The Auditor-General Audit Report No.25 2004–05 Performance Audit

Army Capability Assurance Processes

Department of Defence

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Canberra ACT 1 February 2005

Dear Mr 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*. Pursuant to Senate Standing Order 166 relating to the presentation of documents when the Senate is not sitting, I present the report of this audit and the accompanying brochure. The report is titled *Army Capability Assurance Processes*.

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

Yours sincerely

Oliver Winder

Acting 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

ACMC Army Capability Management Committee

ACMS Army Capability Management System

AEEP Army Equipment Establishment Plan

APEP Army Personnel Establishment Plan

CACD Chief of Army Capability Directive

CASAC Chief of Army's Senior Advisors Committee

CTC Combat Training Centre

DCP Defence Capability Plan

Defence Department of Defence

DMFP Defence Management and Financial Plan

DMO Defence Materiel Organisation

DLOC Directed Level of Capability

FIC Fundamental Inputs to Capability (see Appendix 1)

GTR Gross Training Requirement

HNA 'Hardening' and Networking the Army

JCFADT Joint Standing Committee on Foreign Affairs, Defence and Trade

JOCOPR Joint Operations Command Operational Preparedness

Requirement

MLOC Minimum Level of Capability

NTL Net Training Liability

OLOC Operational Level of Capability

OOPR On-Occurrence Preparedness Report
OPO Operational Performance Objectives

PBS Portfolio Budget Statements

PMKeyS Personnel Management Key Solution

RAR Royal Australian Regiment

SDSS Standard Defence Supply System

TARP Training Activity and Resource Proposals

Glossary

There are two dimensions to concurrency. The first Concurrency

> concerns competing demands for resources. The second concerns competing demands on Force Elements to meet

simultaneous operational requirements.

Force Element A Force Element is a component of a unit, a unit, or an

association of units having common prime objectives and

activities.

Force Structure Force structure is the force-in-being that would be

required to achieve OLOC in terms of equipment,

personnel and facilities.

DLOC DLOC is the funded level of capability 'directed' to be

maintained across all capability outputs. In some

circumstances the DLOC is set below MLOC.

Littoral A littoral environment is one in which the operational

domains of sea, air and land merge.

Military Military capability is the combination of force structure

Capability and preparedness, which enables the nation to exercise

military power.

MLOC MLOC is the lowest level of capability (task specific) from

which a force element can achieve OLOC within readiness

notice.

OLOC OLOC is the task-specific level of capability required by a

force to execute its role on an operation at an acceptable

level of risk.

Operational

The period immediately following deployment on Viability Period

operations, during which deployed forces must be self-

sufficient until the logistic supply system is in place.

Reserve Stocks Reserve stocks are those unlikely to be procured quickly

> enough during a contingency. They are held over and above operating stock levels to support possible future

contingencies.

Surge is the process by which military and civilian Surge

> elements operate at higher than normal rates of effort for a limited and usually short period in order to undertake

operations and/or achieve specific objectives.

Summary and Recommendations



Live firing from an Australian Light Armoured Vehicle

Source: Courtesy of Department of Defence

Summary

Background

- 1. In mid 2004, Army had a force of 42 337 comprising 25 455 personnel employed on a permanent basis in the Regular Army and 16 882 Reserve personnel. The 2004–05 Defence Portfolio Budget Statements (PBS) estimate that the total cost of Defence departmental outcomes would be \$15.6 billion. The Army Capability outcome represents one-third of the Defence budget at \$5.29 billion. This figure comprises the budget for those commands directly under the control of the Chief of Army, as well as resources consumed by other groups to produce Army Capability.¹
- 2. The 'Fundamentals of Land Warfare' outlines the Army Model which comprises four components: the Enabling Component; national and international support base; the Combat Force Reserve; and the Deployable Force. The Enabling Component provides the support required to expand and sustain the Army, as well as a means to generate new capabilities. The Combat Force Reserve provides a mobilisation and sustainability base for the Army and is intended to provide strategic depth by allowing the Deployable Force to adapt to changed circumstances. The Deployable Force comprises high readiness units to provide the initial deployed force and lower readiness units to augment the deployed force and allow for rotation if required. The size and composition of the components of the Army Model are aligned to the current strategic guidance on warning times for possible contingencies.
- 3. Changes in Australia's strategic environment, combined with lessons learnt from various operations, are influencing Army's view of the capabilities required of land forces through the 'Hardening' and Networking the Army (HNA) Review. Initially presented to the Chief of Army's Senior Advisors Committee (CASAC) in December 2003, the Review, which is to be implemented by 2012, addresses a range of existing Army capability issues and Force Structure changes associated with a range of new or updated capabilities scheduled to enter service over the next 10 years.

For 2004–05, Army represents 43.4 per cent of the Army Capability Outcome Budget. The enabling groups of Corporate Services and Infrastructure Group and the Defence Materiel Organisation (DMO) represent 21.2 per cent and 16.0 per cent of the Army Capability Outcome Budget respectively.

² Land Warfare Doctrine 1: The Fundamentals of Land Warfare (2002), pp. 91–93 (Army has indicated that this document is under review.)

The Audit

4. This audit examined the relationship between the strategic guidance and capabilities provided by Army, through analysis of the Army capability management and reporting framework. The objectives of the audit were to: assess Army capability management and reporting processes; determine whether these processes efficiently and effectively manage resources to provide Army capability; and accurately indicate the capability provided by Army.

Overall audit conclusions

- 5. High-level Defence and Army directives are based on guidance provided to Defence by the Government through the White Paper 2000³ and the Strategic Update 2003.⁴ The ANAO identified that a number of risks and limitations have considerable implications for Army's capacity to achieve levels of capability commensurate with those indicated as required by government guidance.
- 6. The ANAO noted that a series of factors adversely impacting on Army capability have emerged over a prolonged period and will require remediation over a number of years. The ANAO found that improving the ability for Army to achieve desired outcomes will require attention to: identifying personnel numbers and skill requirements; improving the availability and serviceability of existing equipment; addressing issues delaying the introduction into service of new and updated equipment; and refining processes that allocate personnel and equipment across Army units.
- 7. Army's capacity to assess and address capability issues in a structured manner has been inhibited by shortcomings in internal reporting arrangements. The ANAO found that these shortcomings contributed to an overstatement in performance measures provided against Army capability outputs in the 2002–03 Defence Annual Report.
- 8. In the period since the White Paper 2000, Army has commenced developing responses to many of these challenges and has implemented a range of strategies to: improve the allocation of resources across Army; address issues associated with the introduction into service of equipment; and enhance internal reporting arrangements. The ANAO considers that further refinement of these strategies, combined with enhanced linkages to overarching Army and Defence capability priorities, need to occur to ensure that remediation measures are progressively implemented effectively within available funding.

Defence 2000: Our Future Defence Force.

⁴ Australia's National Security: A Defence Update 2003.

Key findings

Capability management framework (Chapter 2)

- 9. The ANAO found that a clear link was evident between directives provided by the Chief of the Defence Force and Joint Operations Command to Army and the overarching capability directive for Army. This link is achieved through the allocation of force elements, within Army, to a series of possible contingencies indicated in high level Defence directives. In some circumstances, the same force elements are assigned to multiple tasks, introducing difficult management issues, should more than one contingency require the same force element simultaneously.
- 10. Army capability directives are developed using the Military Appreciation Process which is a decision-making tool used within Defence. This incorporates risk assessment and identification processes, and is repeated at various levels of command within Army as the overarching capability directive for Army cascades through the layers of command into specific unit level directives. The ANAO identified that, at the unit level, procedures surrounding the application of the Military Appreciation Process could be improved, particularly in the area of documentation of key decisions and associated risks.
- 11. ANAO analysis of key Army capability reports noted that the assessment of the key objectives of readiness and sustainability are based on numerical and empirical analysis and interpretation of business rules. The ANAO found that this did not provide a consistent basis for internal analysis and reporting. In mid 2004, Defence and Army changed reporting processes, which to some extent improved the transparency in reporting. However, further refinement would have the potential to reduce unnecessary subjectivity and improve overall reporting reliability and the resulting confidence of all stakeholders.
- 12. The ANAO compared Army's reporting of capability performance information in the 2002–03 Defence Annual Report with related internal Defence documentation. This comparison was unable to reconcile statements of achievement made against certain performance indicators for Output 3.2, Mechanised Operations; Output 3.3, Light Infantry Operations; Output 3.4, Army Aviation Operations; Output 3.5, Ground Based Air Defence; and Output 3.8, Logistics Support.

Managing current capability (Chapter 3)

- 13. Under the White Paper 2000, Army is required to maintain six infantry battalion groups at fewer than 90 days readiness notice. Army revised this to five infantry battalion groups and a commando regiment in the 2004–05 Defence PBS.
- The ANAO compared the identified personnel requirements with 14. actual personnel numbers for a range of Army units and noted that varying degrees of personnel number and key trade deficiencies apply across units. The ANAO also noted that other issues impact on the availability of personnel operations including: deployment and reconstitution compliance with deployment; Army Individual Readiness requirements; personnel about to discharge, be promoted or posted to other units; and disciplinary matters.
- 15. The White Paper 2000 indicated that the Logistics Support Force would be enhanced by increasing the preparedness of individual units to provide improved support to deployed forces and enhanced ability to rotate forces. The ANAO identified that significant challenges remain for Army in maintaining required logistics capabilities, particularly in regard to personnel requirements and critical trade deficiencies.
- 16. In 2000, Army undertook a Reserve Roles and Task Study to align Reserve capabilities by December 2003 to the requirements set down in the White Paper 2000. While Reserve personnel have participated in deployments over the past several years, and the roles of specific elements of the Reserves have been defined in terms of the prevailing strategic guidance, the ANAO considers that the roles and tasks for the bulk of the Reserves lack clear definition. In late 2003, Army commenced a further Roles and Task Study to be implemented as part of HNA by 2012. Army advised that this Study has been completed following two submissions to CASAC, the last of which was in November 2004.
- 17. Army has also experienced an ongoing decline in Reserve personnel numbers and low parading for duty statistics. The ANAO found that, between 1999–2000 and 2002–03, an average of just over 20 per cent of Reserve personnel did not parade for duty at all in a given year.
- 18. In mid 2003, Army identified the need to redistribute equipment from lower readiness units to higher readiness units in order to meet capability requirements. A similar process was undertaken in 1999 in preparation for the deployment to East Timor. In order to better understand and control the distribution of equipment, Army is developing an Army Equipment Establishment Plan (AEEP).

- 19. Maintaining the serviceability of equipment presents difficulties for Army. Factors impacting on equipment serviceability include: ageing fleets and associated difficulties in obtaining parts; increasing technical complexity; and the limited availability of qualified personnel to perform maintenance and repairs. The ANAO found that, while there are processes in place to upgrade and replace elements of the ageing fleet, as well as evidence of attempts to improve overall maintenance outcomes, the impact of these issues will require the development and progressive implementation of suitable strategies to achieve long-term resolution.
- **20.** The ANAO found that the limited availability of ammunition for training has impacted adversely on Army's capacity to maintain required preparedness levels over several years. Army and Defence have undertaken a range of studies to identify operating and reserve explosive ordinance requirements. Army has also implemented a range of simulator systems to reduce demand for ammunition in training.

Training capability (Chapter 4)

- 21. In late 1999, Army commenced developing the Army Capability Management System (ACMS) for full implementation in early 2006. In its final form, ACMS is intended to automate a range of capability management and reporting processes. At the time of audit fieldwork, limited functionality had been implemented for the management of unit training proposals for 2003–04. The ANAO found that interfaces between ACMS and key Defence corporate systems relating to personnel, inventory and accounting, required improvement; as well, associated business processes need to be reviewed and refined to minimise resource intensive processes and assure the integrity of data captured.
- 22. The ANAO found that a clear relationship could not be established between preparedness requirements set down in the overarching Army capability directive and training courses provided by Training Command. A system implemented by Army in 1999 to manage the training program did not provide the functionality required by Training Command. The ANAO review of attendance at Training Command courses indicated that this was less than satisfactory at 66 per cent for 2003–04. Weaknesses in training course management processes and supporting systems contribute to a significant discrepancy between the identified annual Army training requirement and the number of personnel actually attending and passing courses. The ANAO noted that, in 2003–04, the number of trainees passing courses represented 43 per cent of the identified training requirement for Army.
- 23. The ANAO found that, other than for a limited range of activities, assessment of collective training is based on subjective military judgement applied by officers within the chain of command. To a limited extent, training

activities, conducted by the Combat Training Centre (CTC), provide a degree of quality assurance for collective training and capability assessment. The ANAO considers that Army would benefit from the development of more rigorous objective setting and assessment processes for all collective training activities.

Developing future capability (Chapter 5)

- 24. Through the HNA Review, Army is developing a model to provide a long-term focus for capability development and to address a range of existing Army capability issues. Army modelling indicates that, based on projected funding, there will be insufficient personnel to meet the requirements of the model. Aligned to the development of the HNA Model has been the development of a Reserve Roles and Tasks Study to meet HNA rotation requirements. This Study has identified that, without changes to existing Reserve arrangements, the Reserve will be unable to fulfil HNA requirements.
- 25. An option being considered by Army, as part of HNA, is the raising of a second mechanised battalion to improve protected mobility. Under this option, Army would equip both mechanised battalions with fleets comprising the upgraded M113 Armoured Personnel Carrier and the Bushmaster Infantry Mobility Vehicle. Neither of these vehicles had been introduced to service at the time of audit fieldwork.
- 26. In 2001, the Government released the Defence Capability Plan (DCP), which was updated in 2004.⁵ Initially, Army planning processes for the introduction into service of projects outlined in the DCPs were inadequate and lacked required coordination. During 2002 and 2003, Army reviewed and implemented changes to improve introduction into service arrangements. However, further work is required to address a backlog of issues in key areas, such as formal introduction into service processes. The ANAO found that changes to force structure necessary to implement DCP projects are having a significant influence on the HNA Review.
- 27. The ANAO also found that, in April 2004, 38 per cent of Army related major capital procurement projects were at risk of schedule slippage and 44 per cent were under-resourced in terms of staff. The DMO has identified that schedule slippage is a key cause of cost escalation in major projects. Similar issues are impacting on the delivery of minor capital procurement projects which also deliver significant capability to Army. Minor projects have consistently failed to achieve budgeted expenditure forecast since the Defence Reform Program commenced in 1997–98.

The DCP outlines major capital procurement projects approved, or are intended to be approved, in the ensuing 10 years.

