

Photos opposite: Top: a M1A1 Abrams main battle tank. Middle: first flight of the Air Force's Wedgetail Airborne Early Warning and Control aircraft on 24 May 2004. Bottom: the double-hulled oil tanker MT *Delos* that will be modified to replace HMAS *Westralia*.

CHAPTERFOUR

Capital Budget

A large proportion of Defence's budget is tied up in purchasing and maintaining specialist equipment and facilities. This chapter explains where that money was spent during 2003-04.



The Government approved 26 major equipment acquisition projects including the M1A1 Abrams main battle tank, two additional airborne early warning and control aircraft and an oil tanker to replace HMAS *Westralia*

The two additional Airborne Early Warning and Control aircraft will bring the total purchase to six aircraft. They will extend the ADF's range for detection of hostile strike forces and control of allied aircraft

The facilities at RAAF Williamtown, near Newcastle, New South Wales, are being redeveloped to support the introduction of these aircraft. As part of that construction, the squadron's new headquarters facility was completed this year

Overview

Overview of the Capital Investment Program

The Capital Investment Program is comprised of:

- the Unapproved Major Capital Equipment Program (Defence Capability Plan) - managed by the Chief of the Capability Development Group;
- the Approved Major Capital Equipment Program - managed by the Chief Executive Officer of Defence Materiel Organisation;
- the Capital Facilities Program, - managed by Deputy Secretary Corporate Services;
- other Capital Purchases - several Groups are accountable for its management; and
- Capital Receipts - several Groups are accountable for its management.

Reprogramming of the Capital Investment Program

In the context of the 2004-05 Budget, the Government agreed to reprogram an amount of \$2,226m (\$2,547m in outturn prices) to the period 2008-09 to 2013-14. Details were shown on p.77 of the *Portfolio Budget Statements 2004-05*. The reprogramming included funds not able to be spent in 2002-03 (\$200m) and 2003-04 (\$500m), changes to the Defence Capability Plan and the revised rate of expenditure considered appropriate to deliver these projects. The amount of \$500m in respect of 2003-04 was later reduced to \$330m to manage the cash flow requirements in 2003-04 of acquiring an additional two airborne early warning and control aircraft.

Capital/Operating Adjustment

In accordance with Australian Accounting Standards, Defence is required to classify certain investment costs such as research and development, project studies, design work, specialist and professional advice and project office overheads as operating expenses rather than through the capital appropriation.

In the post-Defence Procurement Review environment, more work is being undertaken prior to first pass approval and between first and second pass to define the options, costs, schedule and risks of project proposals. A higher proportion of costs for this work is now classified as operating expenses such as project definition costs and project development funds. The same trend applies to the Capital Facilities Program, and offsetting adjustments between the capital and operating appropriations have been agreed by the Government to reflect this requirement. The mix of funding will continue to change, reflecting project throughput and the individual circumstances for each project.

Overview of Financial Performance in 2003-04

Capital investment expenses in 2003-04 totalled \$3,751.2m or \$343.8m greater than the projected result as summarised in Table 4.1 below. Explanations for the variations in each category follow.

Group/Item Description	2003-04				
	Budget Estimate	Revised Estimate	Projected Result	Actual Result	Variance
	\$m	\$m	\$m	\$m	\$m
Unapproved Major Capital Equipment	358.3	195.5	9.6	-	-9.6
Approved Major Capital Equipment					
- Capital Component	2,851.2	2,179.8	2,140.7	2,372.4	231.7
- Operating Component	213.8	210.6	318.4	373.3	54.9
Total Approved Major Capital Equipment	3,065.0	2,390.4	2,459.1	2,745.7	286.6
Major Capital Facilities					
- Capital Component	375.6	406.9	411.0	367.5	-43.5
- Operating Component	-	-	10.0	18.4	8.4
Total Major Capital Facilities	375.6	406.9	421.0	385.9	-35.1
Other Capital Purchases (various Group Heads)	430.4	554.5	517.7	619.6	101.9
Portfolio Held Funds	51.0	490.5	-	-	-
Total Capital Investment Program	4,280.3	4,037.8	3,407.4	3,751.2	343.8
Less Capital Receipts	106.5	106.5	106.5	101.9	-4.6
Net Capital Program	4,173.8	3,931.3	3,300.9	3,649.3	348.4

Defence Capability Plan (-\$9.6m)

The Defence Capability Plan is a detailed, costed plan for Australia's military capabilities over a ten-year period, with broad guidance on major investments over the following ten years. The plan is reviewed regularly to take account of changing strategic circumstances, new technologies and changed priorities. This plan was reviewed, and a revised Defence Capability Plan was announced in February 2004. The plan sets out the planned investment in new equipment under five capabilities goals – land forces, air combat, maritime forces, strike and information capability.

