

The Auditor-General
Audit Report No.24 2001–2002
Performance Audit

Status Reporting of Major Defence Acquisition Projects

Department of Defence

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Canberra ACT
10 December 2001

Dear Madam President
Dear Mr Speaker

The Australian National Audit Office has undertaken a performance audit in the Department of Defence in accordance with the authority contained in the *Auditor-General Act 1997*. I present this report of this audit, and the accompanying brochure, to the Parliament. The report is titled *Status Reporting of Major Defence Acquisition Projects*.

Following its tabling in Parliament, the report will be placed on the Australian National Audit Office's Homepage—
<http://www.anao.gov.au>.

Yours sincerely



P. J. Barrett
Auditor-General

The Honourable the President of the Senate
The Honourable the Speaker of the House of Representatives
Parliament House
Canberra ACT

AUDITING FOR AUSTRALIA

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Abbreviations

ADF	Australian Defence Force
ANAO	Australian National Audit Office
DAO	Defence Acquisition Organisation
DMO	Defence Materiel Organisation
KPI	Key Performance Indicator
JORN	Jindalee Operational Radar Network
MAB	Management Audit Branch
PROMIS	Project Reporting and Monitoring System

Summary

Summary

Background

1. Major capital equipment contributes importantly to the capabilities of the Australian Defence Force (ADF) to achieve the Defence mission, that is, the defence of Australia and its national interests. The Defence Materiel Organisation (DMO) is the relatively new Defence organisation responsible for the acquisition and through-life support of Defence equipment and systems. DMO's stated purpose is to equip and sustain the ADF. In 2001–02, it will spend \$2.9 billion on progressing some 270 major capital equipment acquisition projects.
2. DMO was created from the amalgamation of the Defence Acquisition Organisation, Support Command Australia and part of National Support in Defence's organisational structure that took effect from 1 July 2000. The amalgamation was to facilitate major reforms to improve the timeliness, cost performance and quality of Defence's major capital acquisitions and support and their through-life management. Given the extent and nature of DMO's activities, reform of these operations involves significant activity in many areas of the acquisition and support process. Holistically, the reforms should lead to substantial improvements in project management.
3. Project management is the means by which a project is planned, organised, directed and controlled. It involves the use of a range of methods and techniques tailored for the individual circumstances of a specific project. Defence's ability to manage major acquisition projects to meet military capability requirements on time and within budget has been the focus of ANAO and Joint Committee of Public Accounts and Audit consideration for some time. The ANAO therefore scheduled a performance audit to assess the status of major acquisition projects, and the validity of project status reports provided to Government.
4. The preliminary study for the audit focused on DMO reporting on the status of major equipment acquisition projects. This significant area was identified in earlier ANAO reports as in need of improvement and is important from a governance perspective in providing management with an early warning of problem areas. The study concluded that there was sufficient basis to proceed to a performance audit.

5. DMO was concerned, however, to be able to progress its reform agenda, including reporting initiatives, prior to the performance audit being conducted. On the basis of information provided by DMO about its reform agenda, the ANAO agreed with DMO's request to postpone the audit for 12–18 months to enable the reforms to be implemented. The reforms include a pilot project to test a new reporting system.

6. The ANAO will monitor the progress of the reforms and consider scheduling a performance audit of the status of major Defence capital equipment acquisition projects at a more appropriate time. A full audit would include in-depth examination of the status of a sample of the larger acquisition projects in order to verify the accuracy and completeness of Defence's project status reporting.

7. This interim report is based on findings from the preliminary study and information provided by DMO. The report provides information on some of the issues facing DMO with regard to the status reporting of major acquisition projects, and indicates how DMO is seeking to address these issues in the context of its wider reform agenda.

Conclusion

8. DMO is implementing a comprehensive reform program to enhance its capability to deliver materiel systems to Defence on time and within budget and to provide associated through-life support. The DMO Reform Plan is wide-ranging and covers organisational and structural change; people reforms; and materiel reform and process change. In implementing its Reform Plan, DMO is also addressing issues raised in the past about Defence's management of major capital equipment acquisition projects.

9. Periodic and accurate reporting of project status in terms of time, cost and quality is an important element of good project management. At present, DMO project status reports do not always indicate whether major capital equipment acquisition projects are meeting agreed timeliness, cost performance or quality criteria, or report against key performance indicators.

10. As part of its reform agenda, DMO will commence a project to test a new system for reporting project progress on cost and schedule performance, and against a properly integrated schedule and project work breakdown structure. The pilot project is to be tested on three major capital equipment projects in the Electronic Systems Division. If successful, it will be rolled out across that Division, and can be considered for introduction across DMO.

11. A sound project reporting system would assist in assessing DMO's progress in implementing its broader reform objectives. It would also assist in managing the very significant risks in major capital equipment acquisition projects.

Key Findings

DMO Reform (Chapter 2)

12. As a relatively new organisation, DMO is seeking to reform the process of acquiring and supporting major equipment for the ADF. The DMO Reform Plan comprises three parts: organisational and structural change; people reforms; and materiel reform and process change.

13. As part of the reform agenda, a project to improve the status reporting of projects is being undertaken in the Electronic Systems Division. A reporting methodology similar to the applied earned value method and a new management information system are to be tested.

14. Improving risk management, particularly emphasising increased investment in risk reduction prior to committing to acquisitions, is one of the acquisition reform initiatives to be pursued in 2001–02. It is an important reform initiative as a Defence risk analysis indicates that the risk of failure of major capital equipment acquisition projects is very high, and will continue to be so for several years.

Management Information Systems (Chapter 3)

15. PROMIS (Project Reporting and Monitoring System), the management information system used in DMO, has the potential to provide a useful framework for project status reporting. However, the full functionality of the system is not being realised as only financial data can be entered directly. Project schedule (time) data must be entered manually but its entry is not consistent. A quality module to record information on the quality of a project has not yet been fully developed.

16. The DMO recognises that there are opportunities to rationalise its various management information systems. It is developing a Business Information System Architecture to provide a common framework and promote better integration, consistency and evolution of the information environment.

17. Under DMO's new reporting procedures, Branch Heads and Division Heads will provide certification sign-offs on major reports to management and other stakeholders. The new procedures will assist in improving the consistency of reported data. Reports to those outside the DMO are to be coordinated through a newly-established Executive Support Unit.

Quantity of Reporting (Chapter 4)

18. Individual project teams in DMO are required to produce a large quantity of project status reports. Overlap between the range of reports being produced is an issue that DMO is addressing. Data on costs associated with the preparation of reports by DMO project teams cannot presently be captured. However, as part of the acquisition reform initiatives for 2001–02, an activity-based costing model is to be implemented in DMO.

19. Quantifying the levels of resource usage and estimating the indicative costs and production time associated with the production of project status reports would indicate to DMO the extent to which resources are being directed to the reporting process. With such information, DMO would have a basis on which to make decisions with respect to the rationalisation of its reporting processes to ease pressure on project managers and facilitate more consistent and efficient status reporting.

Completeness of Reporting (Chapter 5)

20. DMO project status reports do not always indicate whether projects are meeting agreed timeliness, cost and quality, or report against key performance indicators. Some DMO project status reports indicate the overall status of individual projects but many generally take the form of point-in-time reporting without reporting trends and comparisons over time. Notably, DMO reports produced for the Defence Committee now include an indication of the overall project status and an indication of the trend of this status.