Recommendations

28. The ANAO made eight recommendations aimed at improving Army capability management processes.

Agency Response

29. The Department provided the following response to this audit:

Defence agrees with all of the eight recommendations, and is pleased to see the acknowledgment in the overall audit conclusion: "In the period since the White Paper 2000, Army has commenced developing responses to many of these challenges and has implemented a range of strategies to: improve the allocation of resources across the Army; address issues associated with the introduction into service of equipment; and enhance internal reporting arrangements."

Recommendations

Recommendation

No.1

Para. 2.14

The ANAO recommends that, in order to maintain the visibility of risks associated with the implementation of higher-level directives at the unit level, Army document key decisions made during the development of unit level directives within an overall risk management framework which should be regularly monitored and resourced.

Defence Response: Agreed.

Recommendation

No.2

Para. 2.36

The ANAO recommends that, in order to provide increased objectivity and improve overall reliability of the assessment and reporting of preparedness, Army:

- (a) routinely aggregate key aspects of unit level Fundamental Inputs to Capability reporting up to the output level; and
- (b) assess the impact of deficiencies identified through this reporting process within an overall capability risk management framework.

Defence Response: Agreed.

Recommendation

No.3

Para. 2.48

The ANAO recommends that, in order to improve the reliability of indicators of performance provided in the Defence Annual Report, Army develop suitable quantifiable measures for each output and performance indicator, where possible, as the basis for supporting statements of achievement.

Defence Response: Agreed.

Recommendation

No.4

Para. 3.25

The ANAO recommends that, to improve the level of benefit that the Reserves contribute to Army capability, Army:

- (a) identify and assign a specific set of tasks that can be fulfilled by Reserve units within existing funding and capabilities; and
- (b) develop incremental enhancements to the capability of the Reserves for other tasks.

Defence Response: Agreed.

No.5

Para. 3.44

Recommendation The ANAO recommends that, in order to improve the overall serviceability of equipment, Army, in conjunction with the Defence Materiel Organisation, monitor and equipment maintenance review and monitoring arrangements to progressively address serviceability issues in line with capability priorities.

Defence Response: Agreed.

Recommendation

No.6

Para. 4.22

The ANAO recommends that, prior to further developing a Training Command management information system, Army review Training Command processes to enhance linkages between courses provided and preparedness requirements, and take suitable measures to improve overall attendance outcomes.

Defence Response: Agreed.

Recommendation

No.7

Para. 4.30

The ANAO recommends that, to enhance Army's capacity to assess and aggregate the outcomes of collective training, Army, prior to the conduct of collective training, establish explicit training objectives and define associated assessment criteria for effective management of those outcomes.

Defence Response: Agreed.

Recommendation

No.8

Para. 5.36

The ANAO recommends that, to enhance the link between Army capability requirements and equipment entering into service, Army, in consultation with the Defence Materiel Organisation, develop:

- mechanisms to prioritise equipment acquisition projects and ensure that projects are staffed in line with these priorities;
- regularly report on the status of all major projects through the Army Balanced Scorecard; and
- review the budget formulation process to achieve a better alignment between budgeted and actual capital expenditure.

Defence Response: Agreed.

Audit Findings and Conclusions

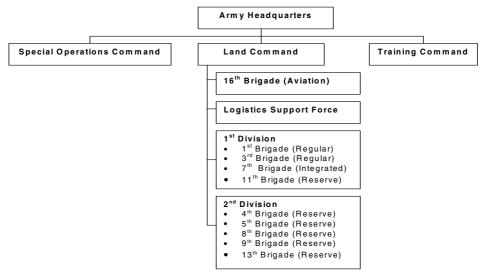
1. Introduction

This chapter outlines the objectives of Army capability management processes and structures, together with the audit approach.

Background

- 1.1 The management and development of Army capability is a long-term process, requiring a sound appreciation of the existing and future strategic environment to ensure that Army remains relevant to, and capable of, meeting government requirements. In recent decades there have been significant changes to the strategic environment. These changes have included the passing of the Cold War era; a period where incursions from the north and the defence of Australia shaped strategic thinking; and now a period where the defence of Australia remains a priority but the implications of globalisation, the activities of non-state entities and regional security have taken on increasing importance.
- **1.2** Army is organised into three commands under Army Headquarters (see Figure 1.1). These commands are Land Command, Special Operations Command, and Training Command. Special Operations Command and Training Command each have a number of subordinate units. Land Command incorporates a number of subordinate units and two Divisions, each comprising a number of Brigades, as shown below.

Figure 1.1
Army organisational structure



Source: Adapted from Defence documentation.

1.3 The Chief of Army's responsibility is to deliver the Army Capability outcome. Two key committees supported by a range of working groups assist in this regard. These committees are CASAC⁶ and the Army Capability Management Committee (ACMC)⁷.

Government capability guidance

- 1.4 The Defence White Paper, *Defence 2000: Our Future Defence Force* (the White Paper 2000), articulates the Government's strategic policy by identifying a range of capabilities required of Defence. For Army, the White Paper 2000 identifies the requirement for an Army capable of responding swiftly and effectively to an armed lodgement on Australian territory, and for security operations in our immediate neighbourhood.
- 1.5 The White Paper 2000 indicated the intent to structure Army so as to be able to deploy a brigade group on operations for extended periods and, at the same time, maintain a battalion group ready for deployment elsewhere.⁸ This was to be achieved by:
- maintaining six battalion groups of approximately 1000 personnel at 30 to 90 days notice to move and an Special Air Service regiment of approximately 700 personnel;
- utilising 7th Brigade, supplemented by personnel from the Army Reserves, to provide sustainment and rotation capabilities;⁹
- changing the role of the Army Reserves from providing partially trained personnel as a basis for expanding Army, to providing fully trained personnel ready for deployment;

ANAO Audit Report No.25 2004-05 Army Capability Assurance Processes

The Chief of Army chairs CASAC. Permanent members of CASAC include: the Deputy Chief of Army; the three component commanders; the Head of Land Systems in the DMO; and representatives from key support and policy areas within Army Headquarters. CASAC provides advice to the Chief of Army on intelligence and policy matters relating to the strategic direction of Army; the capabilities of the force in being and the future force; personnel; and budgetary matters.

The Deputy Chief of Army chairs ACMC. Permanent members include: Chiefs of Staff or Deputy Commanders from the three component commands; the Commander of 16th (Aviation) Brigade; the Scientific Adviser–Army; and representatives from key policy and support areas within Army. The ACMC is subordinate to CASAC. ACMC is responsible for the coordination of Army's business processes including resource management; risk management; corporate governance; achieving preparedness requirements; modernisation; and focussing enabling functions.

The White Paper 2000 indicated that personnel should not be deployed on operation for longer than six to 12 months.

The Australian Defence Force Capability Fact Book (April 2003) states that 'Although it [7th Brigade] is the best equipped of Army's Reserve Formations, the Reserve component of 7th Brigade would need a mobilisation period of intensive training and preparation before it could be deployed on active service.' p. 19.

- improving the capacity of the Logistics Support Force to provide support to deployed forces, by increasing the sustainability and preparedness of individual units; and
- purchasing, or upgrading, equipment to increase combat capabilities in line with the DCP.
- 1.6 Following the terrorist attacks on 11 September 2001 in the United States and the later Bali bombings, and in response to concerns surrounding the proliferation of weapons of mass destruction, the Government released Australia's National Security—A Defence Update 2003 (the Strategic Update 2003). The Strategic Update 2003 identified that operations in the direct defence of Australia were less likely and that operations to contribute to the security of our immediate neighbourhood and coalition operations were more likely. While there were a number of implications for Army from the Strategic Update 2003, the most significant implications were for Special Operations. These included the raising of the Special Operations Command and an additional Tactical Assault Group.
- 1.7 The White Paper 2000 also introduced a new Defence planning and budgeting process framed around the Defence Management and Financial Plan (DMFP). The DMFP is updated annually and incorporates in-year management data plus projections for the following nine years. The purpose of the DMFP is to seek, in accordance with changing priorities, government funding approval for the progressive implementation of the White Paper 2000, the Strategic Update 2003, and the DCP 2004–14.

Recent Parliamentary Committee reviews

- **1.8** In August 2000, the Joint Standing Committee on Foreign Affairs, Defence and Trade (JCFADT) tabled a report titled *From Phantom to Force: Towards a More Efficient and Effective Army*. That report included a series of comments surrounding Army capability, particularly in relation to perceived inadequacies in force structure and deficiencies in personnel and equipment. The comments and recommendations contained in that report were refined in a subsequent JCFADT report entitled *A Model for a New Army: Community Comments on 'From Phantom to Force' Parliamentary Report into the Army* (September 2001).
- 1.9 In October 2003, the JCFADT presented a report in relation to the Defence Annual Report 2001–02 which commented on a range of issues relating to Army capability. These included the impact of maintaining a high operational tempo; personnel and ammunition shortfalls; the role of Special Operations; and the capability and cost of the ADF Reserves. In June 2004, the Committee released a report on Australia's Maritime Strategy which commented on the role of the Reserves and the development of the Army

Sustainment Model. This was followed in August 2004, by the Committee presenting a report in relation to the Defence Annual Report 2002–03 which commented on the purchase of the main battle tank, a project that was identified in the DCP 2004–14.

Audit approach

- **1.10** Following a preliminary study, audit fieldwork was substantively conducted in the period from April to July 2004. The audit fieldwork focussed on Army Headquarters and Land Command, with limited evaluation of Training Command. While broader Army capability management issues may be relevant to the recently established Special Operations Command, fieldwork did not encompass units within that command.
- 1.11 In the 2004–05 Defence PBS, the Army Capability Outcome comprised 10 Army outputs (see Table 1.1). Within Land Command, fieldwork focused on six key Army outputs. These outputs are highlighted in Table 1.1 and represent 78 per cent (some \$4 billion) of the estimated Army Capability Outcome Budget for 2004–05.

Table 1.1
Army capability outcome and output structure: 2004–05

Output	Funding \$m	Description
3.1	322.3	Capability for Special Forces Operations
3.2	866.1	Capability for Mechanised Operations
3.3	1,034.6	Capability for Light Infantry Operations
3.4	592.6	Capability for Army Aviation Operations
3.5	175.7	Capability for Ground Based Air Defence
3.6	495.5	Capability for Combat Support Operations
3.7	150.4	Capability for Regional Surveillance
3.8	521.8	Capability for Operational Logistic Support to Land Forces
3.9	577.3	Capability for Motorised Infantry Operations
3.10	530.3	Capability for Protective Operations

Source: 2004–05 Portfolio Budget Statements–Defence Portfolio.

- **1.12** This audit examined the relationship between the strategic guidance and capabilities provided by Army, through analysis of the Army capability management and reporting framework. The objectives of the audit were to:
- assess Army capability management and reporting processes;
- determine whether these processes efficiently and effectively manage resources to provide Army capability; and
- ascertain whether reporting arrangements accurately indicate the capability provided by Army.
- **1.13** The audit was conducted in accordance with the ANAO Auditing Standards. The Total cost of the audit was \$311 975.

Report structure

1.14 The remainder of this report is structured into four chapters. Chapter 2 outlines the framework used by Defence to link strategic guidance to internal capability processes. Chapter 3 outlines processes used by Army to manage current capability. Chapter 4 covers the management of training within Army. The final chapter examines the HNA Model and capital procurement processes.

2. Capability Management Framework

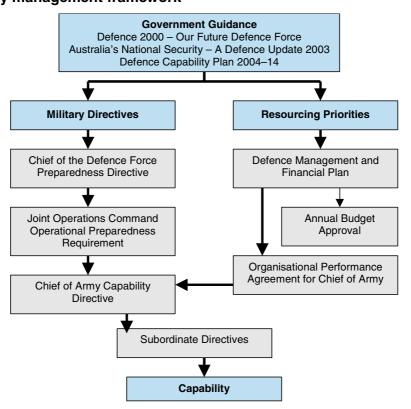
This chapter outlines the capability management framework used by Defence and links strategic guidance to internal Defence capability management processes and resourcing.

Capability governance

2.1 As defence capabilities are maintained on a contingency basis, there is a need for Defence assessed requirements to be constrained within resource limitations and tied directly to Government guidance. Figure 2.1 describes the capability management framework used by Defence which is intended to provide this outcome.¹⁰

Figure 2.1

Capability management framework



Source: Adapted by ANAO from Defence documentation.

ANAO Performance Audit No.43 2003–04 Defence Force Preparedness Management Systems provides detailed analysis of the processes for managing preparedness across Defence.

Resourcing priorities

- 2.2 The Organisational Performance Agreement is an agreement, updated annually, between the Secretary of Defence, Chief of the Defence Force and the Chief of Army. The Agreement is designed to reflect the DMFP. It is primarily focussed on single financial year budget allocations, but also provides forecasts of expected performance, strategic initiatives, capability limitations and risks to performance for 10 years.
- 2.3 The Agreement details the level of performance to be delivered by Army, including the impact of deviations from strategic performance. These deviations are included within a schedule to the Agreement and are identified as the Directed Level of Capability (DLOC). DLOC is defined as the capability Army can provide within budgetary constraints.

Military directives

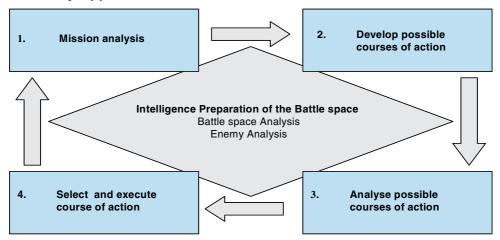
- 2.4 Within Defence, Government guidance provided through the White Paper 2000 and the Strategic Update 2003 are taken forward in the Chief of Defence Force Preparedness Directive. This series of Directives has existed for many years. From 2002, the JOCOPR¹¹ defined the Operational Preparedness Objectives (OPOs) for Defence. OPOs are integral to the Preparedness Management System and reflect some 103 Military Response Options which have been grouped into 24 Aggregated Military Response Options. The OPOs represent very broad categories of tasks that provide the aspirational basis for capability managers and commanders to define the precise format of training required to achieve the relevant objectives.¹²
- 2.5 The Chief of Army Capability Directive (CACD) is the prime capability directive for Army. The CACD aligns Army with the preparedness requirements outlined in the JOCOPR. This occurs through the application of the Military Appreciation Process (see Figure 2.2), which results in specific force elements being aligned to specific OPOs and assigned a Minimum Level of Capability (MLOC) in terms of readiness notice, operational viability and sustainability periods.