Between the period when the Defence White Paper 2000 was announced in December 2000 and 30 June 2004, the Government had approved around 120 major projects or phases of projects with an approximate cost of \$18.4 billion. The Government will be presented with further projects for approval in 2004-05.

An amount of \$9.6m remained unexpended in 2003-04 due to timing issues associated with the approval of some projects. This funding was used to contribute to higher than forecast expenses in the approved major capital equipment program.

Approved Major Capital Equipment Program (+\$286.6m)

The Defence Materiel Organisation manages the approved major capital investment program. Following project approval, new projects are transferred from the Defence Capability Plan to the Defence Materiel Organisation for their acquisition phase.

The approved major capital equipment program is comprised of those projects that generally cost in excess of \$20m and which, following approval, are transferred from the Defence Capability Plan to the Defence Materiel Organisation for their acquisition phase. Until 2003-04, projects costing \$20m or more required approval by the Government. Following implementation of the new 'two pass' approval process as part of the implementation of the Defence Procurement Review, the Government approval threshold has been increased to \$50m. Projects costing between \$8m and \$50m (formerly \$8m to \$20m) are now approved jointly by the Ministers for Defence, and Finance and Administration. Projects costing less than \$20m are generally categorised as minor capital projects and are part of the other capital purchases category, although individual project phases within the Defence Capability Plan, such as studies, can cost less than \$20m. For more detail on the 'two pass' implementation process, refer to Chapter One - New Capability Development and Acquisition Process.

After allowing for the \$500m which was reprogrammed in the 2004-05 Budget, and the subsequent decision to bring \$170m of this amount forward to 2003-04 to enable the payment of the deposit for the two additional early warning and control aircraft, total expenses in the approved capital program in 2003-04 were \$286.6m higher than forecast. The reasons for the other increases include the HMAS *Westralia* replacement (\$54m), the initial deposit on the Main Battle Tank Replacement project (\$5m), and an earlier than anticipated payment for the Joint Strike Fighter (\$28m).

Table 4.2 and accompanying descriptions provide details of the approved project cost, cumulative expenditure to 30 June 2004 and actual expenditure for 2003-04, of the top 20 (by 2003-04 expenditure) major capital equipment projects for Defence.

Table 4.2	Top 20 Projects by Actual 2003-04 Expenditure				
	Approved Project Cost ⁽¹⁾	Cumulative Expenditure ⁽²⁾	2003-04 Budget Estimate ⁽³⁾	2003-04 Revised Estimate ⁽⁴⁾	2003-04 Actual
	\$m	\$m	\$m	\$m	\$m
Aerospace					
Airborne Early Warning and Control	3,426	1,554	516	359	528
Armed Reconnaissance Helicopter	1,894	425	526	400	285
F/A-18 Hornet Upgrade	1,516	614	125	70	81
Anzac Ship Helicopter	998	889	60	41	39
P-3C Update Implementation	902	793	59	47	36
Maritime					
Anzac Ship Project ⁽⁵⁾	5,352	4,882	226	220	220
FFG Upgrade Implementation	1,442	911	120	109	102
Collins Combat System	433	81	85	54	54
Maritime Operations Support Capability	141	54	n/a ⁽⁶⁾	47	54
Collins-class Reliability and Sustainability Improvements	359	114	50	37	39
Evolved SeaSparrow Missile	270	174	88	39	34

Underwater and Surface Warfighting					
Upgrade Program	154	90	40	28	31
Mine Hunter Coastal Acquisition	1,257	1,115	45	27	30
Land					
Australian Light Armoured Vehicles	666	472	171	151	155
Upgrade of M113 Armoured Vehicles	566	137	26	26	30
New Air Combat Capability					
Joint Strike Fighter	205	66	36	29	56
Electronic and Weapon Systems					
Explosive Ordnance Reserve Stocks	193	51	n/a ⁽⁷⁾	50	51
Lightweight Torpedo Replacement ⁽⁸⁾	307	84	55	53	43
Jindalee Operational Radar Network	1,238	1,095	45	37	40
Air-to-Surface Stand-off Weapon Capability	438	329	68	30	29

Notes

1. December 2004 prices.
2. Expenditure to 30 June 2004.
3. December 2002 prices.
4. January 2004 prices.
5. Project approval, expenditure and estimate figures are the net cost of the 10-ship program after deducting New Zealand revenue.
6. Project not approved at time of Budget Estimates.
7. Project not approved at time of Budget Estimates.
8. This project was previously reported in the portfolio additional estimates statement under Maritime projects.