21. Key Performance Indicators (KPIs) can be used to provide information on the progress of a project in terms of meeting its targets. DMO has put considerable effort into developing a comprehensive set of KPIs that are linked to DMO's objectives, and ultimately to its organisational goals.

22. Information on major capital equipment acquisition projects in reports external to DMO, such as the Defence Annual Report, does not always indicate what phase of a project is being reported and where this fits into the whole project. The absence of published information on variations to projects is an issue that Defence has accepted as being a valid criticism by the Senate Foreign Affairs, Defence and Trade Legislation Committee.

Audit Findings and Conclusions

1. Introduction

This chapter discusses the Defence Materiel Organisation and sets out the objectives, scope and focus of the preliminary study.

Background

1.1 The Defence¹ mission is the defence of Australia and its national interests. Major capital equipment contributes to the capabilities of the Australian Defence Force (ADF) to achieve the mission.

1.2 Status reporting on the progress of major capital equipment acquisition projects in meeting schedule, cost and quality targets allows a project's progress or performance to be assessed, informs the decision-making process and enhances managerial accountability of the acquisition of major capital equipment.

1.3 Defence's management of major capital equipment acquisition projects to meet military capability requirements on time and within budget has been the subject of reports by the ANAO, the Joint Committee of Public Accounts and Audit (JCPAA) and others since 1983. Those reports raised issues concerning project progress reporting which are summarised at Appendix 1.

Defence Materiel Organisation

1.4 The Defence Materiel Organisation (DMO) in Defence is responsible for the acquisition and through-life support of equipment and systems used by the ADF. In 2001-02 the DMO will spend \$2.9 billion on progressing some 270 major capital equipment acquisition projects.² Thus DMO is a very significant organisation in its own right and its task of effectively managing and coordinating such a large number of major capital acquisition projects is a major challenge.

1.5 DMO was created from the amalgamation of the Defence Acquisition Organisation (DAO), Support Command Australia, and part of National Support Division in Defence's organisational structure that took effect from 1 July 2000. DMO's stated purpose is to *'equip and sustain Australia's Defence Force.'*

¹ 'Defence' comprises the Department of Defence and the Australian Defence Force (ADF), which in turn comprises the three Services: Navy, Army and Air Force.

² Roche, M., 2001, 'Acquiring a National Defence Capability for the 21st Century' at Defence + Industry Conference, 26 June 2001, p. 3.

1.6 The rationale behind the amalgamation was to facilitate major reforms that would improve the timeliness, cost performance and quality of Defence's major capital acquisitions and their through-life management.³ The then Minister for Defence welcomed the amalgamation and said that the Government had been very concerned at the inadequate level of management and accountability associated with many major Defence projects.⁴

1.7 In an address in November 2000 the then Minister said that, in addition to implementing the Government's Defence White Paper, Defence must meet the challenges in four significant areas: financial management; systems; personnel; and DMO. In respect of the fourth, he said:

The fourth and final point, I think, for major headlines in 2001, of course is the Defence Materiel Organisation. That is, the merged Defence Acquisition Organisation and Support Command. The reasoning behind this was that when I looked at the two operations there were clearly significant deficiencies. We've all known in the past what a shambles part of the acquisition operation has been. I don't think we need to go into detail. But clearly within acquisition we needed to settle the question of responsibility and accountability, more probably than any other part.

*People who are head of these departments, head of these sections, must accept responsibility for their actions in the future. To say committee movements wasn't my problem, somebody else's problem, will not do. That's how millions are wasted. And the public doesn't like it. The taxpayers don't deserve it. And, in the future, future funding will be very much measured by performance in these areas. And as some 40 per cent of the Defence budget goes into this area—in round figures—it's something we need to pay a lot of attention to.*⁵

³ Department of Defence, 2000, *Good Governance to Underpin Defence Renewal*, Department of Defence Media Release PACC146/00, [26 June 2000], [Online], Available: <http://www.defence.gov.au/media/2000/14600.htm>, [18 September 2001].

⁴ Moore, Hon. J. [Minister for Defence], 2000, *Defence Management Reform*, Media Release MIN 144/00, [26 June 2000], [Online], Available: <http://www.minister.defence.gov.au/Mooretpl.cfm?CurrentId=208>, [18 September 2001].

⁵ Moore, Hon. J. [Minister for Defence], 2000, 'Address to the Royal United Services Institute of Australia Triennial International Seminar' in *Journal of Royal United Services Institute of Australia*, Vol. 22, December 2000, pp. 10–12.

DMO reforms

1.8 To achieve the objectives underpinning its formation, DMO is seeking to reform the acquisition process and improve operations through the DMO Reform Plan. The Plan is divided into the following parts:

- organisational and structural change;
- people reforms; and
- materiel reform and process change.

1.9 The reforms aim ‘... *to shorten acquisition times, provide better whole-of-life costing for equipment, reduce transaction costs with industry and provide the government with greater transparency and oversight of the acquisition process*’.⁶ The reforms are discussed in Chapter 2 of this report.

1.10 Successful implementation of this reform agenda is important as there are significant gains to be made in terms of more cost effective and timely delivery of equipment to the ADF.

The audit

1.11 Defence’s ability to manage major acquisition projects to meet military capability requirements on time and within budget has been the focus of ANAO and JCPAA consideration for some time. The ANAO therefore scheduled a performance audit to assess the status of major acquisition projects, and the validity of project status reports provided to Government. The preliminary study for the audit focused on DMO’s project status reporting on major equipment acquisition projects. This area has been identified in ANAO reports and other external reviews as needing improvement (see Appendix 1) and is important from a governance perspective in providing management with an early warning of problem areas. The preliminary study concluded that there was sufficient basis to proceed to a performance audit.

1.12 DMO indicated to the ANAO that it fully supported the proposed audit but was concerned to be able to progress its reform agenda, including reporting initiatives, prior to the performance audit being conducted. DMO requested that the audit be postponed for 12–18 months to enable the DMO Reform Plan and a number of other related initiatives to be implemented.

⁶ Department of Defence, 2000, *Defence Annual Report 1999–2000*, Canberra, p. 85.

1.13 After reviewing DMO information supplied in support of the request, the ANAO agreed to postpone the audit. This would also allow the ANAO to review the new DMO business model at an early stage after implementation to identify any potential risks or gaps. The ANAO will monitor the situation in the coming year, and will consider scheduling a performance audit of the status of major Defence capital equipment acquisition projects at a more appropriate time. A full audit would include in-depth examination of the status of a sample of the larger acquisition projects in order to verify the accuracy and completeness of Defence's project status reporting.

1.14 This interim report is based on findings from the preliminary study and information provided by DMO about its reform agenda. The proposed report was provided to Defence in October 2001 for comment. The preliminary study was conducted in conformance with ANAO auditing standards and cost \$142 000.

Report structure

1.15 The remainder of this report sets out the ANAO's findings from the preliminary study. It is divided into four chapters, as follows:

- Chapter 2 — DMO Reform Plan;
- Chapter 3 — Management Information Systems;
- Chapter 4 — Quantity of Reporting; and
- Chapter 5 — Completeness of Reporting.