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On 16 March 2004, the Government announced changes to ADF higher command arrangements with the establishment of the Joint Operations Command. An outcome of this change was that the Australian Theatre Operational Preparedness Requirement was renamed Joint Operations Command Operational Preparedness Requirement (JOCOPR).

The JOCOPR is not costed and, as such, there are no constraints on the size of the force elements identified to achieve the requirements of the OPOs.

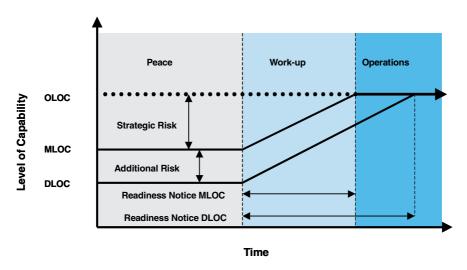
Figure 2.2
The Military Appreciation Process



Source: Defence documentation.

- 2.6 One outcome of the allocation of force elements to OPOs within the CACD is that certain force elements are assigned to multiple OPOs. This introduces concurrency issues should circumstances envisaged in more than one OPO require the same force element simultaneously, or in a relatively close timeframe. The Chief of the Defence Force is responsible for resolving concurrency issues, based on the military-strategic circumstances and priorities at the time. Consistent with these concurrency issues, recent operational demands on key force elements have limited the capacity of reliant force elements to conduct training and maintain required preparedness levels. This limitation is likely to have implications for Army's capacity to meet White Paper 2000 and Strategic Update 2003 requirements.
- 2.7 The DLOC arrangement provides the link between military directives and resourcing constraints or residual capability deficiencies. This is achieved in the CACD by assigning force elements a readiness notice, operational viability period and/or sustainability period based on DLOC where resources are considered insufficient, or residual deficiencies do not enable Army to meet JOCOPR MLOC requirements.
- 2.8 Maintaining force elements at DLOC introduces additional implied strategic risk (see Figure 2.3). In some circumstances, budget supplementation may mitigate this risk. However, DLOC deficiencies may remain for several years. Examples include ammunition shortfalls, critical trade deficiencies, and equipment deficiencies. These have featured as preparedness inhibitors for Army in Defence annual reports since 2000–01.

Figure 2.3
Relationship between levels of capability



Source: Prepared by ANAO from Defence documentation.

Subordinate directives

2.9 At the various levels of command, the Military Appreciation Process is repeated, resulting in increasingly detailed directives that translate strategic roles into activities and tasks at the operational and tactical levels. These activities and tasks form the basis for training activities conducted by Army during the year.

2.10 A key aspect of the Mission Analysis Phase of the Military Appreciation Process is the analysis of the superior commander's intent. The Fundamentals of Land Warfare identifies that doctrine provides a unifying approach to the planning and conduct of operations. This is achieved by establishing a framework for decision-making by commanders at all levels, thereby providing cohesion through mutual understanding.

2.11 Army documentation indicates a significant backlog in the development and publication of doctrine.¹³ Output Seminars conducted by Army Headquarters on three Army outputs since late 2003, indicate that there are a range of issues that are yet to be resolved in relation to draft doctrine,

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Land Warfare Doctrine No.1 The Fundamentals of Land Warfare identifies that military doctrine encapsulates the way in which the Army conceptualises and conducts land warfare. Doctrine ranges from the more philosophical, such as the understanding of the nature of war, through to the purely procedural, such as gun drill or range safety. Doctrine forms part of the Command and Management Fundamental Input to Capability.

some of which relate to the HNA process. Army is attempting to address this backlog in doctrine through a range of approaches, including adjusting the doctrine hierarchy and the contracting of editorial services.

- 2.12 The ANAO found that units apply the Military Appreciation Process, with varying degrees of rigour, in developing subordinate directives. Central to the Military Appreciation Process are a series of risk identification and analysis processes that are used to inform key decisions. During fieldwork the ANAO noted that there was limited documentation of key decisions made, and of any risks identified, in the Military Appreciation Process. These decisions need to be adequately documented in a risk management framework, to clearly indicate capability issues identified in the planning phase, thereby providing a sounder basis for capability reporting processes.
- 2.13 The Army Management Framework, which encapsulates the Army Planning Process (see Table 2.1), has been developed to enable commanders at all levels to align assigned missions and tasks with resource allocations and performance targets. The Army Planning process spans a period of three years. A consequence of this duration is that, at a given point in time, units will be preparing for and undertaking activities in the current year; planning and preparing for activities in the following year; and attempting to identify and plan activities two years into the future. During this three-year period, the two-year posting cycle applied to Army personnel may result in those involved in initial planning phases not being within the unit during subsequent refinement and implementation phases.

Table 2.1
The annual Army planning process

Year	Month	Activity
1	March	Chief of Army Capability Directive issued
	April	Command tasking directives developed
	May to June	Unit and formation Training Activity and Resource Proposals developed
	July	Training Activity and Resource Proposals refined by Commands
2	August to March	Defence Management Financial Plan developed
	July to June	Organisational Performance Agreement prepared
	April to June	Commands Revise Tasking Directives based on allocated resources and formations and units finalise activity plans
3	July to June	In-year management of activity and resource consumption

Source: Defence documentation.

Recommendation No.1

2.14 The ANAO recommends that, in order to maintain the visibility of risks associated with the implementation of higher-level directives at the unit level, Army document key decisions made during the development of unit level directives within an overall risk management framework which should be regularly monitored and resourced.

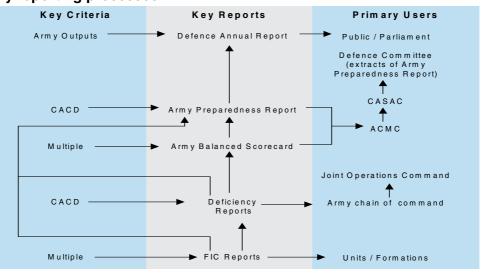
Defence response

2.15 Agreed.

Capability reporting

2.16 Army capability reporting processes are multi-layered; are subject to a number of criteria; encompass a broad range of issues; and service the needs of a variety of users (see Figure 2.4). Internal reporting on current capability is closely linked to the preparedness requirements set down in the CACD and attempts to relate the achievement of these requirements to the Army output structure. External reporting in the Defence Annual Report focuses on indicating performance against the Army Outputs, with linkages to classified preparedness requirements made through indications of achievement against a standard set of performance criteria associated with each output.

Figure 2.4
Army reporting processes



Source: Developed by ANAO from Defence documentation

Unit level reporting

- **2.17** Force elements are held at levels of preparedness commensurate with anticipated warning times. This is achieved by adjusting the amount of time it takes a unit to transition from lower levels of capability to the Operational Level of Capability (OLOC) through the allocation of resources. These resources are described in terms of the eight Fundamental Inputs to Capability (FIC). These FIC are detailed at Appendix 1 under the headings organisation; personnel; collective training; major systems; supplies; facilities; support; and command and management.
- 2.18 Regular unit level reporting to Brigade Headquarters is centred around the FIC construct. For each of the eight FIC, a comparison is made between the resources considered necessary to achieve directed preparedness levels to those actually available to the unit. Depending on the nature of the FIC and the capability issue being considered, FIC-based analysis has the capacity, assuming the underlying assumptions are accurate, to provide a reasonably objective numerically based analysis of performance and indication of capability. For example, the personnel, major systems (eg. tanks) and supplies FICs lend themselves to numerical analysis. However, for the command and management FIC, a combination of objective numerical analysis, overlayed with more subjective analysis of less tangible issues, may be necessary to provide a full appreciation of performance.
- 2.19 For the personnel FIC, reports provide numerical comparison between a Units Establishment MLOC entitlement and actual personnel strength. These reports also identify other issues impacting on the availability of personnel for deployment including: critical trades; Army Individual Readiness Notice compliance; the number of personnel deployed on operations; postings into and out of the unit; and disciplinary matters. Similar comparisons are made between a units actual major systems and supplies holding and the Unit Establishment MLOC entitlement. Some FIC reports also indicate the serviceability of equipment held by the unit, including equipment that cannot be made available for service within the unit's readiness requirements, and equipment that will, or can if required, be repaired within designated readiness timeframes.
- **2.20** FIC reports provide a basis for reporting a unit's capability and represent a sound basis for the assessment of readiness of a unit. While the broad framework for these reports is based around the FIC, the content, detail and format vary across units. Given that much of the detail in these reports can be expressed in numerical terms, the ANAO considers that standardisation of key aspects of these reports would enhance Army's ability to compare, aggregate and assess key capability issues to improve performance.

Identification of preparedness deficiencies

- **2.21** The key mechanism for a unit to identify preparedness issues is through the submission of a Deficiency Report, previously referred to as an On-Occurrence Preparedness Report (OOPRs).¹⁴ Deficiency Reports¹⁵ are a common reporting process used across Army, Navy, Air Force, and Joint Operations Command. Other than for a limited range of activities, Training Command units are not assigned preparedness requirements in the CACD. As a result, deficiencies in Training Command are not captured through the deficiency system.
- **2.22** Deficiency Reports are reviewed at the various levels of command within Army before being referred to Joint Operations Command as an identified deficiency. For example, a deficiency identified by a Brigade will be referred to the Divisional Headquarters. If the Divisional Headquarters cannot rectify the deficiency, it is referred to Land Headquarters. This continues up the chain of command to Army Headquarters.
- **2.23** This escalation and assessment of Deficiency reports can be a prolonged process and, as a consequence, deficiencies reported under the previous OOPR database were at risk of losing visibility in the intervening period. The OOPR database was decommissioned around the time that the ANAO completed fieldwork in mid 2004, and was replaced with the Defence Deficiency Database. The ANAO conducted a limited review of this database and noted that it provided improved visibility, at all levels of command, of deficiency issues captured within the system.
- **2.24** Contributing to the delay in the escalation of deficiencies are issues associated with inadequate levels of information provided by subordinate commands in support of Deficiency Reports submitted. In September 2004, the Defence Capability Development Group issued business rules for preparedness reporting. While these business rules focus on high level reporting, they involve the combination of FIC analysis overlayed on a risk management framework. The ANAO considers that Army could strengthen its reporting structures by incorporating similar mechanisms into Deficiency Reporting, at all levels, to expedite review and escalation processes.

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Deficiency Reports are a key reporting process within the Defence Preparedness Management System. The ANAO's Audit Report No.43 2003–04, *Defence Force Preparedness Management System* provides further information on the OOPR system (pages 79–81).

Deficiency Reports are intended to enable capability output managers to advise of specific deficiencies that inhibit a force elements capacity to deliver a capability or preparedness standard required to be met under JOCOPR or DLOC arrangements.

Internal reports

- **2.25** Army uses two key reports to inform senior Army and Defence Committees. These reports are the Army Balanced Scorecard and the Army Preparedness Report.
- **2.26** The Army Balanced Scorecard is based around the Army Strategy Map and is divided into six key criteria. These criteria encompass broad Army management issues, current capability, force development and modernisation, general Army administration, relationships with enabling organisations, and personnel management. These criteria are further divided into specific objectives against which assessments are made using a traffic light system.
- **2.27** Supporting the traffic light system are detailed reports on performance. The nature of the objective determines the frequency at which these reports are submitted together with the Army Balanced Scorecard. Reporting frequencies range from monthly, for those indicators linked to preparedness, to annually, in areas where fluctuations in performance are less common. When considered in conjunction with the detailed reports, the Army Balanced Scorecard provides a generally comprehensive high-level view of Army capability management activities and performance.
- **2.28** Many of the objectives within the Army Balanced Scorecard have set criteria to identify when a traffic light changes colour, although key objectives from a preparedness perspective do not have set criteria. Two of these objectives relate to the assessment of the readiness and sustainability of the combat ready force at DLOC. Army indicated that the assessment criteria for these performance indicators are based on Army Preparedness Report business rules.
- **2.29** Army Headquarters compile the Army Preparedness Report based on input provided by the commands. Prior to mid 2004, the Army Preparedness Report was divided into two parts: these were the Army Preparedness Report Summary; and the Output Readiness and Sustainability Report.¹⁶
- **2.30** The Output Readiness and Sustainability section of the Army Preparedness Report provides analysis of issues impacting on readiness and sustainability. Business rules for the assessment of output readiness involve both the numerical and empirical assessment by commands of a range of issues in relation to personnel, equipment, facilities, training and operating stock. For sustainability, the business rules identify that Defence is developing

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The Army Preparedness Report Summary is divided into two further sections, those being the Army Capability Summary and the Army Capability Assessment. Elements of these reports are presented to the Defence Committee. The Army Capability Assessment Component provides a traffic light analysis of performance by readiness bands and OPOs against specified preparedness requirements. This section also outlines associated Deficiency Reports, including remediation activities and agreed deficiencies as included in the Organisational Performance Agreement.

models for sustainment and, as a consequence, the criteria for the measurement of sustainability is subjective.

- **2.31** A key input into the readiness and sustainability considerations is the Deficiency Report process. Deficiency Reports, by focusing on identified inadequacies, do not provide a holistic view of capability at the output level. In acknowledgement of this issue, Army Headquarters conducts triennial output seminars with a focus on specific Army outputs. The purpose of output seminars is to provide Army Headquarters with a holistic view of capabilities at the output level, not available through either the Army Preparedness Report or the Deficiency Reports.¹⁷ Input to seminars and reports are based around the FIC construct.
- **2.32** At the time of the audit fieldwork, Army Headquarters had conducted five output seminars. The ANAO compared documentation provided as input to the most recent seminar to summary reports prepared by Army Headquarters. This revealed that, while the summary reports identified most issues in general terms, the magnitude of many of the significant issues, as evidenced in the input provided, was not incorporated in the Army Headquarters report. Similarly, while many of the specific issues were assigned to personnel for resolution or consideration, strategies to address broader capability issues, including intermediate risk mitigation approaches, were not identified.
- **2.33** Following the completion of audit fieldwork, Army finalised a further output seminar. Whilst the report produced for this output seminar was, to some extent, more comprehensive than those produced for previous seminars, the ANAO considers that a more systematic and numerical analysis of issues identified would improve the rigour and usefulness of this process. This type of information would also provide a more reliable quality assurance basis for internal reporting, broader Army capability management, and resource allocation processes.
- 2.34 The ANAO noted that the Army Preparedness Reports infrequently included analysis of outputs by FIC. In mid 2004, Army added a third part to the Army Preparedness Report. This part provides a FIC-based report on issues impacting on capability by output, based on input from units and formations forming part of the output. Army indicated that this process allows output managers to raise capability concerns for higher headquarters attention and action, if appropriate, and performs on a monthly basis what output seminars have done triennially. Arrangements for the compilation of part two have also changed to provide greater input to the content from Land

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¹⁷ These seminars involve key personnel from commands, formations and units that contribute to the output.

