.

ANAO findings

- 2.6 The ANAO report focused on the Defence Acquisition Organisation (DAO), and also touched on Australian Defence Headquarters (ADHQ) and Support Command Australia (SCA). These are 3 of the 12 functional groups that provide products and services to Defence's 22 identified outputs.
- 2.7 The ANAO made six recommendations in total, all of which were agreed to by Defence, some with qualifications. The main issues raised in the ANAO's report were:
- corporate governance;
 - capability management framework;
 - output budgeting;
 - financial management;
 - acquisition performance monitoring;
 - business process improvement; and
 - personnel management.
- 2.8 The ANAO concluded that the 'overall management of Defence's acquisition projects has experienced some systematic problems, and both the ANAO and the department saw scope for improving the higher level management of major projects.'⁴

3 *Audit Report No. 13, 1999-2000*, p. 31.

4 *Transcript, 16 May 2000*, p. 30.

Issues discussed at the public hearing

- 2.9 At the public hearing the Committee pursued a number of issues arising from the audit report. These included:
- output management framework;
 - financial management;
 - capability management framework; and
 - personnel management.
- 2.10 The Committee and the ANAO were concerned that the management of acquisition projects had experienced systemic problems arising from a traditional top-down management of Defence's various functional groups. Defence acknowledged at the time of the ANAO audit that there was a need to restructure the DAO.
- 2.11 At the public hearing, Defence informed the Committee that the Department had 'put together a program of acquisition reform which is now in front of the Minister.'⁵ Defence explained that its program for acquisition reform involved:
- ...just about everything that we do in the way of acquiring capital equipment from the moment we start to specify capability right through the acquisition process—including consideration of options before we get there, right through the acquisition process, management of the acquisition process, project management into the through-life support phase.⁶

Output management framework

- 2.12 The Government's new 'outcomes and outputs framework'⁷ places particular importance on measuring the cost and price of outputs and outcomes rather than merely determining and controlling financial inputs. This is particularly relevant to Defence for the management of acquisition projects. Defence spends about a quarter of its budget on capital equipment acquisitions and slightly less than that on equipment maintenance and stores.⁸

5 *Transcript, 16 May 2000*, p. 31.

6 *Transcript, 16 May 2000*, p. 31.

7 Outcomes: are the results, impacts or consequences of actions by the Commonwealth on the Australian community.

Outputs: are the goods and services produced by agencies on behalf of government for external organisations or individuals. (DoFA, *The New Framework*, <http://www.dofa.gov.au>)

8 *Audit Report No. 13, 1999-2000*, p. 70.

- 2.13 Defence has 22 Outputs and six output managers. Outputs 1-19 relate to military capabilities and Outputs 20-22 relate to international relations, defence strategy and national support tasks.⁹ In the audit report, the ANAO recommended that Defence consider the benefits of allocating capability output budgets to the relevant Output Managers, who, in turn, would fund the functional Groups through purchaser-provider agreements designed to achieve capability outputs.¹⁰
- 2.14 The ANAO emphasised that 'Output Managers responsible for capabilities may be in the best position to make such decisions.'¹¹ Some of the advantages of allocating budgets to the Output Managers would:
- enhance the functional Groups' incentive to improve the outputs framework and avoid any blurring of responsibility and accountability for Outputs;
 - improve the transparency of current and capital expenditure in producing Outputs and increase the emphasis on efficient and effective management of Outputs; and
 - accord with the Defence Executive's 'seamless management' initiative.¹²
- 2.15 At the public hearing, Defence agreed that the 'acquisition project team should be funded on a purchaser-provider basis.'¹³ However, they did not agree that output budgets should be allocated to output managers. Defence stated:
- We simply do not agree at this stage that an output manager who is in a position for two to four years can make some of the decisions that are going to be coming to roost 15 years down the track.¹⁴
- 2.16 Presently, Defence allocates budgets to each of its functional groups rather than to the 22 Defence outputs. The ANAO found that 'Output Managers do not have direct financial control over the different service providers in the capability management continuum even though they are accountable for outputs that are affected by resource decisions they do not directly influence.'¹⁵

9 *Audit Report No. 13, 1999-2000*, p. 173.