2. DMO Reform Plan

This chapter provides an overview of current reforms in the Defence Materiel Organisation and indicates reform projects which may lead to changes in the reporting of major capital equipment acquisition projects. Defence's internal risk assessment of major capital equipment acquisition projects is also discussed.

Overview of DMO Reform Plan

2.1 DMO is in the process of implementing a comprehensive reform program to enhance its capability to deliver equipment to the ADF on time and budget and to provide associated through-life support. The DMO Reform Plan is divided into three parts:

- **organisational and structural change**—transforming three separate organisations - Defence Acquisition Organisation (DAO), and part of Support Command Australia, and National Support Division - into an integrated organisation with a common culture, with personnel from Canberra collocated with their capital equipment projects in regional centres around Australia;
- **people reforms**—introducing workforce planning and strategic people development; and
- **materiel reform and process change**—providing products and services fit for purpose, on time and within budget by means of standardised business processes and information technology systems across the organisation.

2.2 In implementing its Reform Plan, DMO is addressing past issues that have been raised about the management of major capital equipment acquisition projects. Initiatives are also being adopted alongside those discussed in this chapter.

Organisational and structural change

2.3 The purpose of part one of the DMO Reform Plan is to *'integrate the acquisition and support elements of our business and locate them appropriately with our customers'*.⁷ In the twelve months from December 2000, DMO is undertaking the organisational changes necessary in moving from three separate organisations with different structures, cultures and purposes to a single integrated organisation with a common culture.

⁷ DMO Reform Plan Part 1—Organisational and Structural Change.

2.4 The organisational restructure saw the establishment of the following Divisions in DMO to manage acquisition and through-life support of equipment:

- Aerospace Systems Division;
- Airborne Early Warning and Control Division;
- Electronic Systems Division;
- Land Systems Division; and
- Maritime Systems Division.

The Head of each Division is responsible to the Under Secretary Defence Materiel⁸ for their overall performance, and responsive to the Service Chiefs and the Vice Chief of the Defence Force in delivering support.

2.5 Each Division has responsibility to:

- coordinate and manage the acquisition and introduction into service of new or upgraded capital equipment;
- coordinate and manage financial and other resources required for capital equipment;
- assist project sponsors with requirement definition and administration of project approval;
- prepare specifications and evaluate suitable equipment;
- evaluate tenders and execute contracts;
- manage all aspects of equipment acquisition and support; and
- provide timely advice to the Services to integrate new equipment into use.

2.6 Collocation of DMO personnel with their capital equipment acquisition project is an important element of this part of the reform plan and has been extended beyond its initial 12-month timeframe. The collocation entails relocating civilian and military positions from Canberra with their capital equipment projects in regional centres around Australia. Some 700 such relocations were programmed to occur during 2001–02.⁹ DMO subsequently advised that it now envisages relocations will number around 500. Most will be from Canberra to Perth, Amberley, Darwin, Adelaide, Nowra and Williamstown.¹⁰

⁸ As the Head of DMO, the Under Secretary Defence Materiel reports to the Secretary of the Department of Defence for the performance of the DMO.

⁹ Department of Defence, 2001, *Portfolio Budget Statements 2001–02, Defence Portfolio (Department of Defence and the Defence Housing Authority)*, Budget Related Paper Nos. 1.4A and 1.4C, Canberra, p. 101.

¹⁰ *ibid.*

People reforms

2.7 Part two of the DMO Reform plan aims to ‘*create the climate where people are valued and can do their best*’.¹¹ The plan will be implemented during 2001–02 and seeks to create the tools, infrastructure and systems to manage the DMO workforce by:

- establishing materiel career streams;
- introducing workforce planning;
- developing a strategic approach to education and people development; and
- providing value-added human resource support to Divisions.¹²

Materiel reform and process change

2.8 Part three of the DMO reform process concerns detailed policy, procedures, reporting, governance and business practices under which DMO will operate. Initiatives to be undertaken in this part of the reform process are designed to reform DMO’s processes on the basis of commercial approaches and best practice and adopt a more strategic approach to DMO’s relationships with Industry.¹³

2.9 As previously indicated, a number of the initiatives being undertaken as part of the DMO reform process focus on materiel reform to provide products and services fit for purpose, on time and within budget. These initiatives are to:

- institute a performance evaluation and reporting system at DMO and Divisional levels;
- establish a DMO Corporate Governance Framework;
- establish Project Governance Boards;¹⁴
- further develop strategic management of Defence contracting;
- improve tendering and contracting procedures;

¹¹ DMO Reform Plan Part 2—People Reforms, p. 1.

¹² *ibid.*, p. 2.

¹³ DMO Reform Plan Part 3—Materiel Reform and Process Change, p. 2.

¹⁴ Project Governance Boards will be intended to provide:

- early warning of potentially serious issues to the Under Secretary Defence Materiel and Division Heads;
- advice to the project managers on how to improve their performance and recommendations on how to overcome their more challenging issues; and
- assurance that project offices are going to achieve their objectives and are following appropriate processes and policies.

- reform software acquisition and systems engineering;
- implement an improved risk management framework;
- standardise business processes and IT systems as appropriate; and
- further develop Company Scorecards.

Reforms relevant to project reporting

2.10 Some initiatives being undertaken as part of the DMO reform agenda are intended to lead to changes in the reporting of major defence acquisition projects within DMO. A sound project reporting system will assist in assessing DMO's progress in implementing its broader reform objectives. It will also assist in giving management early warning of potential problem areas. An overview of these initiatives is provided in the following paragraphs.

Electronic Systems Division reporting project

2.11 A reporting project is being piloted in the Electronic Systems Division to improve the scheduling and status reporting of projects. The objective of the project is to change workplace practice in the Division from:

...one where proper project scheduling, maintenance of a costed project work breakdown structure and proper project reporting are virtually non-existent, to one where ...cost and schedule performance to date, current status and forecast to completion are reported monthly against a properly integrated schedule and project work breakdown structure; and reporting facilitates easy review by management.¹⁵

2.12 This pilot project is to be tested on three major capital equipment projects in the Electronic Systems Division and, if successful, will be rolled out across the division. The initial indications are that this will take approximately three years and cost in the order of \$2.5 million. The project may also be considered for DMO-wide use as a replacement for the PROMIS system (discussed in Chapter 3). The project management methodology used in the pilot to report project performance is similar to the earned value method.

¹⁵ Briefing Paper—For the DMO Executive: Improve Project Scheduling and Status Reporting, [provided to the ANAO by DMO on 19 July 2001], p. 2.

Project management methodology

2.13 The Project Management Methodology (PMM) to be employed in DMO projects is a tailored application of the PRINCE 2 (PROjects IN Controlled Environments) structured method for project management. PRINCE 2 was piloted during 1998 and was seen to have potential to improve acquisition project outcomes and provide some of the basic information required under the accrual-based outputs and outcomes framework. It is now the default PMM for all newly approved major capital equipment acquisition projects. As part of the reform process, work is being undertaken to identify the gap between what the project management methodology provides and what DMO requires to enable it to manage major capital equipment acquisition projects.