Command and Special Operations Command. The combination of the Defence Deficiency Database and changes to the Army Preparedness Report represent an improvement over previous reporting arrangements.

2.35 While the detail and accountability lines in the Army Preparedness Report have improved during the course of the audit, the business rules for assessing readiness and sustainability within Army continue to be based on largely subjective criteria. The ANAO considers that the aggregation of numerical FIC based data up to the output level, overlayed with an appropriate risk management framework, would enhance Army's capacity to identify and address capability issues, as well as improve the rigour and usefulness of reporting.

Recommendation No.2

- **2.36** The ANAO recommends that, in order to provide increased objectivity and improve overall reliability of the assessment and reporting of preparedness, Army:
- (a) routinely aggregate key aspects of unit level Fundamental Inputs to Capability reporting up to the output level; and
- (b) assess the impact of deficiencies identified through this reporting process within an overall capability risk management framework.

Defence response

2.37 Agreed.

External reporting

- **2.38** External reporting of Army capability, in the Defence Annual Report, is centred on the structurally based Army outputs. These outputs have evolved over several years in the Defence PBS. In 2003–04 Defence introduced a new outcome and output structure. Army contributes to the achievement of government defence and security outcomes by providing capabilities through 10 outputs (see Table 1.1).
- **2.39** In August 2000, the then Minister for Defence directed the Secretary to establish an independent capacity to review Defence outputs. The Directorate of Output Evaluations was established in the Defence Improvement Division to conduct these reviews. The purpose of Output Evaluations is to provide the Minister with independent assurance of the effectiveness and efficiency of

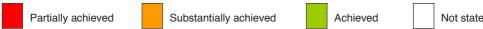
The ANAO Audit Report No.43 2003–04, Defence Force Preparedness Management Systems made a series of findings in relation to preparedness reporting across Defence. These included different practices, conventions, and, to some extent, understandings of the meaning of preparedness, and inadequate policy surrounding sustainment across Defence.

capability delivery by output, and confirm if planned activities are aligned with Defence guidance. At the time of the audit fieldwork, three Army Outputs had been evaluated through this process, with further evaluations scheduled. The ANAO reviewed output evaluations conducted on relevant Army Outputs and noted that they provide a generally comprehensive coverage of output capabilities.

- **2.40** The 2002–03 Defence Annual Report provided two qualitative performance indicators and one quantitative performance indicator for each Army Output (see Table 2.2). The two qualitative performance indicators are:
- to achieve level of preparedness directed by the Chief of the Defence Force for military response options with a warning time of less than 12 months; and
- to achieve a level of training that maintains core skills and professional standards across all warfare areas.
- **2.41** For all but Output 3.4, Capability for Army Aviation Operations, the quantitative indicators were based on the number and type of units assigned to the output. The quantitative performance indicator for Output 3.4 is based on the flying hours of the various aircraft used in the delivery of that output. Against each performance indicator, the Army provides a statement of achievement, those being partially achieved, substantially achieved and achieved.
- **2.42** The first qualitative indicator, which relates to achievement of required preparedness, is based around documentation that incorporates the OPOs, DLOC arrangements, and a range of military judgements. As an indicator of performance, its relevance across outputs is variable depending on the readiness level assigned to the constituent units.
- 2.43 For the quantitative indicator, the 2002–03 Defence Annual Report gives a general description of the capability provided by units aligned to outputs. To an extent, the same descriptors of unit capability are used for units allocated to various outputs. As personnel and equipment entitlements are largely determined in line with JOCOPR requirements, these general descriptors are of limited benefit from a capability indication and comparability perspective. For example, Output 3.3, Capability for Light Infantry Operations; and Output 3.10, Protective Operations, both incorporate units described as infantry battalions. The infantry battalions within Output 3.3 comprise Regular highly trained and equipped personnel, while the infantry battalions in Output 3.10 comprise predominantly Reserve personnel with limited capacity to undertake training and gain access to equipment.

Table 2.2 Army Output statements of achievement in Defence Annual Report: 2001-02, 2002-03 and 2003-04

Army Output	Performance indicator	2001–02	2002–03	2003–04
Output 1	Preparedness			
Special	Training			
Operations	Output unit composition			
Output 2	Preparedness			
Mechanised	Training			
Operations	Output unit composition			
Output 3	Preparedness			
Light	Training			
Infantry	Output unit composition			
Output 4	Preparedness			
Army	Training			
Aviation	Flying Hours			
Output 5	Preparedness			
Ground Based	Training			
Air Defence	Output unit composition			
Output 6	Preparedness			
Combat Support	Training			
Operations	Output unit composition			
Output 7	Preparedness			
Regional	Training			
Surveillance	Output unit composition			
Output 8	Preparedness			
Logistics	Training			
Support	Output unit composition			
Output 9	Preparedness			
Motorised	Training			
Operations	Output unit composition	Regular units	Regular units	Regular units
		Reserve units	Reserve units	Reserve units
Output 10	Preparedness			
Protective	Training			
Operations	Output unit composition			
Partially achieve	d Substantially a	chieved	Achieved	Not stated



Source: Defence Annual Reports for 2001–02, 2002–03 and 2003–04

- **2.44** Four recurring themes have featured, to varying degrees, in the descriptive text for all three performance indicators over recent Defence annual reports. These are personnel deficiencies in key trades, ammunition shortages, equipment shortages and serviceability issues, and the impact of undertaking and supporting operations.
- 2.45 A comparison between the statements of achievement contained in the Defence Annual reports for 2001–02 through to 2002–03 indicates that, of the 30 statements of achievement for Army outputs, eight indicated an improvement; 21 indicated no change; and one indicated a decline in capability (see Table 2.2). For 2002–03, the Defence Annual Report indicated that Army achieved the required performance criteria for 27 per cent of the performance indicators; substantially achieved against 45 per cent of the performance indicators; and partially achieved against the remaining 28 per cent. Performance indicators in the 2003–04 Defence Annual report were largely unchanged to those included in the 2002–03 Report.
- **2.46** Army was unable to demonstrate an audit trail to show the process used to develop and support the veracity of the statements of achievement for each output contained in the 2002–03 Defence Annual Report. Army advised ANAO of the process used to develop the statements of achievement. The ANAO undertook a similar process, but was unable to reconcile the information used by Army to stated levels of achievement for certain performance indicators for Output 3.2, Mechanised Operations; Output 3.3, Light Infantry Operations; Output 3.4, Army Aviation Operations; Output 3.5, Ground Based Air Defence; and Output 3.8, Logistics Support.
- **2.47** Similarly, issues identified in output evaluations conducted towards the end of 2002–03 and early in 2003–04, also tend to indicate that the statements of achievement in the Annual Report are imprecise. An output seminar conducted by Army in mid 2003, and long-term capability issues identified by an early 2004 output seminar, are also supportive of this observation. The ANAO notes that changes to the Army Preparedness Report implemented in mid-2004 should enhance Army's capacity to develop statements of achievement for performance indicators at the output level for Defence Annual Reports from 2004–05 onwards.

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The 2003–04 Defence Annual Report was released on 18 November 2004, several months after fieldwork was completed on this audit. As a consequence statements of achievement contained in that report were not reviewed as part of this audit.

Recommendation No.3

2.48 The ANAO recommends that, in order to improve the reliability of indicators of performance provided in the Defence Annual Report, Army develop suitable quantifiable measures for each output and performance indicator, where possible, as the basis for supporting statements of achievement.

Defence Response

2.49 Agreed.

3. Managing Current Capability

This chapter outlines processes and issues associated with the management of current capability.

Force structure

- 3.1 The Army Unit Establishment Document (previously referred to as the Single Entitlement Document) provides the structure of Army units in terms of personnel and equipment. The Unit Establishment Document is reviewed and updated on a rolling three-year cycle, which is designed to structure the Army in accordance with strategic guidance. Unit Establishment Reviews are conducted by a team endorsed by Army Headquarters and involve representatives from intermediate commands and the unit being reviewed. This process is subject to a predetermined set of business rules and considerations. Once complete, the personnel aspects of the Unit Establishment are loaded into the PMKeyS database.
- 3.2 The outcome of the Unit Establishment Review process is the identification of a unit's MLOC and OLOC personnel and equipment entitlement. The OLOC requirements for personnel and equipment are based on mid intensity warfighting on a sustained basis. The absence of mobilisation plans for Land Command and Special Operations Command resulted in the inability to create an OLOC structure, and thereby identify the surge requirement, for Training Command. In the CACD for 2003, Army Headquarters was tasked with developing the Army Mobilisation Plan to provide a conceptual and practical framework for Army mobilisation. Army has indicated that the development of an Army Mobilisation Plan is predicated on the provision of an Australian Defence Force Mobilisation Plan.
- **3.3** The model used to determine the Unit Establishment MLOC, which equates to how a unit should be resourced in accordance with strategic guidance, is the Combat Force Sustainment Model for Land Command Units. The Gross Training Requirement (GTR) is used for Training Command units.
- 3.4 The Combat Force Sustainment Model was developed in line with the White Paper 2000 requirement to be able to deploy a brigade for extended periods, while maintaining a battalion for deployment elsewhere. The 2002–03 Defence Annual Report outlined the intent to develop an Army Sustainment Model. The Army Sustainment Model is planned to integrate the Combat Force Sustainment Model with a yet to be developed Training Force Sustainment Model. It is intended to address inadequacies in the Combat Force Sustainment Model, primarily in terms of meeting White Paper 2000 sustainment requirements. The Defence PBS for 2004–05 indicates that the Army

Sustainment Model remains under development.²⁰ Army has linked development of the Army Sustainment Model to the HNA Review.

Prioritisation of personnel allocations

- 3.5 The APEP provides detailed guidance on Army's personnel establishment requirements and workforce distribution, in accordance with financial planning guidance and capability requirements. The APEP provides staffing priorities by Army Capability outputs. Unit priorities are determined by the commands, cognisant of direction provided by Army Headquarters through the Army Personnel Establishment Working Group, and confirmed by the ACMC. These priorities are used to inform the Posting Planning Cycle and are intended to reflect the CACD requirements in terms of tasks and training throughput and, consequently, may result in the modification of DLOC agreements as necessary.
- 3.6 APEP priorities are determined based on a tiered criterion, with units on deployment given the highest priority and units held at lower readiness afforded the lowest priority. Percentages associated with these priorities are expressed in terms of the proportion each unit's posted personnel strength represents of the Unit Establishment MLOC requirements.
- 3.7 Overall, the APEP for 2004–05 to 2014–15 provides a comparison between the authorised average funded strength and the current average funded strength, plus DLOC personnel deficiencies and personnel required for the planned introduction into service of new capabilities.²¹ This process identified existing personnel deficiencies and forecasts increasing personnel shortfalls out to 2010.²²

Preparedness

3.8 Preparedness is the measurement of how ready and sustainable Army is to undertake military operations. Readiness refers to the availability and proficiency of personnel, the availability and serviceability of equipment, and the availability of consumables to sustain forces through the operational viability period. Sustainability is the ability to continue to conduct operations after the operational viability period and is measured in terms of personnel, equipment and consumables necessary to complete the assigned operational tasks.

Portfolio Budget Statements 2004–05 – Defence Portfolio. (p. 145).

In mid-2003, an Army review of the outcome of the first Unit Establishment Review cycle conducted between 2000 and 2003 (the 2003 Force Structure Review) identified a range of issues associated with the existing Army force structure. Many of these issues are reflected in the APEP for 2004–05 to 2014–15 and coincide with other current capability issues identified during audit fieldwork.

Personnel projections are held at a constant level for the years 2009–10 to 2014-15 in the APEP 2004–05 to 2014–15.

Personnel requirements

3.9 The White Paper 2000 indicated the intent to increase personnel numbers in the Defence Force. In the period July 2000 to July 2004, the actual number of Regular Army personnel increased by 1291 or 5.3 per cent. During that same period, the actual number of Reserve personnel fell by 1021 or 5.7 per cent. The increase in Regular personnel numbers since 2000 followed a period of decline from 1991. The decline in Reserves has been ongoing, with a period of accelerated decline in the late 1990s (see Table 3.1). ²³

Table 3.1
Service category personnel numbers since 1991

Service category	1991	1994	1997	2000	2004
Regular	31 143	26 347	25 885	24 164	25 455
Reserves	26 485	25 304	24 880	17 903	16 882
Total	57 628	51 651	50 765	42 067	42,337

Source: Defence Documentation.

3.10 The White Paper 2000 also indicated the intent to maintain six infantry battalion groups²⁴ of approximately 1000 personnel at a readiness notice of 30 to 90 days. In the 2003–04 Defence PBS, Army changed that number to five infantry battalion groups²⁵ and one commando unit at 90 days readiness or less.²⁶ Army attributed this change to the Government's direction to raise the Tactical Assault Group (East) counter terrorism capability and to establish an additional commando company within 4th Battalion, Royal Australian Regiment (Commando). These capabilities are within Special Operations Command.

ANAO Audit Report No.25 2004–05 Army Capability Assurance Processes

ANAO Audit Report No.33 2000–01, Australian Defence Force Reserves provides detailed analysis of Reserve recruitment and retention including issues contributing to the accelerated decline commencing in 1998–99.

The Australian Defence Capability Fact Book (April 2003) states: 'The basic building block of a light capability is the Battalion Group which would be based around a light infantry battalion supported by APC's [Armoured Personnel Carriers], artillery, engineers and combat service support.' (p. 18).

Of the five high readiness infantry battalions, three are within 3rd Brigade being the 1st, 2nd and 3rd Battalions of the Royal Australian Regiment (RAR). The remaining two infantry battalions are the mechanised infantry battalion, 5/7 RAR and the motorised infantry battalion, 6 RAR. These battalions are within the 1st and 7th Brigade respectively. The *Australian Defence Force Capability Fact Book* (April 2003) indicates that 1 and 2 RAR are staffed to approximately 700 soldiers while 3 RAR, a parachute battalion, is staffed to approximately 500 soldiers. (p. 18).

²⁶ Portfolio Budget Statements 2004–05 – Defence Portfolio, (p. 144).