10 *Audit Report No. 13, 1999-2000*, p. 75.

11 *Audit Report No. 13, 1999-2000*, p. 72.

12 *Audit Report No. 13, 1999-2000*, p. 74.

13 *Transcript, 16 May 2000*, p. 42.

14 *Transcript, 16 May 2000*, p. 47.

15 *Audit Report No. 13, 1999-2000*, p. 70.

- 2.17 During the hearing, Defence reinforced that 'The output manager does not have the decision making ability to decide that he will spend it on armed reconnaissance helicopters rather than armoured personnel carriers. That is not a decision the output manager makes. That is made by the Defence Capability Committee and by government.'¹⁶
- 2.18 The Committee notes that since the public hearing was held, Defence has varied its position on Recommendation 1 in the audit report. Defence announced that the new Output Structure along with the new Group Structure will take effect from 1 July 2000. Defence stated that 'Under the leadership of the new Defence Secretary, Dr Hawke, there have been efforts to clarify the lines of responsibility and accountability within the Department and to simplify the Output and Group Structures.'¹⁷

Internal audit committee

- 2.19 Defence's internal audit committee, the Defence Audit and Program Evaluation Committee (DAPEC), is an important component of Defence's corporate governance framework.
- 2.20 In the audit report, the ANAO was concerned that DAPEC has not monitored or reviewed ANAO performance audit reports or JCPAA reports, despite these reports raising some matters of concern about management of major Defence acquisition projects.¹⁸
- 2.21 During the hearing the Committee expressed its disappointment in relation to this matter, and reinforced the Committee's efforts in trying to establish an open and positive rapport with Defence.
- 2.22 Defence advised the Committee that a database had been established to contain all recommendations from audit committees right across the board, over the past two years. Defence commented that recommendations that have not been followed-up would be brought to the attention of DAPEC and followed up much more rigorously.¹⁹
- 2.23 Defence informed the Committee that a new chair was appointed to DAPEC on 4 May 2000. Defence is confident that this new appointment will strengthen the committee. They commented:

16 *Transcript, 16 May 2000*, p. 43.

17 Letter from Mr Rod Corey, 4 May 2000

18 *Audit Report No. 13, 1999-2000*, p. 49.

19 *Transcript, 16 May 2000*, p. 40.

I think you will find a much firmer approach to making group managers responsible for those recommendations that they have agreed to.'²⁰

- 2.24 DAPEC has recently started reporting to the Secretary of Defence at the end of every DAPEC meeting 'on the substance of the discussions at the meeting.'²¹
- 2.25 Defence also commented that 'I would expect the audit committee to get down into the detail from time to time, but I would also expect them to be pressing me and my division heads on what is coming out of projects and out of audit reports.'²²

Committee comment

- 2.26 The Committee welcomes these new initiatives in strengthening the role of Defence's audit committee. However, the Committee is concerned that DAPEC has not demonstrated in the past a proactive approach to monitoring and reviewing ANAO and JCPAA recommendations. In view of this deficiency, the Committee makes the following recommendation:

Recommendation 1

- 2.27 **The Committee recommends that the Defence Audit and Program Evaluation Committee ensure that Australian National Audit Office and JCPAA recommendations are monitored and reviewed in a timely manner.**

Risk management

- 2.28 Defence requires a robust risk management framework in order to mitigate against adverse events occurring. Risk management plans and processes should identify and manage possible risks. Well conceived risk management strategies include setting acceptable levels of risk.
- 2.29 Defence recognises that there are high risk elements associated with developing 'state of the art' capability, that cannot be tried, tested and

20 *Transcript, 16 May 2000*, p. 40.

21 *Transcript, 16 May 2000*, p. 41.