2.14 A DMO issues paper has noted that ‘... *the implementation of the PMM in DMO resulted in another layer of process and reporting requirements that had varying degrees of overlap and conflict with the existing arrangements*’.¹⁶ Although some reporting from DMO project offices ‘... *is working well and is well used, other reports are repetitive and/or ignored*’.¹⁷

2.15 Consideration is thus being given to DMO’s need for a standard acquisition management system to cover all aspects of managing major capital equipment acquisition projects, based on an augmentation of the existing PMM. A standard acquisition management system, together with the establishment of Project Governance Boards, is seen by DMO as being ideal for ‘... *making project reporting efficient and effective for all involved*’.¹⁸

Standardisation of business processes

2.16 The standardisation of business processes, one of the initiatives being conducted under Part 3 of the DMO Reform Plan (see paragraph 2.9), arises from the need to review and revise policies, procedures and processes across DMO to ensure their common application across the organisation and consistency with DMO’s new business environment. Of the key processes to be documented, DMO has designated performance reporting to Defence and Government as an area of high priority, with the documentation and dissemination of current best practice to be completed by the end of December 2001.¹⁹

¹⁶ Issues Paper—For the DMO Executive: Project Management Methodology—The Next Step, [provided to the ANAO by DMO on 19 July 2001], p. 1.

¹⁷ Project Governance Boards—Brief for ANAO, p. 2.

¹⁸ *ibid.*, p. 2.

¹⁹ DMO Reform Plan Part 3—Materiel Reform and Process Change, Annex C, p. 1.

Risk assessment of major projects

2.17 Risk assessment is a necessary step towards risk management. The ANAO recommended in 1995 that Defence's Management Audit Branch (MAB) develop a medium-term audit strategy for the Defence Audit Committee's consideration.²⁰ MAB has done this each year since 1999. The latest strategy indicates that the risk of failure of DMO's major capital equipment acquisition projects is very high, and that the risk will continue for several years. Relevant parts of MAB's medium-term audit strategies are summarised as follows:

- The 1999 strategy rated the DAO's major capital equipment acquisition projects from low to high risk, and rated their materiality (\$ impact) and overall importance as very high.²¹
- The 2000 strategy rated DAO's major capital equipment acquisition projects from low to high risk.²²
- The 2001 strategy, developed with assistance from a consulting firm for the period 2001–04, rated the likelihood of failure of major capital equipment acquisition projects, inadequate contract management, and ineffective IT systems (not delivered, not integrated), as very high for the next three years, and rated the consequences of those risks occurring as very high.²³ Defence informed the ANAO that this is primarily due to organisational changes within the DMO and the relocation of business away from Canberra and that the risks would continue until the new DMO organisation and business processes are bedded down.

2.18 MAB's risk assessment for 2001 was undertaken after DMO was formed. An effective reporting system in DMO will be an important element in ensuring that projects are successfully delivered. MAB's risk assessment underlines the need for accurate and complete project status reporting. Early identification of potential problems in project delivery would facilitate informed decision-making and effective remedial action.

²⁰ ANAO, 1995, *Department of Defence—Management Audit*, Audit Report No.11 1995–96, Canberra, Recommendation No.10.

See also: ANAO, 2000, *Management Audit Branch—Follow-up*, Audit Report No.50 1999–2000, Canberra.

²¹ Defence Audit and Program Evaluation Committee (DAPEC) Agendum No.2/1999, Management Audit Branch, *Medium Term Audit Strategy*.

²² DAPEC Agendum 7/2000, 28 March 2000, Management Audit Branch, *Medium Term Audit Strategy 2000/2003*.

²³ Defence Audit Committee Agendum 18/2001, DAC Meeting—14 May 2001, *MAB's Medium Term Audit Strategy 2001/2004*.

2.19 The *Defence Annual Report 1999–2000* stated that a Portfolio-wide evaluation of risk management was completed during the year. The draft evaluation report indicated a need for an overarching risk management framework and to implement a risk management regime, and noted that there would be cost implications. Defence subsequently established a strategic risk management unit with responsibility for implementing a systematic framework and decided to put in place a strategic risk management policy during 2000–01.²⁴

2.20 DMO's current reform agenda aims to improve the Defence materiel process, including project status reporting and an overall DMO enterprise risk management plan. Improving risk management, particularly emphasising increased investment in risk reduction prior to committing to acquisitions, is one of the acquisition reform initiatives to be pursued in 2001–02.²⁵

Conclusion

2.21 DMO is in the process of implementing a comprehensive reform program to enhance its capability to deliver equipment to the ADF on time and budget and to provide associated through-life support. In implementing its Reform Plan, DMO is addressing issues raised in the past about Defence's management of major capital equipment acquisition projects. These include the issue of status reports on projects. A sound project reporting system will assist in assessing DMO's progress in implementing its broader reform objectives. It is also key from a governance perspective in providing management with an early warning of problem areas.

2.22 Risk assessment is a necessary step towards risk management. The latest Defence risk management strategy indicates that the risk of failure of DMO's major capital equipment acquisition projects is very high, and that the risk will continue for several years until the new DMO organisation and business processes are bedded down. Improving risk management is one of DMO's major acquisition reform initiatives to be pursued in 2001–02.

²⁴ Department of Defence, *Defence Annual Report 1999–2000*, pp. 64–67.

²⁵ Department of Defence, 2001, *op. cit.*, p. 101.

3. Management Information Systems

This chapter examines the use of DMO's main project reporting system as at May 2001. It also discusses other management information issues in DMO, issues regarding consistency of reported information, and DMO initiatives to address them.

PROMIS

3.1 The main corporate reporting system for project performance used in DMO is the Project Reporting and Monitoring System (PROMIS). DMO's predecessor, DAO, had been developing this system since 1996 to provide information on each project's status, financial performance and performance trends.²⁶ PROMIS is an in-house written system using Lotus Notes databases.²⁷

3.2 Financial data is fed directly into PROMIS daily from ROMAN (Resource Output Management Accounting Network), which is the financial information system now employed throughout Defence and common to all DMO projects. In contrast, there is no direct feed of time-schedule data into PROMIS from the various project management applications being used within DMO, and project teams have to enter schedule data manually into PROMIS in order to keep it up to date. However, project teams are not required by DMO to do this.

3.3 At the time of the preliminary study, PROMIS was not being used to capture information on project quality. Consequently, there was no facility to record centrally information on the quality of a project within DMO. The reporting of quality within DMO is considered further in Chapter 5.

3.4 PROMIS has the potential to provide a useful framework for project reporting at the corporate level but it is not being fully used. Defence informs that DMO is currently exploring the business case for further developing PROMIS or using alternative solutions.

²⁶ ANAO, 1999a, *op. cit.*, p. 95.

²⁷ PROMIS was developed and implemented prior to the implementation of the PMM.

Other management information issues

3.5 The DMO recognises that there are opportunities to rationalise its various management information systems:

The storage and manipulation of information in the DMO is currently achieved through a myriad of disparate Information Systems ranging from spread sheets and locally developed databases to the mid range and large corporate systems. Duplication and lack of coherence of IM [Information Management] Systems is a major impediment to improving effectiveness and efficiency.²⁸

3.6 A DMO Business Information System Architecture is being developed to provide a common framework and to promote better integration, consistency and evolution of the information environment. The review is expected to be completed by April 2002.