- **3.11** To meet the White Paper 2000 guidance, infantry battalion groups would require mounting and sustainment support from logistics elements within Army.²⁷ The Logistics Support Force provides close and general support²⁸ to deployed forces including transport and distribution, supply support, recovery and maintenance support, health support, communication, and ancillary personnel support.
- 3.12 The White Paper 2000 indicated that logistics support to deployed forces would be enhanced by increasing the preparedness of units in the Logistics Support Force.²⁹ The 2001–02 Defence Annual Report noted that the Logistics Support Force had been enhanced by the addition of 642 regular positions. Subsequently, the 2002–03 Defence Annual Report indicated that the Logistics Support Force Output had insufficient personnel to meet the likely tasks required of it, and that shortages of personnel in critical trades limited its capacity to meet preparedness requirements.³⁰
- **3.13** The APEP for 2004–14 indicated significant personnel deficiencies within the Logistics Support Force. ANAO is advised that these issues are being addressed, in part, through Reserve augmentation. Similar personnel issues apply to logistics elements embedded within other Army formations and units that provide support to operations. Army has indicated the intent to address these deficiencies during 2005–06.
- 3.14 In addition to the Logistics Support Output, the ANAO considered the relationship between the Unit Establishment MLOC and posted strength for Army units within the Mechanised Operations, Light Infantry and Army Aviation Outputs. This process identified varying degrees of MLOC personnel deficiencies across these outputs. The 2003 Force Structure Review supports this conclusion by identifying the inability of Army to staff units to MLOC. Additionally, a range of other issues impact on the readiness of personnel within these outputs, including:
- operational deployment and reconstitution following deployment;

Australian Defence Doctrine Publication 4.2–Logistic Support to Operations states the mission of logistics is to generate and sustain operational preparedness of the force and to support the employment of those forces to achieve a designated outcome, which may vary across the conflict spectrum.

Close support is a tailored logistic capability to provide responsiveness and balance to a formation and links the manoeuvre force to general support. General support is the capabilities, resources and assets that require deployable infrastructure in order to provide a critical mass of support and services to the entire force.

The ANAO Audit Report No.38 2001–02, Audit Management of ADF Deployments to East Timor identified that, prior to the commencement of the East Timor deployment, the logistics elements had been downsized and outsourced over more than a decade.

³⁰ 2002–03 Defence Annual Report, (p. 149).

- inability to achieve high levels of compliance with Army Individual Readiness Notice requirements;³¹
- personnel about to be discharged, promoted or posted to other units; and
- disciplinary matters.
- 3.15 Army documentation indicates that MLOC personnel deficiencies could be removed through an organisational restructure. This suggests that the Unit Establishment Review Process may be overstating personnel requirements to meet the Combat Force Sustainment Model. Army has also identified issues associated with the allocation of personnel to certain units, through the first cycle of the Unit Establishment Review process. It is planned to address these issues through the second cycle of the Unit Establishment Review. Army also acknowledges that the Combat Force Sustainment Model requires further development and does not incorporate Training Command.
- **3.16** The HNA Review, which incorporates the development of related Unit Establishment documents based around the Army Sustainment Model, is the process by which Army intends to address these issues. Initial indications are that the HNA Unit Establishment process is also identifying personnel deficiencies and is reliant on Reserve augmentation.

Army Reserves roles and tasks

3.17 The Fundamentals of Land Warfare indicates the importance of maintaining the Combat Force Reserve at appropriate levels of readiness, to enable the Deployable Force to adapt in a timely manner to changes in the strategic environment or sustain lengthy operations. The White Paper 2000 outlined the intention to re-role the Army Reserves, from providing the basis for expansion of Army, to providing fully trained personnel to support frontline forces deployed on operations.

3.18 In line with the White Paper 2000 requirements, the 2nd Division Reserve Roles and Tasks Study undertaken in 2000, identified a range of options for how the Reserves may be employed with an emphasis on augmentation, reinforcement, and rotation roles.³² The 2000–01 Defence Annual

A range of issues impact on Army Individual Readiness Notice compliance levels. These include, amongst others, inaccuracies in the PMKeyS system, general administrative issues, access to medical and dental personnel and facilities, access to weapons simulators and firing ranges, and injuries. The ANAO Audit Report No.26 1999–2000 Army Individual Readiness Notice and Audit Report No.45 2003–04, Army Individual Readiness Notice Follow Up Audit provides detailed analysis of AIRN related issues.

issue

ANAO Audit Report No.33 2000–01, *Australian Defence Force Reserves* outlines issues impacting on the effectiveness of the Army Reserve prior to the completion of the 2000, 2nd Division Reserve Roles and Task Study. That audit recommended that, in order to improve the effectiveness of Reserves and to complement the capabilities of the full time force, Army rationalise the Army Reserve Force Structure to a level that is sustainable in the long term, ensuring that it is based on the Army concept of operations, the outcomes of the Roles and Task Study and the resources available to the Reserves.

Report noted that Army would change the focus of the Reserves from a mobilisation and expansion role to one that contributes to the support and sustainment of contemporary ADF operations. That report indicated that Reserve units would be allocated their new roles and restructured by December 2003.

- 3.19 In May 2003, the Chief of the Defence Force issued a Directive to all Service Chiefs to raise the Reserve Response Force. The role of the Reserve Response Force is to conduct protective and security operations within Australia and to support Defence assistance to the civil authority. The RRF will comprise seven companies of deployable personnel by 2008. These companies will be within the six Reserve brigades and 1 Commando Regiment. When fully established the Reserve Response Force will represent approximately six per cent of the current Army Reserve.³³ The six units to be established within Output 3.10-Protective Operations, will be the only force elements within that Output that have a readiness notice of less than 12 months.
- 3.20 The 2001–02 Defence Annual Report indicated that Reserve units with a preparedness requirement of less than 360 days, such as medical support units (Output 3.8) and commando units (Output 3.1), were removed from the Protective Operations output and attributed to other outputs. Table 3.1 identifies the distribution of reserve personnel across outputs. Nearly three-quarters of Reserve personnel continue to serve within units assigned to Output 3.9, which comprises the integrated 7th Brigade, and Output 3.10, which comprises the Reserve formation of 2nd Division and 11th Brigade. Almost seven per cent of the Reserves are attributed to Output 3.8, Operational Logistics Support, which is an area of Army that has relied on Reserve augmentation for operational deployments.
- **3.21** Between July 2000 and March 2004, approximately 2000³⁴ Reserves were deployed on operations for varying durations. These included East Timor (1000 personnel) and Bougainville (500 personnel). Roles of Reservists on operations included specialist areas such as the medical professions and logistics. A further 1267 Reserve personnel were deployed to Malaysia as part of three month rotations of Rifle Company Butterworth between January 2000 and February 2004.

Based on total reserve figures provided in 2002–03 Defence Annual Report, Table 5.1.

Army has indicated that there is no central repository that is able to provide these figures, therefore this figure represents an estimate provided by Army. The figure does not include Reserve personnel that have transferred to the Regular force and subsequently deployed on operations. No analysis has been undertaken to determine the extent that these figures comprise multiple deployments of the same personnel.

Table 3.2
Reserve personnel distribution across outputs

Output	Percentage of total Reserve personnel
3.1-Special Operations Command	3.13
3.2-Mechanised Operations (1st Brigade)	1.81
3.3-Light Infantry Operations (3rd Brigade)	0.05
3.4-Army Aviation Operations (16th (Aviation) Brigade)	0.40
3.5-Ground-Based Air Defence (16th Air Defence Regiment)	0.22
3.6-Combat Support Operations	8.06
3.7-Regional Surveillance (3 Regional Force Surveillance Units)	7.32
3.8-Operational Logistics Support (Logistics Support Force)	6.95
3.9-Motorised Infantry Operations (7th Brigade)	14.57
3.10-Protective Operations (2nd Division and 11th Brigade)	57.51
Total	100.00

Source: Defence documentation.

3.22 In November 2002, a company of 90 Reservists was deployed on operations in East Timor. The planning for this deployment commenced in November 2001, and involved an extensive selection process across two Reserve Brigades, followed by significant training and evaluation processes. A variety of tasks were undertaken by various elements of the company while on deployment, although security and static protection were the primary roles fulfilled. The post operational report indicates that linkages between Reserve force elements and preparedness directives need to be improved to provide appropriately organised and structured Reserve formations.

3.23 Army documentation identifies that Reserves have difficulty in completing individual employment training, and that this has implications for Reserve retention. Contributing to this issue is the large proportion of Reserves who do not parade for duty regularly (see Table 3.3). For the period 1999–2000 to 2002–03, Reserve personnel parading for duty fewer than 16 days per annum have consistently been in excess of 35 per cent of the Reserve personnel.³⁵ On average, just over one-fifth of Reserve personnel have not paraded for duty at all within the year since 1998–99.

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Reasons cited by Army as contributing to the size of this figure includes personnel who have recently enlisted, about to discharge, or personnel classified as non-effective. Other reasons identified include access to and availability for training courses, individual unsuitable for Reserve service, and management issues.

Table 3.3

Reserve parading statistics as a proportion of total days paraded: 1998–99 to 2002–03

Number of days paraded for duty	1998–99 %	1999–00 %	2000–01 %	2001–02 %	2002–03 %	Average %
0 days	18.6	20.9	22.4	22.2	22.9	21.4
1 to 15 days	15.5	16.1	17.7	16.9	14.1	16.1
16 to 30 days	13.3	13.2	12.5	11.6	11.6	12.4
31 to 60 days	28.5	26.8	23.6	23.4	24.1	25.3
More than 60 days	24.3	23.1	23.8	25.8	27.4	24.9

Note: The total number of days Reserve personnel paraded for duty declined by 26 per cent between 1998–99 and 2002–03. Figures may not add to 100 per cent due to rounding.

Source: Defence documentation.

3.24 The 2003 Force Structure Review identified the inability of the Reserves to address the OLOC/MLOC gap in Regular units, particularly in relation to trained personnel in technical trades. In August 2003, the Chief of Army commissioned a further Reserves Roles and Tasks Study. The purpose of this study is to plan the effective transition of the Reserves to the 2012 HNA. The subsequent submission to CASAC identified that previous reviews have identified the lack of clarity and relevance of Reserve roles and tasks, and that this lack of clarity had contributed to a slow degradation of capability. Remediation processes resulting from these reviews have not been successful in addressing this decline in capability (see also Chapter 5).

Recommendation No.4

- **3.25** The ANAO recommends that, to improve the level of benefit that the Reserves contribute to Army capability, Army:
- (a) identify and assign a specific set of tasks that can be fulfilled by Reserve units within existing funding and capabilities; and
- (b) develop incremental enhancements to the capability of the Reserves for other tasks.

Defence response

3.26 Agreed.

Trade structural issues

- **3.27** Defence annual reports since 2000–01 have stated that deficiencies of personnel in key trades have impacted adversely on Army's capacity to achieve performance targets. A range of issues impact on these trades, including the trade structure within Army, retention, recruitment, and broader Australian trade demographic issues. The 2003 Force Structure Review identified that the first Unit Establishment cycle had resolved sustainability in 117 trades, but that 22 other trades remained unsustainable due to an insufficient establishment pool at lower ranks to provide a promotion base for higher ranks.
- **3.28** Army, through the Army Personnel Working Group, closely monitors critical trades. Strategies employed to remediate critical trade shortfalls include trade restructures; targeted recruitment; and submissions to the Defence Force Remuneration Tribunal to remove remuneration anomalies that adversely impact on trade structure.

Shortfalls in officer rank structure

- 3.29 The 2003 Force Structure Review indicated that significant vacancies exist at the Captain (12.4 per cent) and Major (16.5 per cent) ranks. These are attributable to a rank structure issue identified as far back as the 1960s, and relates to an insufficient number of Lieutenant positions to provide a sustainable promotion pool for the rank of Captain.³⁶
- **3.30** Processes in place to address the rank structure issue include direct appointments of personnel with desired skills, transfers from the Reserves and other services, along with lateral appointments of personnel serving in other countries' military. In 2003–04, recruitment processes did not achieve set targets, with the primary reason being cited as ineffective advertising. Recruitment of Officers through the Australian Defence Force Academy and The Royal Military College between 1999–2000 and 2002–03 failed to achieve targets.
- **3.31** In July 2003, the ACMC agreed to a restructure of the officer ranks by reducing the Officer Corp by 300 positions and down ranking 115 Captain positions to Lieutenant. Army indicated that the second cycle of the Army Establishment Review process is planned to address the officer rank sustainability issue.

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The total Lieutenant establishment is approximately 44 per cent of the Captain establishment.

Availability of equipment and ordnance

Explosive ordnance

- **3.32** The 2001–02 Defence Annual Report identified that shortfalls in ammunition were limiting the capacity to conduct training and meet preparedness requirements. The report identified that these issues would be addressed through the Army Ammunition Study and the ADF Explosive Ordnance Study. The Army Ammunition Study was endorsed by CASAC in December 2002. The study attributed shortfalls in specific ammunition natures to technical, supply chain or lack of capital investment in stock levels in the past. The study resulted in an endorsed set of training ammunition requirements which were provided to the Joint Ammunition Logistics Organisation.
- 3.33 The ADF Explosive Ordnance Study was informed by the Army Ammunition Study and used a defined set of Australian Illustrative Planning Scenarios to identify reserve stock holding requirements for explosive ordnance.³⁷ The 2003–04 Defence PBS indicated that the Army Ammunition and Explosive Ordnance Studies have identified the quantum of ammunition deficiencies and indicated that the DMFP had foreshadowed funding to commence remediation to better align ammunition stockholdings with preparedness requirements. The 2004–05 Defence PBS indicated that additional funding for explosive ordnance was benefiting Army in the short-term.
- **3.34** The DCP 2004–14 indicates that replenishment of this ammunition war stock is to be achieved though Project JP 2085—Explosive Ordnance Warstock. The project is split into three phases with planned delivery spanning the period from 2005 to 2014. 38

Allocation of equipment

3.35 During 1999–2000, Army redistributed equipment from low readiness units, loan pools and attrition stocks to high readiness units to meet operational requirements, particularly in relation to East Timor. The 2001–02 ANAO audit report on the ADF deployments to East Timor identified that backlogs of equipment maintenance during the operation were a consistent problem. The audit identified four primary causes of the backlogs including: insufficient mechanical maintenance personnel, ageing vehicle fleets, low levels of unit stockholding at deployment, and slow logistic supply of parts. The audit noted that, while some of the maintenance backlog was non-essential in nature, the number of urgent repairs that could not be carried out was

Australian Illustrative Planning Scenarios have been endorsed by the Chief of Service Committee to provide scenarios for planning, preparedness, sustainment and capability development.