Top 20 projects by 2003-04 Expenditure

Airborne Early Warning and Control

Achieved

Prime contractor: The Boeing Company (United States)

This project will provide Defence with an airborne early warning and control capability, with the provision of six aircraft and associated supplies and support. The contract was signed with The Boeing Company in December 2000 for four aircraft, with an option for an additional two aircraft. The option for an additional two aircraft was agreed in June 2004. Modification of the last four aircraft will take place in South-East Queensland. The project remains on schedule and on budget, with a planned in-service date of 2007.

The first Boeing 737 commenced modification activity in January 2003 and the second in May 2003. The first aircraft flew in May 2004 and commenced certification testing. The second aircraft is undergoing modification and will begin mission system testing in early 2005. The critical design reviews for the mission support segments and mission simulators were completed successfully in late 2003 and Build 5 of the mission computing software entered testing in April 2004. Construction of the squadron headquarters building commenced in May 2003 and was completed in February 2004.

The 2003-04 actual spend exceeded the 2003-04 revised estimate due primarily to a payment required on contractual acceptance of the option to procure an additional two aircraft.

This project contributes to Air Force capability.

Armed Reconnaissance Helicopter

Substantially Achieved

Prime contractor: Australian Aerospace

The new armed reconnaissance helicopter is the most advanced helicopter of its type in the world and will be a huge boost to the Army's capability. The helicopter is a very sophisticated weapons platform and will be used in operations as part of a combined arms team.

This project will provide Defence with 22 Tiger armed reconnaissance helicopters, a training system including simulation devices for aircrew and maintenance personnel, a software support facility and a ground mission management system. The first two interim configuration helicopters are planned to enter service in Australia from December 2004.

The project remains on schedule to achieve the in-service date. Of the four helicopters to be produced in France, the first helicopter is undertaking pre-certification flight testing, the second is in ground test phase, with the remainder on schedule to meet their delivery dates. Production in Australia is also on schedule, with four airframes now under assembly in Brisbane, Queensland.

Initial operational capability is expected to be achieved on schedule by June 2007. Full operational capability is expected to be achieved by December 2008.

Actual expenditure was lower than the 2003-04 revised estimate, due to the delayed delivery of contract milestones primarily associated with aircrew training devices, ground mission equipment and through-life support measures.

This project contributes to Army capability.

F/A-18 Hornet Upgrade

Substantially Achieved

Prime contractor: The Boeing Company (United States)

This project will upgrade the F/A-18 fleet to incorporate enhancements that will allow the aircraft to perform its air defence tasks more effectively.

The fleet was provided with new radars and upgraded mission software in August 2003 under Phase 2.1.

Phase 2.2 is an avionics upgrade that will increase the situational awareness of the pilot in the air combat role. It involves integration of colour cockpit displays, a digital moving map capability, a Link 16 data link, a helmet mounted cueing system and a new countermeasures dispensing set. Two prototype aircraft were inducted for modification work in June 2004 and Phase 2.2 upgrades remain on schedule with completion due by December 2007. A contract for the provision of the Hornet aircrew training system was signed in May 2004.

Phase 2.3 is the upgrade of the electronic warfare self-protection suite, including a new radar warning receiver, electronic jammer and additional expendables capacity for the countermeasures dispensing system. Options assessments for this phase were progressed on schedule.

The financial outcome was less than the 2003-04 Budget estimate, but higher than the revised estimate. The variations were due to rescheduling of foreign military sales payments and delays in awarding the colour cockpit displays program.

This project contributes to Air Force capability.

Anzac Ship Helicopter

Substantially Achieved

Prime contractor: Kaman Aerospace International Corporation

This project will acquire 11 maritime combat helicopters for the Anzac-class frigates, providing an enhanced capability for surface surveillance, anti-ship warfare and contact investigation. The acquisition includes a full mission flight simulator and software support centre.

Ten of the 11 Super Seasprite maritime combat helicopters are now in Australia, with one helicopter remaining in the United States for ongoing flight tests. Five helicopters have been provisionally accepted. Provisional acceptance of the helicopters with a basic suite of software has allowed the commencement of flight trials and initial squadron training in preparation for the final release of software, which will enable full combat capability after 2004-05. Full mission software ground integration testing is now well advanced and is expected to be ready for flight tests in the first half of 2005.

Full Mission Flight Simulator and Software Support Centre is planned for acceptance in late 2004-05.