Reliability and accuracy of information

3.7 An examination of a selection of project status reports produced by DMO project teams reveals that there are currently risks to the reliability and accuracy of information across reports.

3.8 Difficulties ensuring information is both reliable and accurate may arise partly because time-schedule data is not being directly entered into PROMIS. However, a risk to information reliability and accuracy also arises because reports can be generated both by those directly involved in the project, and by others who are aware of project status only from information in PROMIS. This risk arises because it is possible for all system users to gain read-only access to PROMIS without being aware that the information may not be up-to date.

3.9 DMO has implemented new reporting procedures whereby Branch Heads/Division Heads are required to provide certification sign-offs on major reports to management and other stakeholders. Reports to those outside DMO are coordinated through the newly-established Executive Support Unit in Under Secretary Defence Materiel's office.

Conclusion

3.10 The main corporate reporting system for project performance used in DMO is the Project Reporting and Monitoring System (PROMIS). The system has the potential to provide a useful framework for project reporting.

²⁸ Defence Materiel Organisation, 2001, *DMO Business Rules*, Section 7 of DMO Corporate Governance Framework, Canberra, p. 16.

3.11 The DMO recognises that there are opportunities to rationalise its various management information systems and is developing a Business Information System Architecture to provide a common framework and promote better integration, consistency and evolution of the information environment.

3.12 There are risks to the reliability and accuracy of reported data. However, DMO is implementing new reporting procedures whereby Branch Heads/Division Heads are to sign off reports to management and other stakeholders.

4. Quantity of Reporting

This chapter examines issues relating to the number of reports generated by DMO and the costs associated with the production of DMO project status reports.

Number of reports

4.1 Individual project teams in DMO are required to produce a large quantity of project status reports.

4.2 One reason for the large number of reports produced by DMO project teams is the presence of ‘stovepipe’ reporting in DMO. A project team commented in a report to the Head of the Division that *‘within DMO there is a proliferation of stovepipe (ie independent but duplicated various format) reporting requirements’*. The Secretary has also commented of Defence as a whole that *‘Stovepipes r us!’*²⁹ DMO have advised that new reporting requirements are being developed to eliminate the proliferation of stovepipes.

4.3 The overlap between different reports is being considered in DMO. An issues paper for the DMO Executive on project management methodology noted that *‘highlight and exception reports had overlap with the Weekly Brief and some aspects of PROMIS reporting’*.³⁰

The cost of reporting

4.4 Quantifying the levels of resource usage and estimating the indicative costs and production time associated with the production of project status reports would indicate to DMO the extent to which resources are being directed to the reporting process. With such information, DMO would have a basis on which to make decisions with respect to the rationalisation of its reporting processes to ease pressure on project managers and facilitate more consistent and efficient project status reporting.

²⁹ Hawke, Dr A. [Secretary of the Department of Defence], 2000, ‘In Search of the Knowledge Edge—The Management Component’, An Address to CSC on 25 August 2000. Address quoted in Audit Report No.11 2000–2001 *Knowledge System Equipment Acquisition Projects in Defence*, p. 79.

³⁰ Issues Paper—For the DMO Executive: Project Management Methodology—The Next Step, [provided to the ANAO by DMO on 19 July 2001], p. 2.

4.5 Data on costs associated with the preparation of reports by DMO project teams cannot currently be captured. However, as part of the acquisition reform initiatives for 2001–02, an activity-based costing model is to be implemented in DMO. Defence informs that it is in the process of rolling out an Activity Based Costing system that will capture reporting costs.

4.6 Audit Report No.32 1998–99 *Agency Management of Parliamentary Workflow* sought to assess whether the management of parliamentary workflow by the agencies reviewed, of which Defence was one, was efficient and effective, and to identify elements of good practice. In assessing agency effectiveness and efficiency, the audit focused on issues of client service such as timeliness, quality and cost. With regard to cost, the audit found that the agencies reviewed did not estimate or budget at the level of ministerial and parliamentary workflow. It also found that, for the majority of the agencies reviewed, this was expected to change with the introduction of accrual budgeting and the requirement for reporting on outputs and their performance.

4.7 In that report the ANAO recommended that ‘... *agencies put in place effective mechanisms to cost the production of parliamentary workflow outputs*’. Defence agreed with the recommendation and noted that they intended to ‘... *increase the availability of cost information which will take account of the time and effort involved in producing parliamentary workflow outputs*’.³¹ The most recent entry made in Defence’s Audit Recommendations Management System database (in November 1999) indicated that a project to provide cost data in a cost effective way was nearing completion.³² The results of this project may be able to be used by DMO to determine the costs associated with preparing reports.

³¹ ANAO, 1999b, *Agency Management of Parliamentary Workflow*, Audit Report No.32 1998–99, Canberra, p. 52.

³² The Audit Recommendations Management System was established by MAB in 1999 to monitor progress in implementing audit recommendations.

Conclusion

4.8 Individual project teams in DMO are required to produce a large quantity of project status reports, some of which may overlap. The overlap between the range of reports being produced is an issue that DMO is addressing.

4.9 Data on costs associated with the preparation of project status reports by DMO project teams cannot currently be captured. DMO is in the process of rolling out an Activity Based Costing system that will capture reporting costs. With such information, DMO would have a basis on which to make decisions with respect to the rationalisation of its reporting processes to ease pressure on project managers and facilitate more consistent and efficient status reporting.

5 Completeness of Reporting

This chapter examines issues relating to the completeness of information in DMO project status reports.

Background

5.1 The ANAO Better Practice Guide *Performance Information Principles* advocates that reports on performance should provide readers

*...with the information they need on the key aspects of performance that allow them to assess progress towards, and the achievement of, program outcomes. This should include information on the production of outputs, milestones, targets, budgets and so on.*³³

5.2 The guide also indicates that reports should make it clear whether targets have been met or not and the reasons for significant variations from the expected performance, provide an honest coverage of successes and failures and be easily understood by readers.³⁴ It is also important that reports may be read as stand-alone reports, without the reader needing to refer to previous reports or other documents.

Reporting against time, cost and quality criteria

5.3 In order to be able to properly assess progress on major capital equipment acquisition projects and facilitate informed decision-making, project status reports should contain sufficient information to allow a manager to make an informed judgement on whether projects are meeting agreed *timeliness, cost, and quality* criteria. They should also be presented in such a way as to allow the manager to focus on unusual trends or exceptions.

5.4 The following observations are based on the DMO reports selected for examination as part of the ANAO's preliminary study.

³³ ANAO, 1996, *Performance Information Principles*, Better Practice Guide, Canberra, p. 27.

³⁴ *ibid.*, pp. 27–28.

Timeliness

5.5 Project status reports prepared by the DMO project teams do not consistently contain information on whether the delivery of major capital equipment acquisition projects is in line with the agreed schedule. The focus of the reports is on what has been delivered, with often no indication as to whether this delivery was achieved on schedule, or the extent to which it was running ahead of or behind the schedule.

5.6 If no indication of timeliness is given in a report it becomes necessary to refer to additional information sources to determine the extent to which a project is varying from schedule.