22 *Transcript, 16 May 2000*, p. 42.

bought off the shelf.²³ Defence informed the Committee that 'We will innovate where we think that the risks are acceptable. We will make a risk judgement.'²⁴

- 2.30 There are some valuable lessons that can be learned from previous long-term acquisition projects. Defence made the following comment:

Perhaps one of the problem areas with some of our projects is that we have tended to risk manage the entire project rather than risk manage the individual components of it.²⁵

Committee comment

- 2.31 The Committee encourages Defence to take into account lessons learned from previous projects and to review current risk management strategies for major acquisition projects.

Financial management

- 2.32 Effective financial management requires good financial management information systems, processes and practices. The ANAO found that many 'Defence programs lack the quality of financial and resource management information needed for fully effective planning, budgeting, managing, reporting and evaluation.'²⁶
- 2.33 Defence has established a \$44 million financial management information system, Project ROMAN, to manage the design, development and implementation of the accrual based outcome and outputs framework. However, this system is not yet fully operational. Defence is still in a transitional stage and is operating on both a cash based budget and an accrual based budget.

23 *Transcript, 16 May 2000*, p. 32.

24 *Transcript, 16 May 2000*, p. 33.

25 *Transcript, 16 May 2000*, p. 33.

26 *Audit Report No. 13, 1999-2000*, p. 78.

Budget allocation

- 2.34 Defence's budgeting process allocates resources to each functional group. Some of these groups have complex inter-group relationships and devolve resources to other Groups. For example, in 1998-1999 the three Services provided DAO, the receiving group, with approximately 540 Service personnel to work in DAO's project teams and senior management positions.²⁷ The ANAO highlighted the following deficiency with the Defence budgeting process:
- Defence has not yet implemented policies and procedures, which allow the full attribution of inter-group costs to the extent that may be expected within a fully implemented outputs management framework.²⁸
- 2.35 As a result, the true cost of each Defence output cannot easily be calculated. This creates difficulties in 'evaluating the efficiency of outputs and examining the accuracy of Defence's budget program.'²⁹
- 2.36 Defence informed the Committee that they are still in a transitional stage from cash to accrual budgeting and are therefore funded through two appropriations. The first one 'is the basic cost of outputs' and the second is 'an equity injection'.³⁰
- 2.37 Defence discussed some of the difficulties it has faced with the new accrual budgeting framework. In terms of accumulated depreciation on major acquisitions, Defence stated '...we have not got the backlog of depreciation expenses going back in time, so it is very hard to suddenly find the money. So, in a sense, ...we are really relying on Finance as the banker'.³¹
- 2.38 Defence also commented that 'there is fairly clearly established evidence that the cost of military equipment rises in real terms, sometimes by many per cent real per annum, so that the depreciation will never be enough to cover the cost.'³²

27 *Audit Report No. 13, 1999-2000*, p. 81.

28 *Audit Report No. 13, 1999-2000*, p. 82.

29 *Audit Report No. 13, 1999-2000*, p. 85.

30 *Transcript, 16 May 2000*, p. 45.

31 *Transcript, 16 May 2000*, p. 46.

32 *Transcript, 16 May 2000*, p. 46.

- 2.39 In terms of equity injections, Defence commented that an 'equity injection, which is put into capital, is simply a balancing line; it brings the budget up to zero per cent.'³³ Defence would like more flexibility on equity injections in order to address the peaks and troughs that are present in the Defence budget.

Budget carryover

- 2.40 The ANAO reported that 'Defence is allowed an annual budget carryover of \$150 million.'³⁴ However, the report also noted that this amount may be exceeded for major capital projects if the carryover was raised in the budget process and agreed to by the Expenditure Review Committee.³⁵
- 2.41 In the past, cash-based budgets have only allowed limited roll over provisions and have resulted in pressures to spend the annual budget allocation. However, during the public hearing Defence commented that 'with accrual accounting, there is essentially no limit now to the cash we can carry over.'³⁶
- 2.42 The ANAO found that it was not in the Commonwealth's interest to have a limited roll over provision, as it was creating budgetary and contractual inefficiencies.³⁷ In some cases, Defence was paying for a substantial proportion of the project in advance in order to spend the annual budget allocation. Payments in advance were not commensurate with earned value and often led to inefficiencies.