The project achieved its 2003-04 revised estimate.

This project contributes to Navy capability.

P-3C Update Implementation

Substantially Achieved

Prime contractor: L-3 Communications Integrated Systems

This project will provide the Air Force with an improved information gathering capability through the updating of the P-3C avionics system and associated suite of support facilities.

The P-3C Avionics Update project will ensure the effectiveness of the P-3C Orion fleet until the planned withdrawal date of 2015. Under this project, the radar, acoustic system, data management system, navigation and communications equipment are being replaced with integrated systems.

The project has remained on schedule with 14 (of a total of 18) updated AP-3C aircraft now accepted. The remaining four production aircraft are scheduled for progressive delivery by December 2004. The deployable mission replay analysis module and the systems engineering laboratory have been accepted. A number of long lead time spares purchases are yet to be delivered.

The project did not achieve its 2003-04 revised estimate due to delays in anticipated down payments for spare parts ordered from manufacturers and contractor delays in delivering radar spare parts.

This project contributes to Air Force capability.

Anzac Ship Project

Achieved

Prime contractor: Tenix Defence

This project involves delivery of 10 ships, associated shore facilities and logistic support. Two of the 10 ships (02 and 04) were built for the Royal New Zealand Navy. The primary roles of the Anzac-class ships are surveillance and patrol, naval gunfire support for our forces, protection of shipping, disaster relief and search and rescue. Eight ships have been delivered and are in service with the Royal Australian Navy and the Royal New Zealand Navy. Delivery of Ship 08 (*Ballarat*) occurred in April 2004 ahead of schedule at the request of Tenix Defence and with Government approval. Plans for the other ships remain on schedule with Ship 09 (*Toowoomba*) and Ship 10 (*Perth*) planned for delivery in the third quarter of 2005 and the second quarter of 2006 respectively.

Expenditure for 2003-04 was in line with the revised estimate.

This project contributes to Navy capability.

FFG Upgrade Implementation

Substantially Achieved

Prime contractor: ADI

This project seeks to regain a comparative regional capability for Adelaide-class guided missile frigates (FFGs) and ensure that they remain effective and supportable to the end of their life. The FFG upgrade will improve the anti-ship missile defence and air surveillance capabilities of the ships. An overall schedule delay of up to 24 months has been mutually agreed between the Commonwealth and the prime contractor, ADI.

A contract change was signed in April 2004 for a revised schedule that includes incentives for delivery in a range of not more than 18-24 months later than the original contracted delivery date.

ADI commenced the installation/production phase of the upgrade at its Garden Island facility with the Commonwealth handover of the lead ship (HMAS *Sydney*) in September 2003. Contractor delivery of the lead ship is now rescheduled for the third quarter of 2005, which is still within the contracted date. The upgrade is scheduled to conclude with the delivery of the upgraded HMAS *Darwin* by 2008.

As a result of the Defence Capability Plan decision to remove the two oldest guided missile frigates from service from 2006 when the last of the new Anzac-class frigates is delivered, these two ships will no longer be considered for upgrade under this project. The cost impact of this decision is still to be finalised. Savings will be realised from annual operating costs for spare parts, fuel, maintenance and other running costs, whilst other cost savings will be made under the current prime contract. The contract savings will need to be negotiated with the prime contractor, given it is a fixed price arrangement.

The expenditure for 2003-04 was overestimated.

This project contributes to Navy capability.

Collins-Class Submarines Replacement Combat System

Partially Achieved

Prime contactors: Foreign military sales with the United States Government, as well as Raytheon Australia, Thales, Sonartech Atlas and the Australian Submarine Corporation.

This project is to provide a replacement combat system for the Collins-class submarines. This will contribute to the development of the submarines' full capability, in conjunction with other phases of the project that implement a program of modifications and enhancements to the submarine platform.

Acquisition of initial sets of the United States Navy tactical command and control system is progressing satisfactorily under a foreign military sales case. A Memorandum of Understanding will be signed with the United States Navy during 2004-05 to transition the acquisition to an Armaments Cooperative Project that also establishes a joint development process for the system.

All four major Australian-based supply contracts are now in place and progressing satisfactorily. Installation contracts with the Australian Submarine Corporation will be placed progressively to align with submarine docking availabilities.

The supply contracts were established later than planned and this has resulted in delayed expenditure against the budget estimate for 2003-04, but was in line with the revised estimate.

Installation of the first replacement combat system is planned for 2006, with all submarines planned to be upgraded by the end of 2010.

This project contributes to Navy capability.