Cost

5.7 Not all project status reports produced by DMO project teams contain information on project budgets. The absence of this information restricts the ability of the reader to monitor effectively performance against agreed budget. In these cases, it again becomes necessary to refer to other information sources to determine whether a project is varying from budget.

5.8 Information relating to earned value analysis (see paragraph 2.12) was included in some DMO reports examined. More consistent use of earned value analysis in reports to senior management would give a fuller indication of project performance and improve the quality of financial information available for decision-making purposes.

Quality

5.9 Project status reports produced by DMO project teams tend not to report the extent to which a required level of quality is being met in a major capital equipment acquisition project.

5.10 Some reporting on the quality of major capital equipment acquisition projects is occurring although this tends to focus on the reasons for delays. Reports on the Top 20 Projects provided to the Defence Committee are now starting to pay more attention to quality issues. Several reports have indicated that equipment testing has occurred and note that short-comings with respect to performance have been identified.³⁵

³⁵ The Defence Committee is responsible for providing advice on the long-term strategic direction of Defence with a focus on capability, timely and responsive defence advice, and proper stewardship of people and resources.

5.11 Problems with quality may lead to an increase in budget and/or a delay to the acceptance of the project, which in turn may generate additional costs to Defence. Early recognition of quality issues would allow early mitigation and reduce the risk of problems at later stages of project completion.

5.12 The ANAO audits of the Jindalee Operational Radar Network (JORN) Project and New Submarine Project disclosed that issues of concern raised by Defence's quality assurance officers after their inspection of the contractor's production process were often ignored by Defence's project office. The ANAO has previously recommended that DMO prepare regular reports containing information on quality assurance issues and variations from approved tolerance limits on quality and any action necessary in the circumstances.³⁶

5.13 A qualitative measure may be the effect that variations in cost, schedule and quality have on wider capability issues. The ANAO Better Practice Guide *Performance Information Principles* states that it is important for external reports to be outcome-focused. The focus of the reports reviewed during the preliminary study is the progress of individual major capital equipment acquisition projects. However, given that a delay in the delivery of a project can have significant impact on the capability of the ADF, it may be appropriate for the focus of reporting to be expanded to include some consideration of the impact of delays. Such reporting could include the impact a delay to the delivery of the project may have on the capability to which the project contributes; for example, the extent to which a delay means that outdated equipment presently in service will need to have its life extended.

Project phases

5.14 Major capital equipment acquisition projects undertaken by DMO consist of several stages, or 'phases', which may be concerned with incremental progress on a new piece of equipment or different modifications to a single piece of equipment. Phase 1 of the project to upgrade the F/A-18 Hornet aircraft, for example, includes the completion of the communications and on-board computers upgrade. Phase 2 involves the commencement of the design phase for the cockpit and display upgrade. In some cases a phase may be dependent on the completion of another phase; in other cases they are independent.

5.15 A reader of external DMO project reports may not necessarily be aware which phase of a particular major capital equipment acquisition project is being reported as this is not always indicated in reports

³⁶ ANAO, 1999a, *op. cit.*, p. 107.

prepared by DMO. For example, it is not apparent from reading the section on major capital equipment in the *Defence Annual Report 1999–2000* that projects conducted by DMO are even completed in phases. Project information provided does not always specify which particular phase of the project is being reported on and where the phase fits into the overall project.

Use of key performance indicators

5.16 Key Performance Indicators (KPIs) can be used to provide information on the progress of a project in terms of meeting its targets. DMO has put considerable effort into developing a comprehensive set of KPIs that are linked to DMO's objectives, and ultimately to its organisational goals. The KPIs provide a measure against which the DMO's Balanced Scorecard can be reported.³⁷

5.17 The KPI relevant to status reporting is '*Number of projects within tolerance*' the intent of which is '*to indicate the current performance of the top 20 DMO MCE³⁸ projects (by value), as reported to the Defence Committee monthly. The report also covers other projects of concern that require visibility at DMO Executive level.*'³⁹

5.18 The report to the Defence Committee is based on information provided by Division Heads on individual projects. A 'traffic light' (see paragraph 5.24) indicates the status of individual projects referred to in the report. The aggregated status of all projects is calculated and is used as a performance measure against the KPI in the balanced scorecard.

5.19 DMO, by focussing on KPIs linked to a balanced scorecard, is utilising better practice in internal reporting. This was indicated in the (Commonwealth) Management Advisory Board report *Beyond Bean Counting*, as follows:

*Key performance Indicators (KPIs) would be the focus of the report, with the number of KPIs honed down to the bare essentials for senior management's attention and presenting a balance between operational and financial indicators.*⁴⁰

Beyond Bean Counting includes useful guidance on better practice in internal reporting.

³⁷ The Balanced Scorecard is the performance measurement model adopted by DMO. It uses both financial and non-financial, or operational, data to measure and enhance performance within an organisation.

³⁸ Major Capital Equipment.

³⁹ DMO Balanced Scorecard KPI Profile.

⁴⁰ Management Advisory Board (December 1997) *Beyond Bean Counting—Effective Financial Management in the APS—1998 & Beyond*, p. 57.

Use of trend data

5.20 The inclusion of summarised trend information in reports assists the reader to make an informed judgement on the progress of the project. Where trend information and comparisons over time are absent, a reader who wishes to obtain a picture of the progress of the project over time must compile their own comparative picture by referencing a collection of reports.

5.21 Project status reports produced by DMO generally take the form of point-in-time reporting and tend not to report on trends and comparisons over time. Many of the reports produced by DMO project teams cannot be treated as stand-alone reports.

Trend reporting on overall project status

5.22 Defence is aware that it has tended in the past to produce data-heavy reports. The Secretary of Defence has remarked of the Defence portfolio as a whole that *‘Presentations involving masses of data are commonplace, but converting them to valid and meaningful information to support decision making seems beyond us’* and *‘Defence is data rich—information and knowledge poor’*.⁴¹

5.23 DMO is moving away from such data-heavy reporting to a more user-friendly report format. For example, the reports it produces for the Defence Committee now include an indication of the overall project status and an indication of the trend of this status. A ‘traffic light’ annotated to the report indicates whether the status of the project is ‘of concern’ (red), marginal (yellow) or healthy (green) and an arrow indicates whether the trend is worsening (red, arrow down), constant (yellow, arrow sideways) or improving (green, arrow up).

Information on variations

5.24 Information on the number of variations that have been made to project time schedule and/or approved expenditure can provide an indication of whether projects are facing one-off or systemic problems. Project status reports produced by DMO project teams do not indicate the number of variations to completion date that have been made and as such do not indicate whether projects are falling increasingly behind time. Only a small number of project status reports are noting a change in risk profile. Reporting of such information would assist in indicating whether there are any systemic factors in DMO that are having an adverse effect on the delivery of major capital equipment acquisition projects.

⁴¹ Hawke, Dr A., *op. cit.*, pp. 77, 79.