³⁸ Defence Capability Plan 2004–14, (p. 105).

sufficient to be mentioned as a major concern in post-operational reports submitted by ADF personnel serving in East Timor.³⁹ A post-operation report for the deployment to the Solomon Islands identified a difficulty in prioritising the movement of goods and equipment, with a persistent over-prioritisation of demands within the logistics system.

3.36 The Fundamentals of Land Warfare Doctrine categorises East Timor as a small scale, low intensity, long duration operation. The 1991 Gulf Coalition is described as a medium scale, high intensity, short duration operation. Defence Doctrine indicates that sustainment of a force is influenced by a number of factors, including: threat levels, available resources, priorities, risk, and the four major factors of distance, destination, demand and duration. Doctrine indicates a direct relationship between demand and intensity by stating that intensity can be measured in terms of the rate of resource consumption. ⁴⁰ This suggests that, in a higher intensity conflict, the serviceability of equipment would degenerate more rapidly than was experienced in East Timor.

3.37 The 2003 Force Structure Review identified that the Unit Establishments did not accurately reflect the requirement for equipment against the CACD, resulting in higher readiness units being allocated equipment as a loan entitlement rather than as a full-time entitlement. The report identified that there were insufficient funds to redistribute equipment from low readiness to high readiness units. This issue was considered by the ACMC in July 2003, which agreed to the redistribution of equipment to higher readiness units, subject to the implications for lower readiness being assessed and cost identified.

3.38 In July 2003, the ACMC also agreed to the development of the AEEP, along the lines of the APEP. The 2004–05 Defence PBS notes that Army is continuing the development of the AEEP. Army has stated that the AEEP is being used to progressively reduce loan entitlement and increase the full-time entitlement to equipment of high readiness units in order to meet CACD requirements. This redistribution is impacting on the availability of equipment to, and capability of, low readiness units. Army advised that an AEEP database was presented to ACMC in late 2004 and that the AEEP will be used to inform the unit entitlement review process.

ANAO Audit Report No.38 2001–02, Management of the Australian Defence Force Deployments to East Timor, (p. 72).

Land Warfare Doctrine No. 1, The Fundamentals of Land Warfare 2002, (p. 35).

⁴¹ A unit's equipment entitlement may be met either through full-time entitlement or loan entitlement, with priority given to higher readiness units from a full time entitlement perspective.

- **3.39** The 2003 Force Structure Review identified that there was insufficient funding to support equipment and fleet maintenance. Army documentation indicates that vehicles are in varying degrees of repair, with significant proportions of the fleet either not available for use or subject to restricted use limitations. Audits conducted of materiel maintenance in Army by the DMO, indicate a significant backlog in equipment maintenance. The audit of a 1st Division unit in mid 2003 indicated that only four per cent of the vehicles sampled by the audit were considered fully functional, and only 22 per cent of all equipment sampled was regarded as fully functional.
- **3.40** Contributing to serviceability issues are indications that the posting cycle may exacerbate the impact of these maintenance deficiencies, as incumbents to positions may require significant training over the posting period to become fully effective. Army advised that the current high level of military trade vacancies is a contributing factor to poor equipment serviceability. Civilian contractors are currently being used, as a short-term measure, to reduce the impacts of these vacancies.

General service vehicles

- **3.41** Army documentation indicates that there are insufficient quantities of general service vehicles to meet full-time or loan entitlements. The 1998–99 ANAO audit report on general service vehicles identified this issue, and noted the concern that Units Establishment documentation [at that time] may overstate the extent of this deficiency. The stable of the concern that Units Establishment documentation are that time] may overstate the extent of this deficiency.
- **3.42** Contributing to the unavailability of general service vehicles is the ageing fleet, which has resulted in increased average repair times. The 2002–03 Defence Annual Report stated that maintenance issues for general service vehicles are being addressed. ANAO fieldwork identified that serviceability remains an issue. The 2004–05 Defence PBS indicates that additional funding to support logistics shortfalls for the general service vehicles was benefiting Army in the short-term.
- 3.43 The 2004–14 DCP outlines that Project Land 121, Phase 3A, is scheduled to commence replacing Army field vehicles, with higher readiness units to be equipped first. Phase 3B will provide replacement vehicles for the remainder of Defence. The April 2004 Army Balanced Scorecard indicated that Phase 3A was experiencing difficulties from a staffing perspective. At that time, Project Land 121, Phase 2A had not been implemented and was experiencing difficulties in terms of staffing and schedule.

⁴² General service vehicles are unarmoured wheeled vehicles, including trailers and motorcycles, used to move equipment, supplies and personnel.

⁴³ ANAO Audit Report No.41 1998–99, *General Service Vehicles*, (p. 13).

Defence Capability Plan 2004–14, (p. 132).

Recommendation No.5

3.44 The ANAO recommends that, in order to improve the overall serviceability of equipment, Army, in conjunction with the Defence Materiel Organisation, monitor and review equipment maintenance and monitoring arrangements to progressively address serviceability issues in line with capability priorities.

Defence response

3.45 Agreed.

4. Training Capability

This chapter outlines processes used by Army to determine the nature of training conducted, the management of delivery of training, and the assessment of training outcome.

Training management framework

- **4.1** The various levels of command within Army develop training plans in accordance with relevant directives and planned major exercises. Training can be delineated into two categories, individual⁴⁵ and collective training.⁴⁶
- 4.2 Training directives vary in content and form depending on the level of command issuing the directive, the roles performed, and readiness requirements of units subject to the directive. The 1st Division Training Directive for 2003–04 focuses on developing skills suitable for Manoeuvre Operations in a Littoral Environment, with an emphasis on urban operations. In line with this directive, the Brigades within the Division are assigned roles consistent with the capabilities to be provided in a combined arms sense. These roles inform the development of brigade level Concepts of Operations which, in turn, identify the tasks to be undertaken by units within the brigade. The Concepts of Operations, combined with CACD requirements, inform the nature and scope of collective training conducted.
- 4.3 At the unit level, these documents are translated into training directives encompassing the spectrum of individual and collective training activities, including tactical tasks. These tactical tasks are not standardised across directives, with differing terminology used to describe similar tasks and varying task structures applied across units.
- 4.4 The Australian Defence Force Warfare Centre, which is responsible for the management of the Program of Major Service Activities, is developing the Australian Joint Essential Tasks to provide a joint context to evaluate the

Individual training is captured within the Personnel FIC. Individual training is intended to provide Army personnel with the knowledge, skills and attitudes to perform their duties in both peacetime and war. Individual training covers a variety of subjects including, amongst others, individual readiness; physical training; individual weapons; trade; leadership; occupational health and safety training; and specific military skills.

Collective training is a FIC in itself, and ranges from sub-unit level to major joint and combined exercises. The nature and extent of collective training are determined by readiness and roles defined in planning directives. For example, the annual training plan for 1st Brigade, which is a mechanised brigade comprising higher readiness units, outlines a training continuum commencing with individual training, sequencing through to increasingly complex collective training which culminates in a major exercise. In contrast, the training plan for 2nd Division for 2003–04, which comprises Reserve brigades predominantly held at low readiness, emphasises attending promotion courses and achieving basic training including trade qualifications. For 2nd Division, collective training is capped at the sub-unit level for units other than those within the Reserve Response Force.

Program of Major Service Activities. The Australian Defence Force Warfare Centre indicated that for combined exercises, analysis of the commonality between Australian Joint Essential Tasks and the tasks lists of the other countries participating in the exercise was occurring to provide combined task lists as a basis for activity assessment. ANAO fieldwork noted that further work was required to adequately identify the relationship between Australian Joint Essential Tasks and Army tasks at the operational and, particularly, the tactical level.

Training Activity and Resource Proposals

- 4.5 The Training Activity and Resource Proposal (TARP) process is a key phase of the Army Planning Process and, as such, provides input into key documents, including the DMFP and the Chief of Army's Organisational Performance Agreement. The TARP process involves four phases including: the development and cascading of directives through commands; the identification of resource requirements and the preparation of impact statements where resources are considered insufficient; the assessment and approval of resource and performance requirements and the allocation of resources across commands and; the conduct and evaluation of activities including adjustment to reflect changed circumstances.
- 4.6 The TARP process is administered through the ACMS.⁴⁷ The ACMS is being developed in two phases. Phase 1 includes an application support module and a collective training module, comprising a collective training planning tool and a collective training in-year management tool. Phase 2 includes a Training Command individual training tool and an Army Headquarters capability management module. The estimated development cost for ACMS is \$11.45 million to March 2006, with an estimated ongoing annual support and maintenance cost of \$0.5 million.
- 4.7 ACMS development commenced in September 1999 and was initially developed as a rapidly developed prototype. This approach required three different prototypes, with the first two failing to fulfil key requirements. In mid 2003, Army documentation indicated that the ACMS would be developed using formal systems lifecycle processes, but that rapid development prototype methodology may continue to be used where user requirements are unknown or difficult to develop.

2003-04.

The ACMS replaces the Forecast Activity Plans and Estimates System, which was developed to support the planning and management of the training program for Land Command and Special Operations Command. Anticipated benefits of this system were improved visibility of resource allocations, forecasts and usage across Land Commands. It was used for the management of resources and activities up to, and including, 2002–03. The ACMS was introduced for training activity and resource planning in

- 4.8 Upon completion of development, the ACMS is intended to provide a standardised process for task-based activity planning and resource prioritisation, based on preparedness and capability requirements. Perceived benefits from this process include enhanced performance management across Army, as well as clearer identification of capability deficiencies and cost drivers. Consequently, Army Headquarters regards ACMS as being central to Army's medium to long term strategy for meeting resource challenges, especially the identification of costed tasking priorities linked to OPOs.
- **4.9** At the time of audit fieldwork, ACMS Phase 1 was partially implemented. Resource allocation to activities was restricted to ammunition, rations, fuel, cash and Army Reserve training salary, operating expenses and collective support, such as helicopters to support an infantry air-mobile activity. As the system is under ongoing development, the functionality relating to many of these items will be subject to further modification. Links between training activities and personnel and equipment were yet to be incorporated into ACMS.
- **4.10** Resource consumption captured by the ACMS through the TARP process is also recorded in other Defence systems such as Standard Defence Supply System (SDSS) for supplies, PMKeyS for personnel, and ROMAN for expenditure. Links between ACMS and these systems were immature, or yet to be established, at the time of the audit fieldwork.
- **4.11** Within ACMS, post-activity reporting is intended to provide a comparison of budgeted resource usage to actual consumption. Army documentation indicates that post-activity reports are not being updated on a timely basis, although directives have been issued requiring units to address this issue.
- 4.12 Users of ACMS identify the priority of resources required for training activities as Critical, Important or Risk Reduction. During fieldwork, the ANAO evaluated the criteria used by unit personnel allocate resources priorities. For the Critical category, personnel identified that resource requirements are those resources considered necessary to conduct training to meet CACD requirements. Limited attention was focussed on Important or Risk Reduction categories by units in the expectation that approval would not be received through the TARP approval process. The ANAO identified that an outcome of this approach could be the excessive prioritisation of resources as Critical, thereby limiting the capacity to efficiently apply resources across Army. Army has indicated the expectation that, over time, the increased visibility of resources consumed by previous activities, combined with the capacity to compare resource consumption across units in ACMS, should temper the overstatement of resource requirements.

- **4.13** A small number of units have achieved a degree of integration of the ACMS into unit business processes. These units tended to have more stringent training competency requirements and/or fulfil support roles during training activities as opposed to combat roles.
- 4.14 The majority of units visited during fieldwork, while acknowledging that the ACMS provides formation level and above with resource management information, identified a range of issues with the ACMS application. These include inadequate training, resource intensive processes, inadequate report formatting and functionality, and slow response times. The slow response time is attributed to bandwidth limitations, and is considered by Army as beyond the scope of the ACMS Project. Within units, resource management and reporting functionality limitations in the ACMS are overcome through duplicate information being entered into spreadsheets to provide data in the required format for internal unit management. Army Headquarters indicated that changes to ACMS training arrangements and ongoing modifications to the system should improve user perceptions of ACMS.

Planning and management of courses

- **4.15** Training Command is responsible for delivering individual training courses through the training management process. This process involves five steps which are determining the GTR for Army, allocation of the Net Training Liability (NTL), scheduling course sessions, delivery of training, and performance measurement.
- **4.16** The GTR⁴⁸ is the number of personnel requiring training on a Training Command course during a training year. The NTL is the training volume accepted by the Training Command to address the GTR within a training year expressed in terms of the number trainees. The ability of Training Command to match GTR to NTL is limited by resource allocations, training establishment capacity, availability of students, and recruitment achievements.
- **4.17** The GTR and the NTL are incorporated within the CACD. This component of the CACD is separate to preparedness requirements set down through the OPO serials in the CACD. The ANAO found that the relationship between the NTL and preparedness requirements is not clearly established within the CACD.

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The GTR for Regular Army personnel is calculated by analysing the projected gap between an employment category establishment and liability, numbers employed out of category, anticipated separation, and training wastage. The GTR for Reserves is based on an assessment of the numbers likely to attend training on particular course type in a training year. This assessment is informed by historical data.

4.18 The NTL as a proportion of GTR for the 2003–04 was 91 per cent. While this figure indicates a degree of parity between the GTR and the NTL, it disguises issues associated with the GTR and the NTL, including a poor alignment between the two. Additionally, overall low levels of course attendance and poor training outcomes relative to identified training requirements, indicate training management processes require improvement. Table 4.1 provides attendance and pass rates for courses convened during 2003–04.

Table 4.1
Training course statistics: 2003–04

Criteria	2003–04 %
Net training liability as proportion of Gross Training Requirement	91
Attendance Rate based on Net Training Liability	66 ^a
Pass Rate based on attendance	72
Pass Rate Based on Gross Training Requirement	43

Note: ^a Figure comprises 71 per cent Army Regular personnel, 22 per cent Reserve personnel, and 7 per cent non-Army personnel.

Source: Defence documentation.

4.19 A program evaluation of Army individual training conducted by the Defence's Inspector General in December 1993 identified that Army was in the process of developing the Army Training Information Management System (ArmyTIMS). ArmyTIMS was to integrate information management by providing functionality to support timetable and course preparation, personnel management, training management plans, lessons support and examinations, and budget allocation and monitoring. Development of ArmyTIMS commenced in 1996, and was completed in December 1999. At implementation, it was identified that Training Command's procedures had varied to the extent that ArmyTIMS no longer provided the functionality originally envisaged.