Committee comment

- 2.43 The Committee strongly supports Recommendation 2 made by the ANAO in relation to capital equipment acquisition budget carryovers. The Committee agrees that Defence should:

... seek Ministerial approval, in consultation with the Department of Finance and Administration, for annual capital equipment acquisition budget carryovers at levels commensurate with sensible re-programming of capital equipment acquisition activities and Commonwealth budget imperatives...³⁸

33 *Transcript, 16 May 2000*, p. 45.

34 *Audit Report No. 13, 1999-2000*, pp. 86-87.

35 *Audit Report No. 13, 1999-2000*, p. 87.

36 *Transcript, 16 May 2000*, p. 44.

37 *Audit Report No. 13, 1999-2000*, p. 86.

38 *Audit Report No. 13, 1999-2000*, p. 88.

- 2.44 The Committee notes that this would assist in the efficiency of project management by linking progress payments to earned value on projects and provide an appropriate carryover between major capital equipment budgets.

Capability management framework

- 2.45 The Committee was particularly interested to hear about improvements made to capability management in light of the Committee's reviews of Defence's Jindalee Operational Radar Network (JORN) project and the Collins Class submarine project. Previous reviews emphasised that the problems of Collins go back to the specification of capability.
- 2.46 Defence acknowledged that there was a problem with its capability management framework:
- ...we need to become more functional in our specifications and to get away from highly detailed technical specifications that get down to the exact model of the computer... (we want to) start to specify more what it is we want in outcomes.³⁹
- 2.47 During the public hearing, Defence made the following comment:
- I have found with projects that are in trouble is that capability was not tightly enough defined at the time we went into the proposal. It is this whole process of changing capability after you get into the proposal that really causes you some trouble.⁴⁰
- 2.48 Defence currently has a Defence Capability Committee (DCC), chaired by the Vice-Chief of the Defence Force, who takes responsibility for capability development. However, Defence is proposing to 'open up that process to government rather earlier and go to them before we know what the answer is but when we think we have an idea of what the options are.'⁴¹
- 2.49 During the public hearing, the Committee raised the issue of improved capability for wartime preparedness. Defence told the Committee that at the acquisition stage, it identified industry objectives, particularly around establishing an effective wartime acquisition support. Defence also commented that across Australia there is an infrastructure of industry which provides support in wartime.⁴² When pressed for details about the

39 *Transcript, 16 May 2000*, p. 32.

40 *Transcript, 16 May 2000*, p. 35.

41 *Transcript, 16 May 2000*, p. 36.

42 *Transcript, 16 May 2000*, p. 37.

servicing requirement processes, Defence commented that 'this is an area where we can and should do this better'.⁴³

Through-life support

2.50 Through-life support is an important consideration for Defence's capability management. Defence informed the Committee that it has made some recommendations to its Minister about acquisition reform in terms of defining the capability process. One of the main recommendations aims to 'involve acquisition staff and logistics and support command staff in the capability definition process'.⁴⁴

2.51 Defence informed the Committee that 'typically in the support phase the overwhelming amount of expenditure—and that might be 80 per cent plus—would be spent in Australia'.⁴⁵

2.52 Defence discussed the benefits of using private finance initiatives (PFI) as a mechanism for controlling through-life costs. In summary, the use of PFIs places responsibility on:

...the supplier to provide a significant proportion of through-life support. ...then you are asking the supplier to start taking some of the decisions up-front that they should have taken in the first place to reduce your costs downstream.⁴⁶

Committee comment

2.53 The Committee supports the proposed new capability process. In addition, the Committee believes that Australian industry should be used, where appropriate, for through-life support.

Personnel management

2.54 Personnel management is a vital component of management reforms. The ANAO stated that 'an organisation can perform well if it recruits, retains and motivates appropriately-skilled personnel who act effectively and are held accountable for the results'.⁴⁷

43 *Transcript, 16 May 2000*, p. 37.

44 *Transcript, 16 May 2000*, p. 35.

45 *Transcript, 16 May 2000*, p. 37.

46 *Transcript, 16 May 2000*, p. 36.

47 *Audit Report No. 13, 1999-2000*, p. 137.