5.25 In terms of Defence reporting on major capital equipment acquisition projects for the information of the Parliament, the absence of information on variations is an issue that has been raised by the Senate Foreign Affairs, Defence and Trade Legislation Committee. With respect to deferred projects in 1999–2000, the Committee noted that information was not given on the effects of reductions on particular major capital equipment acquisition projects or identifying variations, the cost of the variations and how the variations were to be dealt with in forthcoming years. Defence accepted this as a valid criticism.⁴²

Conclusion

5.26 DMO project status reports do not always indicate whether major capital equipment acquisition projects are meeting agreed timeliness, cost or quality criteria, or report against key performance indicators. Some DMO project status reports indicate the overall status of individual major capital equipment acquisition projects but many generally take the form of point-in-time reporting without reporting trends and comparisons over time.

5.27 The recent development by the DMO of a comprehensive set of KPIs linked to a balanced scorecard will allow DMO to measure project status reporting within the context of organisation-wide goals and objectives. The emphasis on a concise set of KPIs also represents better practice in internal reporting.

5.28 Information on major capital equipment acquisition projects in reports external to DMO, such as the Defence Annual Report, does not always note what phase of a project is being reported and where this fits into the totality of the project. The absence of published information on variations to major capital equipment acquisition projects is an issue that Defence has accepted as being a valid criticism by the Senate Foreign Affairs, Defence and Trade Legislation Committee.



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10 December 2001

⁴² Senate Foreign Affairs, Defence and Trade Legislation Committee, 2000, *Additional Estimates Report March 2000*, Canberra, p. 3.

Appendices

Appendix 1

External Review of Defence Project Reporting

1983 Review of Defence Project Management

1. A 1983 audit report examined Defence's management of selected capital equipment acquisition projects. On progress reporting, the audit report commented that effective and continuous review of a project's progress is crucial to the achievement of its technical performance objectives on time and within cost. It said that an attempt should be made to anticipate problems and to take pre-emptive action, and that this called for timely information on a project's progress and effective review of the information. Two of the principal elements of control are time schedules compared with actual progress and budgeted costs compared with actual costs. The audit report noted that in most cases reviewed there were aspects of Defence's performance monitoring which were considered inadequate.⁴³

Joint Committee of Public Accounts Review of Defence Project Management

2. The Joint Committee of Public Accounts reviewed the 1983 audit report and the relevant projects in 1986. Its Report 243 made numerous recommendations to improve Defence's project management. In relation to progress reporting and accountability, it commented that Defence's internal reports and reports for the Parliament were inadequate. The Committee's Recommendation 43 proposed that project management guidelines address the format of internal reports on project progress, problems and remedial action.⁴⁴ Recommendation 67 proposed that Defence report on its major capital equipment program annually to the Parliament, with details of approved cost and timing, and actual cost and progress, for each project.⁴⁵

⁴³ Auditor-General's Office, 1983, *Report of the Auditor-General upon audits, examinations and inspections under the Audit and other Acts—September 1983*, Canberra, pp. 34–35.

⁴⁴ Joint Committee of Public Accounts, 1986, *Report 243: Review of Defence Project Management, Volume 1—Report*, Canberra, p. 89.

⁴⁵ *ibid.*, pp. 116–117.

3. The Committee reported the 'Finance Minute' (the Government's response) in 1987. Recommendation 43 was accepted but in relation to Recommendation 67 Defence indicated that there were likely to be significant resource implications in the preparation of annual reports of the detail proposed. The Department of Finance added that the details sought should be of significant assistance to all those involved in the scrutiny of progress and costs of major Defence capital acquisitions.⁴⁶

ANAO proposed project reporting format

4. In the absence of a standardised and effective performance measurement and reporting system the ANAO suggested to Defence in 1997 that the manager of each major project submit a monthly one-page report based on earned value management processes, milestones, systems engineering management, general risk management and quality assurance issues to show the actual state of the project. The ANAO developed the proposed format with assistance from a project management consultant. The ANAO suggested that Defence Acquisition Organisation (DAO) implement the reporting system without delay, rather than wait for other methods to be refined.

5. DAO replied at the time that its senior managers review projects on a regular basis and are kept informed of what is being achieved. The ANAO understood that the information channels were a mix of oral briefs supported by ad hoc written reports. In 1999 DAO advised it would examine the ANAO's suggested reporting format and that it had developed a one-page senior management reporting format for use by the majority of projects using earned value.⁴⁷

Project progress reporting in Audit Report on New Submarine Project

6. In 1998 the ANAO reported on the New Submarine Project (to build the Collins-class submarines). The report compared that project with the Jindalee Operational Radar Network (JORN) Project, which the ANAO had audited earlier. The ANAO identified several common weaknesses in Defence's business management of the projects. One of these concerned reporting on project progress. The report commented as follows:

⁴⁶ Joint Committee of Public Accounts, 1987, *Report 267: Finance Minute on Report 243—Review of Defence Project Management*, Canberra.

⁴⁷ ANAO, 1999a, *op. cit.*, pp. 94–95.

The [Defence] project offices lacked a sense of the time-cost of money by allowing payments in key areas of the projects to exceed actual value earned. They were reluctant to determine the true state of progress on the project, and came to regard the amount of money paid to the contractor as the value of the work completed. They were not firm in quizzing contractors on progress measurements and failed to pursue deficiencies in quality of product deliveries ...

The project offices appeared over-confident that Defence was protected by a fixed-price contract. Even with payments to the contractors running ahead of effective progress on the projects, the project offices remained unconcerned on the grounds that the contractors would be required to deliver the final product for no more than the total contract price ...

Senior management in Defence lacked a clear view of actual progress on major projects and risks that were emerging on them. Since Defence spends some \$2.2 billion a year on 200 major capital equipment projects with an approved value of \$35 billion, senior management monitoring of such projects is a major corporate governance issue. Project managers should be required to provide regular reports in a prescribed format that set out clearly the salient issues for senior management. These would include data on scheduled and actual progress and scheduled and actual expenditure to date, expected and achieved milestones, emerging or expected risks and summaries of quality assurance and other expert reports. Senior management needs such information not only to monitor project progress but also to check that project offices add value commensurate with project office cost. On New Submarines and JORN the prime contractors and Defence project managers were unduly optimistic about progress and completion, but this optimism was eventually moderated by critical internal reviews by the contractors themselves.

The project offices were under pressure from senior management in Defence to keep spending the Defence Budget appropriation ... This issue must be resolved; payment should be made on reliable and objective evidence of real progress.⁴⁸

⁴⁸ ANAO, 1998, *New Submarine Project—Department of Defence*, Audit Report No.34 1997–98, Canberra, pp 137–138.

McIntosh/Prescott report on the Collins Class Submarine Project

7. The McIntosh/Prescott report (1999) on the Collins-class submarines project commented on project reporting. The report identified several 'key deficiencies' in the submarine project, including:

...inadequate reporting of these issues and their significance within Defence and to the Government ...

The main issue is to improve the managerial and contractual structures so that the deficiencies are recognised and addressed much more quickly and robustly.⁴⁹

Comments by Minister for Defence

8. When releasing the McIntosh/Prescott report, the then Minister for Defence said that the report made clear that management structures and contract arrangements established at the beginning of the project were inadequate to provide the necessary oversight to ensure the project could be satisfactorily concluded in an acceptable timeframe. The Minister said that Defence would be required, among other things, to report more fully to Cabinet on major projects, and that this would include setting out, in advance, clear project road-maps and schedules against which performance will be measured, allowing any problems to be more rapidly exposed in future.⁵⁰

9. Later in July 1999 the Minister announced the preferred tenderer for the \$2 billion Airborne Early Warning and Control aircraft project. He said that the project would incorporate lessons from past acquisition projects, including JORN and the Collins submarines. He said he had instructed the Department to brief him quarterly on progress in the project against agreed milestones.⁵¹

Audit Report No.13 1999–2000 Management of Major Equipment Acquisition Projects

10. The ANAO's 1999 report on management of major Defence equipment acquisition projects arose largely out of concerns expressed by the Joint Committee of Public Accounts and Audit during its reviews of the audit reports on the JORN project and the New Submarine Project.