4.20 A 2002 Army Review identified that ArmyTIMS was not widely used. Subsequently, a 2003 Review of processes in Training Command identified that management reporting processes were manually intensive and supported by basic spreadsheets, with limited functionality for data interrogation. Consequently, the systems did not enable effective decision-making, reports provided were often dated, and systems did not enable the reporting of the full cost of training. Contributing to these issues were ad-hoc processes determined by local requirements, disparate technologies used to manage resources with limited control over development, low visibility of data, and poor understanding of key corporate resource management systems, such as PMKeyS, SDSS and ROMAN.

4.21 In August 2003, Training Command established the Command Management Office and assigned it with responsibility to: automate the command performance management report; assess the suitability of various systems, including PMKeyS and ACMS, to support Training Command management; and incorporate ACMS into Training Command. The Training Command module of ACMS was to be implemented in August 2005, but schedule slippage has extended implementation to March 2006.

Recommendation No.6

4.22 The ANAO recommends that, prior to further developing a Training Command management information system, Army review Training Command processes to enhance linkages between courses provided and preparedness requirements, and take suitable measures to improve overall attendance outcomes.

Defence response

4.23 Agreed.

Assessment of collective training

- **4.24** The ANAO examined the objective setting and assessment processes Army uses in relation to collective training. This fieldwork identified that for a specific range of activities, relatively objective assessment criteria are set and applied. More generally, collective training activities are assessed on the basis of military judgement applied by officers within the chain of command. Differing approaches to assessment, and a high degree of subjectivity across units, introduce the risk that inconsistent standards are being applied across commands.
- **4.25** The CTC⁴⁹ has been identified as the primary collective training quality assurance process for Army. The White Paper 2000 indicated the intent to establish the CTC in Townsville to commence operating around 2006. The purpose of this facility was to ensure that combat units could be trained and tested to the highest levels as quickly as possible.
- **4.26** Army established the CTC earlier than envisaged by the White Paper 2000, although it presently does not have the simulation and other equipment it requires to completely fulfil its objectives. Project Land 134, Phase 1, is intended to provide this capability through the delivery of core CTC live

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⁴⁹ The role of the CTC is to provide training to command headquarters and prepare units, sub-units and combined arm teams for combat in a realistic environment. This is achieved through the conduct, in accordance with Army doctrine, of simulated combined arms training at the formation and unit headquarters level, combined arms training at the combat unit level in a live environment, and combined arms training in a close country environment at the sub-unit level.

simulation, range instrumentation, and information systems. Army documentation indicates that user acceptance of the Project is likely to occur approximately 10 to 12 months later than originally planned.

- **4.27** Units are rotated through the CTC as part of a mission rehearsal or in accordance with preparedness directives. Mission rehearsals relate to deployments for specific operations such as the security detachment in Iraq. Army outlined a process where situation reports provided from operations in Iraq are incorporated into CTC exercises to provide realism for troops about to deploy. Rotations based on preparedness directives usually involve higher readiness elements of Army, although lower readiness elements are offered limited opportunity to participate in CTC exercises.
- **4.28** Units undertaking CTC training are observed and evaluated by CTC personnel. Feedback on the CTC rotation is provided to the unit, brigade and formation headquarters through formal processes. CTC also conducts trend analysis on units undertaking CTC exercises for inclusion in a report to the Land Commander and the Chief of Army.
- **4.29** The CTC represents a relatively new component of Army and, as such, is the subject of ongoing development in terms of doctrine, procedures, personnel and equipment. The ANAO considers the processes employed by the CTC to be of assistance to Army from a quality assurance perspective. However, the existence of the CTC should not diminish the need for Army to develop more rigorous objective setting and assessment processes for collective training conducted outside the CTC environment.

Recommendation No.7

4.30 The ANAO recommends that, to enhance Army's capacity to assess and aggregate the outcomes of collective training, Army, prior to the conduct of collective training, establish explicit training objectives and define associated assessment criteria for effective management of those outcomes.

Defence response

4.31 Agreed.

5. Developing Future Capability

This chapter outlines processes within Army to maintain relevance into the future and address existing equipment and structural issues.

Background

- **5.1** The Fundamentals of Land Warfare Doctrine identifies that, in the past, capability development processes focussed on available weapons platforms, and that this approach may perpetuate outdated concepts and doctrine. To mitigate this risk, doctrine states that Army has adopted a concept-led, capability based approach to modernisation.⁵⁰
- 5.2 Doctrine indicates that this approach to modernisation is intended to utilise warfighting concepts, within a joint and increasingly coalition environment, to guide the development and application of military capabilities. The approach uses three planning horizons: the Army-in-being, the Objective Force, and the Army After Next (see Figure 5.1). The Army-in-being is aimed at delivering a sustainable combat force over the next five years, while positioning Army to transition to the Objective Force. The Objective Force provides the focus for capability development over the next 10 to 20 years. The Army After Next focuses on the period 20-30 years in the future, lacks precise shape, and concentrates on concepts and capabilities considered likely to enhance the effectiveness of land forces.
- **5.3** Within the context of the Objective Force and the Army After Next, the Army has set two key milestones. These are the 2012 HNA and the 2020 Objective Force. The implementation of HNA is intended to provide a pathway to the 2020 Objective Force.

Figure 5.1
The Capability Development Continuum



Source: Adapted from Defence documentation.

Land Warfare Doctrine No.1, *The Fundamentals of Land Warfare*, 2002, (p. 100). The Army has indicated that Land Warfare Doctrine No.1 is currently under review, partly to incorporate the requirements of current conceptual thinking within Army.

'Hardening' and Networking the Army

- 5.4 The HNA Model advanced by Army in late 2003 identified that, for Army to meet the Government's strategic guidance, Army needs to be capable of conducting medium intensity operations in an urbanised environment against a highly lethal enemy.⁵¹ In formulating the HNA Model, Army identified a range of existing issues the Model should address. These covered force structural issues, including: personnel levels in some units; rebalancing the readiness requirements of force elements; refining combined arms capabilities; and improving Army in the areas of flexibility, concurrency and sustainability. Army also identified that absorbing DCP capability enhancements required changes to the force structure, regardless of any other circumstances.
- 5.5 In accordance with terms of reference set by Army, the Defence Science and Technology Organisation conducted a high level audit of the HNA Model. This audit reviewed the Military Appreciation Process⁵² used by Army to develop HNA and identified a range of personnel sustainability issues associated with the Model. Many of the issues identified by the audit are existing issues. Others relate to the shift from an Army dominated by light infantry to one that emphasises protected mobility. The audit also examined the accuracy of the Model from strategic, operational and tactical perspectives. This analysis was subject to time constraints, but indicated that further analysis was required to assure that the model would be viable at all levels. The Army indicated that the Defence Science and Technology Organisation has continued to provide support to the ongoing analysis of the HNA Model through the Army Experimental Framework.
- 5.6 Both the Combat Force Sustainment Model and HNA are two-rotation models.⁵³ HNA modelling also aims to identify the mobilisation requirements for a third rotation. This number of rotations has been identified as necessary to better enable Army to fulfil sustainment requirements of being able to deploy a brigade for extended operations in accordance with the White Paper 2000. Army modelling indicates that the first rotation comprises primarily full-time personnel supplemented by the Reserves in specific areas. The second rotation will have a similar composition but with greater supplementation by

The scope of the HNA Model excluded Special Operations Command, Training Command, the Army Executive and Non-Army Group Personnel. Initially, Reserve formations of 2nd Division and 11 Brigade were also excluded. This limitation was later removed with the incorporation of an already underway Reserve Roles and Tasks Study.

Whilst acknowledging the Military Appreciation Process as a logical, top down, planning and decision making tool the Defence Science and Technology Organisation audit noted that documentation of the Course of Action Development component of the Military Appreciation Process was incomplete.

The Army has indicated the Objective Force 2020 is intended to be a three-rotation model.

the Reserves, particularly in the combat support and service support elements. The third rotation will comprise personnel from the initial deployment with Reserve augmentation as required.

- 5.7 Army analysis identified the need for significant Reserve personnel augmentation to meet the requirements of the HNA Model. Some 17 per cent of the Reserve positions identified as required to augment the HNA Model, were regarded as positions requiring capabilities that Reserve personnel would have difficulty in achieving, or as positions that provide capabilities critical to the functioning of the associated unit.
- 5.8 The 2004 Reserve Roles and Tasks study followed the Military Appreciation Process and developed various courses of action. These involved the individual and/or collective reinforcement of the HNA and similar contributions to peacetime national tasks. Analysis of the FIC required to support these courses of action indicated that none met the requirements of the HNA Model. To overcome these issues, changes were recommended to High Readiness Reserve arrangements. These included extending the duration of service; the identification of specific population demographics to be targeted for recruitment; and rationalisation of the command and control arrangements in the Reserves.
- **5.9** In addition to the Reserve augmentation, Army identified that the HNA Model required more Regular personnel in 2012 than are expected to be available, based on current funding projections. Army has stated that it will only implement HNA to a level within the average funded strength.
- **5.10** HNA has been associated with two concepts, being: Network Centric Warfare⁵⁴, which is a Defence-wide concept; and an Army concept, Complex

information is impeded due to issues relating to incompatibilities of culture and technology.

In 1996, Defence conducted a review of the structure of the Army titled 'Army in the 21st Century' (A21).

September 2003, the draft Army approach to Network Centric Warfare indicated that while recognition exists of the benefits gained by connecting decision makers to information within Army, sharing of

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In late 1996, it was decided to validate A21 through the Restructuring the Army trials. These trials identified that Network Centric Warfare would allow an increased operational tempo and improve engagement outcomes. The White Paper 2000 identified that effective use of information technology was transforming the way armed forces operate and set six objectives. These were to maintain intelligence capabilities; develop comprehensive surveillance systems; develop an integrated command system; improve communication capabilities; improve the effectiveness of the logistics systems; ensure the effective management of these systems, securing them against information warfare, and promoting interoperability with allies. These objectives were reiterated in Force 2020, published in 2002. In

Warfighting.⁵⁵ Like HNA, both Network Centric Warfare and Complex Warfighting are subject to ongoing review. The Defence Science and Technology Organisation audit of the HNA Model recommended that HNA be re-examined in the context of complex warfighting to identify and mitigate any associated risks. As the Concept and the Model are being developed simultaneously, this type of review should reoccur at key milestones to ensure that associated risks and mitigation strategies are identified and retain relevance over time.

Second mechanised battalion

5.11 A key aspect of the HNA Model is survivability in an urbanised environment against lethal threats. Whilst survivability encompasses a range of issues, protected mobility is of significant importance to the model. Accordingly, the model proposes the raising of a second mechanised battalion using upgraded M113 Armoured Personnel Carriers.

5.12 The Force Structure Review 1991 identified the need to increase the tactical mobility of Army through the replacement, around the year 2000, of the M113 A1 Armoured Personnel Carriers, which commenced entering service in 1965. The White Paper 2000 indicated the intent to upgrade the M113 fleet, and projected that the upgraded vehicles would enter service around 2005. In mid-2002, a contract was signed to upgrade 350 M113 vehicles. Under this contract, vehicles are scheduled to enter service between late 2006 and the end of 2011 within an approved project expenditure of \$566 million. The life of type for the upgraded M113 is now estimated to expire in 2020.

5.13 In May 2004, Army identified that there would be insufficient upgraded M113 vehicles entering service to generate the combined arms teams, mechanised combat support and service support required by the HNA Model. To address this deficiency, Army proposes that both mechanised battalions be provisioned with upgraded M113s, with associated support elements provisioned with a fleet comprising upgraded M113s and

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The Complex Warfighting Concept suggests that the environment in which Army expects to conduct operations is a littoral environment, comprising high population density urban areas incorporating complex terrain, diverse population demographics and multiple communication channels. To survive in this environment, the concept indicates that the combined arms team requires enhanced combat identification, physical protection and networking. Similarly, the Restructuring the Army trials identified the need for survivable armoured assets to avoid high casualty rates in close combat, that study emphasised the need to maintain standoff distances where possible to limit this risk. The Complex Warfighting Concept represents an extension of the United States Marine Corp concept known as the 'Three Block War'. Under the 'Three Block War' concept, forces will be engaged in combat operations on one city block, involved in humanitarian assistance on another, while on a third they will be involved in counter-insurgency. Under complex warfighting it is envisaged that all tasks could be occurring concurrently on the same block.

⁵⁶ Defence 2000—Our Future Defence Force, (p. 83).

⁵⁷ Defence Capability Plan 2004–14 (p. 140).

Bushmaster Infantry Mobility Vehicles.⁵⁸ The adoption of this combination of vehicles, for these battalions, would escalate the costs and complexity of facilities, maintenance and logistics support.

5.14 Army has identified that the second mechanised battalion is only one option being considered through the HNA Model, the other being light infantry with increased Armoured Personnel Carrier lift capacity. The ANAO notes that the White Paper 2000 explicitly refers to a single mechanised battalion. The Army has indicated that the Strategic Update 2003 provides authority for this initiative by acknowledging that strategic circumstance have changed and the need to rebalance capabilities and priorities. The Army has indicated that the Strategic circumstance have changed and the need to rebalance capabilities and priorities.

Capital procurement

5.15 Army capability is delivered through a combination of major and minor capital procurement projects that may enhance or replace existing capabilities or introduce new capabilities. Minor capital procurement projects have a project investment cost of less than \$20 million. Where this limit is exceeded, the project is classified as a major capital procurement project. Differing approval processes apply to major and minor capital procurement projects.

5.16 The White Paper 2000 identified that the Government intended to develop new processes for Defence capability planning to provide the ADF with clear long-term goals for the development of capability (see Figure 5.2). This was to be achieved through the development of the DCP to provide detailed and costed capability plans for the military for a 10 year period. The White Paper 2000 indicated that the DCP was to be reviewed annually in accordance with changing priorities and strategic circumstances, and to take account of developments in technology. Funding for the implementation of the DCP occurs though the annual updating of the DMFP.⁶²

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In the ANAO Audit Report No.59 2004–05, *Defence's Project Bushranger. Acquisition of Infantry Mobility Vehicles* the ANAO found that, despite the project having a lengthy demonstration phase, the requirement definition had not been fully developed at the time the Production Option was exercised. The outcomes of this, combined with the overly optimistic projections on deliverables, has been a nominal vehicle unit cost increase of 39 per cent, a forecast slippage of 49 months in delivery, and the need for Defence to commit significant management resources to turn around this project.