- 2.55 Defence requires skilled and experienced personnel, particularly in the areas of DAO and SCA. This has proven to be a difficult area for Defence due to the rotational system for military personnel as well as a difficulty in attracting civilian staff to vacant positions.
- 2.56 Previous audits and external reviews 'have drawn attention to high staff turnover leading to a loss of skills and experience.'⁴⁸

Staff turnover

- 2.57 High staff turnover in Defence has been of particular concern to the Committee since it was highlighted as an obvious inefficiency of Defence's project management in previous reviews.
- 2.58 The ANAO noted in its report that:
- Defence does not seem to have been very successful attracting or producing sufficient numbers of appropriately trained and experienced project management personnel; developing appropriate project management career structures; or achieving the military-civilian mix recommended by the DER [Defence Efficiency Review].⁴⁹
- 2.59 The ANAO also noted that military staff are more expensive than equivalent civilian staff, because they stay for shorter periods and are less expert in pure acquisition aspects.⁵⁰
- 2.60 At the public hearing, Defence commented on the rate of military and civilian personnel turnover. It stated that, contrary to popular belief, '...it actually happens at the lower levels that the civilians turn over faster in between projects.'⁵¹
- 2.61 As part of the *DAO-People-Strategic Plan 1998-2000*, Defence informed the Committee of its strategic plan to retain people with the skills and expertise that is required for DAO. Defence explained:
- On the civilian side we are doing two things. One is that we are right now exploring a broad banded structure for the Defence Acquisition Organisation which will ... provide a career stream in acquisition.⁵²

48 *Audit Report No. 13, 1999-2000*, p. 137.

49 *Audit Report No. 13, 1999-2000*, pp. 150-151.

50 *Audit Report No. 13, 1999-2000*, p. 145.

51 *Transcript, 16 May 2000*, p. 38.

52 *Transcript, 16 May 2000*, p. 38.

- 2.62 Defence hopes that with the broad banding structure 'the incentive for job hopping between projects will be reduced and that progress through the bands will instead be competency and performance based.'⁵³
- 2.63 In terms of retaining the expertise of people at higher levels, Defence intends to use 'workplace agreements with senior and key project people to lock them into a project for a particular time with a payment that is related to their retention for the key stages of the project.'⁵⁴
- 2.64 Defence acknowledges that it will never be practical to keep the same project managers for a period of 15 years, however they do not want to be sending out key project managers just before a critical stage in a project. Defence commented that:
- All three service chiefs have agreed that they will try to synchronise postings into the DAO in accordance with those agreed times. Where they cannot provide a project manager or a key project person that will be there for a significant time, I will look at replacing them with a civilian.⁵⁵

Staff training

- 2.65 Staff training is an important aspect of personnel management. As a result of the *DAO-People-Strategic Plan 1998-2000*, several initiatives are underway to address deficiencies in the DAO's personnel management strategy. However, the ANAO stressed that 'there is much to be done to address DAO's personnel needs.'⁵⁶
- 2.66 Military staff who are posted to DAO usually have a limited amount of knowledge and training in project management. Defence has developed a mandatory procurement and project management training program for all of its project directors.
- 2.67 Defence commented that it is 'also looking within the services to the development of a specialised stream. Certainly Army is heading down this path. Army puts a fair bit of effort into the training of the people who come into the DAO.'⁵⁷

53 *Transcript, 16 May 2000*, p. 38.

54 *Transcript, 16 May 2000*, p. 39.

55 *Transcript, 16 May 2000*, p. 39.

56 *Audit Report No. 13, 1999-2000*, p. 148.

57 *Transcript, 16 May 2000*, p. 39.

Committee comment

- 2.68 The Committee urges Defence to continue to provide well structured career development in order to retain qualified and experienced staff. It is in the interest of DAO and other groups involved in major Defence acquisition to have proficient project management teams in order to achieve capability outputs in the most efficient and effective way.

Recommendation 2

- 2.69 **The Committee recommends that the Australian National Audit Office consider carrying out a follow-up audit, in the next eighteen months to two years, on the management of major Defence acquisition projects.**