⁴⁹ McIntosh, M. and Prescott, J., 1999, *Report to the Minister for Defence on the Collins Class Submarine and Related Matters*, Canberra, p. 31.

⁵⁰ Moore, Hon. J. [Minister for Defence], 1999, *Reform of Defence Acquisition*, Media Statement MIN 188/99, [1 July 1999], [Online], Available: <http://www.minister.defence.gov.au/1999/18899.html>, [18 September 2001].

⁵¹ Moore, Hon. J. [Minister for Defence], 1999, *Australia Decides on Boeing for AEW&C*, Media Alert MIN 202/99, [21 July 1999], [Online], Available: <http://www.minister.defence.gov.au/1999/20299.html>, [18 September 2001].

11. The report examined Defence's project performance monitoring and reporting system. It concluded that work was proceeding slowly on improving performance reporting and benchmarking; progress reporting on major projects needed attention; and that Defence needs a system of uniform reporting to show clearly which projects are exceeding approved schedule or cost or not meeting required quality.⁵²

12. Recommendation No.3(a) and (c) was as follows:

The ANAO recommends that, to promote efficient and effective management of acquisition projects and achievement of capability outputs, Output Managers:

- (a) receive regular reports (until a suitable electronically-based executive management information system can be developed) on each major equipment acquisition project relevant to their responsibilities in a format that includes details of, for example, actual contractor progress against scheduled progress (earned value); contract milestones achieved against milestones due; any expected difficulties in meeting imminent milestones; quality assurance issues that have arisen; and actual expenditure against scheduled expenditure. ...*
- (c) provide, for consideration by Defence senior management, reports on major equipment acquisition projects disclosing any adverse variations from approved tolerance limits on scheduled progress, cost and quality, together with advice of any action considered necessary in the circumstances.*

Defence response [1999]:

- (a) Agreed. The Defence Acquisition Organisation already provides more summary level reports to the Defence Executive (which includes all Output Managers) on major equipment acquisition projects as part of the Executive's monthly review of major management issues, and as part of a six monthly review of the performance of each Defence Group. ... Overall, Defence considers that high level project reporting should be made to both relevant Capability Managers and to the Defence Executive as a whole. ...*
- (c) Agreed, with qualification. The need for such reporting is fully accepted; the issue is which authority should be responsible for the provision of such reports. ...*⁵³

⁵² ANAO, 1999a, *op. cit.*, p. 106.

⁵³ *ibid.*, pp. 107–108.

13. At a Joint Committee of Public Accounts and Audit inquiry into the audit report, Defence indicated in May 2000 that it was in the process of implementing 3(a) and was discussing internally how to implement 3(c).⁵⁴

14. The Audit Recommendations Management System, a database established by Defence in 1999 to monitor progress in implementing audit recommendations, noted in January 2001 that '*implementation of these recommendations [Recommendation No. 3] is substantially complete by virtue of the mechanisms already in place; the remaining elements will be driven by the evolution of Capability Management*'.

Urgent status report

15. In February 2000 the then Minister for Defence released two reports on the Amphibious Transport Ships project. He said that delays and cost overruns on the project were totally unacceptable, and that he had instructed Defence to recommend improvements to ensure that the experience on that project was not repeated on other acquisition projects. He asked Defence to provide him with an urgent status report on the 15 major projects being undertaken in Defence.⁵⁵ Defence provided the urgent status report in August 2000.

16. In summary the report commented as follows:

*... the 15 projects predominantly pose a medium risk, with software development and system integration a significant and perennial challenge. Real cost increases were mainly caused by changes in scope (most contracts are fixed price). The average schedule slippage for the 15 projects is 15 months, reflecting both the complexity of larger projects and the effects of several significant scope changes that have considerably delayed some completion dates. The 'average slippage' figure should be treated with caution, however, as a number of projects are not yet to contract. The data does suggest that, when difficulties arise, they are managed by extending the schedule rather than by allowing budgets to escalate or compromising on capability or quality. JORN is the most problematic project, being over five years behind the schedule set out in the original Telstra contract.*⁵⁶

⁵⁴ Roche, M., 2000, Evidence given to Joint Committee of Public Accounts and Audit Inquiry—Reference: Review of Auditor-General's Reports, second quarter 1999–2000, *Official Committee Hansard*, DPRS, Canberra, [16 May 2000], p. PA 47–8.

⁵⁵ Moore, Hon. J. [Minister for Defence], 2000, *Reports on Amphibious Transport Ships*, Media Release MIN 3/00, [3 February 2000], [Online], Available: <http://www.minister.defence.gov.au/Mooretpl.cfm?CurrentId=284>, [18 September 2001].

⁵⁶ Department of Defence, 2000, *A Status Report on the Top 15 Major Defence Projects*, Minute to Minister, [July 2000], pp. 1–2.

Appendix 2

Performance Audits in Defence

Set out below are the titles of the ANAO's previous performance audit reports on Department of Defence and Australian Defence Force operations tabled in the Parliament in the last five years.

Audit Report No.15 1996–97 <i>Food Provisioning in the ADF</i>	Audit Report No.37 1999–2000 <i>Defence Estate Project Delivery</i>
Audit Report No.17 1996–97 <i>Workforce Planning in the ADF</i>	Audit Report No.40 1999–2000 <i>Tactical Fighter Operations</i>
Audit Report No.27 1996–97 <i>Army Presence in the North</i>	Audit Report No.41 1999–2000 <i>Commonwealth Emergency Management Arrangements</i>
Audit Report No.34 1996–97 <i>ADF Health Services</i>	Audit Report No.50 1999–2000 <i>Management Audit Branch—follow-up</i>
Audit Report No.5 1997–98 <i>Performance Management of Defence Inventory</i>	Audit Report No.3 2000–2001 <i>Environmental Management of Commonwealth Land—follow-up</i>
Audit Report No.34 1997–98 <i>New Submarine Project</i>	Audit Report No.8 2000–2001 <i>Amphibious Transport Ship Project</i>
Audit Report No.43 1997–98 <i>Life-cycle Costing in Defence</i>	Audit Report No.11 2000–2001 <i>Knowledge System Equipment Acquisition Projects in Defence</i>
Audit Report No.2 1998–99 <i>Commercial Support Program</i>	Audit Report No.22 2000–2001 <i>Fraud Control in Defence</i>
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Audit Report No.44 1998–99 <i>Naval Aviation Force</i>	Audit Report No.33 2000–2001 <i>ADF Reserves</i>
Audit Report No.46 1998–99 <i>Redress of Grievances in the ADF</i>	Audit Report No.41 2000–2001 <i>Causes and Consequences of Personnel Postings in the ADF</i>
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