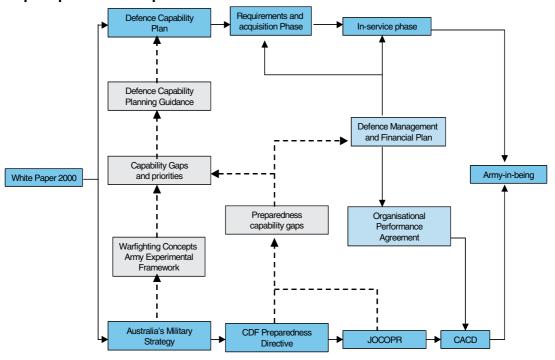
⁵⁹ Defence 2000: Our Future Defence Force, (p. 80).

⁶⁰ Australia's National Security—A Defence Update 2003, (p. 24).

Generally individual items cost less than \$1 million or have no significant Defence policy, or joint service, implications.

Defence 2000: Our Future Defence Force, (p. 77).

Figure 5.2
Capital procurement processes



Source: Adapted from Defence documentation.

5.17 In 2001, Defence released the DCP 2001 for the period 2001-10. The DCP 2001 replaced the Defence New Major Capital Equipment Projects Plan (the Pink Book), which had a five year planning horizon. The DCP 2001 provided a breakdown of: major capability projects previously approved by the Government but not yet to contract, approved by the Government in the 2001–02 Budget, and unapproved but in the Departmental Capability Plan. ⁶³ In 2004, the Government published the second DCP for the period 2004–14 (DCP 2004–14), which proposed fewer projects than did the DCP 2001.

5.18 In September 2003, the Government released the Defence Procurement Review. The Review identified the need for reform to Defence procurement processes to address: cost estimation overruns in equipment acquisition and maintenance, issues associated with inventory and financial management, delays in the delivery of equipment, and inadequacies in the capability provided by equipment delivered. The Review made a series of recommendations in relation to Defence procurement. These included changes to capability definition; assessment and approval processes; project

⁶³ Defence Capability Plan 2001–10, (p. iii–iv).

management and staffing arrangements; the establishment of the DMO as an executive agency; and the establishment of the Capability Development Group within Defence.⁶⁴

Major projects

5.19 Introducing new or updated capabilities into service involves a combination of factors including the identification of personnel and facility requirements, the provision of training, and ongoing equipment maintenance. In August 2004, Army reported 95 joint and Army-specific major project phases entering into service as far into the future as 2018 (see Table 5.1). Of these projects, 10 were included in the top 30 major capital procurement projects in the 2004–05 Defence PBS.

5.20 Army-specific projects in the top 30 for 2004–05 include: the upgrade of the Australian Light Armoured Vehicle, the upgrade of the M113 Armoured Personnel Carriers, the purchase of the Armed Reconnaissance Helicopter, the purchase of directed fire guided weapons, the purchase of the Bushmaster Infantry Mobility vehicles, and the purchase of ground surveillance radar. These six projects have a combined approved cost of \$3.69 billion. In 2004, the decision was made by the Government to purchase 59 refurbished Abrams M1A1 tanks at a cost of \$530 million, and 12 MRH-90 troop lift helicopters at a cost of \$1.3 billion.

Table 5.1

Major Army capital procurement projects: August 2004

Delivery into service	Number of projects
Prior to 2004	5
2004–2006	42
2007–2008	20
Later than 2008	28

Source: Defence documentation.

5.21 In 2002, Army identified a range of issues associated with the introduction into service of new equipment. These issues included inadequate planning in advance of key project decision points, inadequate introduction

Defence Capability Review, 2003, (pp.1 and iii-ix).

Joint projects include the Airborne Early Warning and Control Project, Jindalee Operational Radar Network, Military Satellite Communication—Military Satellite Payload, and High Frequency Modernisation. These projects are particularly relevant to the Network Centric Warfare concept.

Media Releases—New Helicopters for Army, 31 August 2004, M1A1 Abrams Tank Agreement Signed, 9 July 2004.

into service planning, poor coordination between key staff, and inadequate supporting information systems. Consequently, a plan was submitted to CASAC, which made a series of recommendations to address these issues.

- 5.22 These recommendations were subsequently endorsed by CASAC, which directed that a team be established within Army Headquarters to manage the introduction into service of new capabilities. In September 2003, it was ascertained that this team was addressing a backlog of issues associated with implementation of DCP projects. This was being achieved through the development and application of an introduction into service FIC planning methodology (FIC plans).
- **5.23** FIC plans are intended to synchronise the introduction into service of new equipment.⁶⁷ This process involves identifying the capability to be provided by the equipment; defining the scope of the project; and analysing the FIC required to support the introduction into service. Following this analysis, tasks are identified, assigned and deadlines set. By May 2004, FIC plans were developed for just under half of the projects reported.
- **5.24** Through the development of the FIC planning methodology, Army identified areas impacting on the implementation of DCP capability. These areas included: inconsistencies in the incorporation of Network Centric Warfare across projects; backlogs in doctrine; the impact of reductions in the officer corps; HNA; trade structure and sustainability issues; the capacity of the Army Reserves to operate increasingly complex equipment; and fleet management issues associated with low commonality and high operating costs.
- **5.25** At the strategic level, Army has also identified areas where capability development processes could be improved. Significant amongst these were recommendations for the development of an information system to replace manual processes used to support capability implementation, and formalising processes surrounding the introduction into service of Army projects.
- **5.26** In mid 2003, Army estimated that an additional 626 average funded staff were required to support the introduction into service of new capabilities over the following 10 years. Based on this estimate, Army was pursuing funding for those positions but, at that time, the positions were reported as a deficiency.
- **5.27** The status of Army projects, at a general level, is reported through the Army Balanced Scorecard using a traffic light system to indicate status. Projects are classified as: green, if FIC objectives are being achieved for the introduction into service; amber, if minor FIC issues require resolution; or red,

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FIC plans are developed by FIC Working Groups comprising key stakeholders.

if one or more significant FIC issues are preventing the introduction into service.

5.28 A comparison between the status of major projects in June 2003 and August 2004 shows that a number of projects showing a red or green status have remained virtually unchanged for the period (see Table 5.2). The number of projects showing a status of amber has reduced. However, the August 2004 figures did not assess projects with longer term implementation dates, while the June 2003 figures indicated these projects as amber. There has also been a 25 per cent reduction in the number of projects reported in August 2004 when compared to that in July 2003.

Table 5.2

Comparison of changes in the status of Army major projects by number

Status	June 2003	August 2004
Red	4	5
Amber	106	52
Green	16	14
Not assessed	0	24
Total	126	95

Source: Defence documentation.

5.29 In the April 2004 Army Balanced Scorecard, 45 major capital procurement projects were assessed by the DMO, using traffic light indicators against four criteria: resources, capability, schedule, and staffing (see Table 5.3). A similar process was also undertaken in June 2003 for 35 projects. Comparisons based on the status of projects reported for both periods suggest an improvement in the management of projects, although approximately one quarter of the projects was not assessed against three of the four criteria in April 2004. For both periods, a significant proportion of major projects were at risk of schedule slippage. DMO analysis identified that 80 per cent of cost overruns are attributable to schedule delays.⁶⁸

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The Performance Challenge in Delivering the Defence Capability Plan—Speech by the CEO, DMO, 22 June 2004.

Table 5.3

The issues impacting on major capital procurement projects

Criteria	June 2003 Percentage of projects assessed as amber or red status	April 2004 Percentage of projects assessed as amber or red status
Resources	31	11 (22 ^a)
Capability	20	24 (22 ^a)
Schedule	65	38 (20 ^a)
Staffing	60	44 (7 ^a)

Note: a Percentage of projects not assessed against this criterion

Source: Defence documentation.

Minor projects

5.30 The Defence PBS for 2004–05 estimated that Defence will spend approximately \$164 million on minor capital procurement projects in that year. For Army, minor capability procurement projects are diverse in nature. Current projects encompass: the procurement of ammunition; software systems; vehicles such as tractors, bulldozers and graders; training simulation equipment; and electrical distribution systems and generators.

5.31 In 2002, Army identified that the Army's Five Year Minor Capital Procurement Process was spending focussed, rather than 'capability' focussed, and that capacity and process issues hampered achievement of optimal outcomes. In 2003, Army identified that there was a functional separation in the management of major and minor projects, and that changes were required to ensure that projects were managed in a complementary manner. A staff position was established in Army Headquarters in 2004 to assist in achieving this outcome.

5.32 In 2003, Army issued a Defence Instruction (Army) on the Minor Capital Procurement Processes.⁶⁹ This instruction provides guidance on the steps taken in the minor capital procurement process. These steps include the processes for the submission of a development proposal; scrutiny by key stakeholders and committees; endorsement by the Deputy-Chief of Army; approval of the scope, schedule and cost; and acquisition. Approving authorities for minor capital projects are contingent on the estimated project cost (see Table 5.4).

Defence Instruction (Army) LOG 25-1, Army Minor Capital Program, (p. 1).

Table 5.4
Approval criteria for minor capital procurement projects

Project cost	Approving authority
Less than \$5 million	Service Chief, Group Head or delegate
\$5 million to \$8 million	Minister for Defence
\$8 million to \$20 million	Ministers for Defence and Finance and Administration

Source: 2004-05 Defence Portfolio Budget Statements.

5.33 Army has indicated that the minor capital budget is revised throughout the year for a variety of reasons. These include: funding being appropriated to minor capability procurement projects managed outside of the Five Year Minor Capital Procurement Process; funding other budgetary pressures; and funding for other purposes where expenditure on minor projects is unlikely to achieve budgeted expenditure (see Table 5.5).

5.34 Since 1997-98, when the Defence Reform Process commenced, Army expenditure on minor projects has consistently failed to achieve budgeted expenditure. Over that period, the actual under-expenditure based on the initial budgeted figure was 17 per cent, and 10 per cent based on the revised budget. In the 10 years preceding 1997–98, minor projects exceeded the planned budget by 10 per cent and the revised budget by three per cent. The combination of large variations between budgeted and revised figures, and ongoing underspends on minor projects, indicate that processes surrounding the identification and implementation of minor projects require refinement to achieve greater parity between budgeted and actual expenditure.

Table 5.5

Comparison of budget and expenditure for minor capital procurement projects

Year	(1) Initial budget \$m	(2) Revised budget \$m	(3) Actual \$m	(1)–(3) = (4) Variance initial budget \$m	(2)–(3) = (5) Variance revised budget \$m
1997–98	76.7	63.9	68.4	-8.3	4.6
1998–99	92.4	91.6	75.3	-17.1	-16.3
1999–2000	85.0	80.0	70.0	-15.0	-10.0
2000–01	64.5	64.5	48.3	-16.2	-16.2
2001–02	100.5	100.5	90.2	-10.3	-10.3
2002–03	73.1	73.1	68.3	-4.7	-4.7
2003–04	73.2	48.5	49.3	-23.9	0.8

Note: Figures may not add up due to rounding error.

Source: Defence documentation.

5.35 The Army Balanced Scorecard for April 2004 indicated that, of the 33 minor capital procurement projects reported: 20 were regarded as good; 11 were subject to warning; and two required attention. Schedule was the most significant issue for these projects in May 2004, followed by capability and staffing. In June 2003, staffing issues were assessed as having the greatest impact on minor projects, followed by schedule.

Recommendation No.8

- **5.36** The ANAO recommends that, to enhance the link between Army capability requirements and equipment entering into service, Army, in consultation with the Defence Materiel Organisation, develop:
- (a) mechanisms to prioritise equipment acquisition projects and ensure that projects are staffed in line with these priorities;
- (b) regularly report on the status of all major projects through the Army Balanced Scorecard; and
- (c) review the budget formulation process to achieve a better alignment between budgeted and actual capital expenditure.

Defence response

5.37 Agreed.

Canberra ACT 1 February 2005 Oliver Winder Acting Auditor-General

Appendices

Appendix 1: The Fundamental Inputs to Capability

Fundamental Inputs to Capability	Description
Organisation	Army needs to ensure that it has the optimum number of positions, the appropriate balance of competency and skill-sets, and the correct structure to accomplish its tasks and to ensure adequate command and control arrangements. This is essentially a minimal-cost activity that provides the underpinning structure for Army. Consideration must be given to developing flexible, functional groupings that can meet contingency personnel requirements and continual force-improvement requirements.
Personnel	Assuming an appropriate establishment is authorised, the positions must be filled with individuals who satisfy appropriate individual readiness requirements. These requirements include medical and dental standards, physical fitness, and appropriate individual training. Each individual must have the competencies to fulfil his or her position (both specialist and common military skills) and the motivation to apply those competencies to achieve required performance standards of the organisation. The personnel element includes the retention and development of people to meet the needs of Army.
Collective Training	Collective training applies laterally across combined, joint and single service elements and vertically downwards to unit levels. To enhance performance organisational elements must undertake a comprehensive and ongoing collective training regime validated against detailed preparedness requirements derived from government guidance.
Major Systems	Major Systems include ships, tanks, missile systems, armoured personnel carriers, major electronic systems, and aircraft.
Supplies	There are 10 classes of supplies including: subsistence (foodstuffs etc.); general stores (clothing, individual equipment tentage tools etc.); petroleum, oils and lubricants; construction items; ammunition; personal demand items (canteen supplies etc.); principle items, which are a final combination of items ready for its intended use, such vehicles and weapons (some included in major systems FIC); medical and dental stores; repair parts and components; and material to support non-military programs.
Facilities	Facilities include buildings; structures; property, plant and equipment; areas for training and other purposes (for example, exercise areas and firing ranges); utilities; and civil engineering works necessary to support capabilities, both at home stations and deployed locations. Facilities may be owned directly or leased.
Support	Support encompasses the wider national support base and includes training and proficiency support, material and maintenance services; communications and information technology support; intelligence; recruiting and retention; research and development activities; administrative support; and transportation support. Agencies that could provide this support include other outputs; output enablers; owner support agencies; private industry or contractors; other Government agencies; and international support base agencies.
Command and Management	Command and management underpins Defence's operating and management environments through enhanced command and decision-making processes and management reporting avenues. Command and management at all levels are required to plan, apply, measure, monitor and evaluate the function and agency performance, with due cognisance of risk and subsequent risk management. Command and management includes written guidance such as regulations; instructions; publications; directions; requirements; doctrine; tactical level procedures; and preparedness documents. Command and management also include funding not readily attributable to any other FIC elements (eg, discretionary funding).

Source: Defence documentation.

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