Maritime Operations Support Capability

Achieved

Prime contractor: Design and modification contract not yet let

This project will replace HMAS *Westralia* with a commercial double-hull auxiliary oiler, which will be modified in Australia by 2006-07. The ship will be modified so that it has the latest technology and equipment capable of refuelling a range of Navy vessels, including the Anzac and Adelaide-class frigates and the new air warfare destroyers that will enter into service from 2013.

Teekay Shipping (Australia) Pty Ltd was contracted in January 2004 to assist Defence in identifying a ship suitable for purchase and modification for operation as a naval oiler. Australian Marine Technologies Pty Ltd was also contracted in January 2004 to assist in the assessment of the suitability of double-hull product tankers identified by Teekay Shipping for modification to meet the Navy's replenishment requirements.

During May–June 2004, Defence purchased a commercial double-hulled, environmentally sustainable oil tanker, built in the Republic of Korea by Hyundai Mipo Dockyard Company. Australia took delivery of the ship on 17 June 2004. A competitive contract will be let for the design and modification of the ship.

In order to maximise the ability to support the modified ship, the modifications, including design, integrated logistic support data development, and production, are planned to be conducted in Australia starting in 2004-05.

This project contributes to Navy capability.

Collins-Class Submarine Sustainability and Reliability Improvements

Partially Achieved

Prime contractor: Australian Submarine Corporation

The project consists of a large number of individual platform improvements to the Collins-class submarines. A number of individual modifications are being conducted in HMA Ships *Collins* and *Farncomb* during their current full-cycle dockings.

Contracts have been placed for design of the first two new major issues to be addressed; the Special Forces modifications and the sewerage system automation. First implementation of the special forces modifications is planned for HMAS *Collins* in early 2005.

Planned expenditure for the year was not fully achieved because of competing priorities relating to other Defence work being carried out by the Australian Submarine Corporation. However, expenditure was in line with the revised estimate.

This project contributes to Navy capability.

Evolved SeaSparrow Missile

Achieved

Prime contractor: NATO SeaSparrow Consortium

The Evolved SeaSparrow Missile has been selected as an element of the anti-ship missile defence system for the Anzac-class frigates and Adelaide-class guided missile frigates (FFGs) under their upgrade program.

This project will continue to incorporate the Evolved SeaSparrow Missile capability into Navy service. Progressive missile deliveries commenced in 2003, and will continue throughout 2004 and subsequent years. Anzac-class ships *Warramunga*, *Stuart*, *Ballarat* and *Parramatta* have been fitted with the Evolved SeaSparrow missile system. The remaining two Anzac ships under construction are being modified to fire Evolved SeaSparrow missiles and HMA Ships *Anzac* and *Arunta* (the first two Australian Anzac ships) will be upgraded during future maintenance periods.

Successful operational test firings were conducted in September 2003.

Expenditure for 2003-04 was less than the revised estimate due to favourable exchange rates.

This project contributes to Navy capability.

Underwater and Surface Warfighting Upgrade Program

Achieved

Alliance agreement: Anzac Ship Alliance between the Commonwealth, Tenix Defence and Saab Systems.

This project will enhance the Anzac-class ships' surface and sub-surface warfare capabilities. This phase of the project has been split into three sub-phases.

Sub-phase 3A is the Harpoon anti-ship missile launch system. Harpoon is the standard ADF anti-ship missile launched by other Navy and Air Force platforms. The Harpoon's launch capability is being acquired through the Anzac Ship Alliance between the Commonwealth, Tenix Defence and Saab Systems. Equipment delivery commenced in mid-2003 and installation of the capability in the first Anzac ship is progressing to schedule and will be completed in late 2004. Missiles will be acquired under a separate project.

Sub-phase 3B, the Sea Defender torpedo self-defence system, was dropped from the Defence Capability Plan in November 2003, so that higher priority Defence requirements could proceed.

Sub-phase 3C is the Petrel mine and obstacle avoidance sonar, which was approved in the 2003-04 Budget. This capability is being acquired through the Anzac Ship Alliance and is progressing to schedule. Installation is planned to commence in late 2004 and delivery of the capability in the first Anzac ship is expected in mid-2005. The Petrel system is also being fitted to the Adelaide-class frigates under the guided missile frigate upgrade project.

Expenditure for 2003-04 was in line with the revised estimate.

This project contributes to Navy capability.

Mine Hunter Coastal Acquisition

Achieved

Prime contractor: ADI

This project provides for the delivery of six coastal mine hunter vessels and associated supplies, including combat system and platform system trainers at HMAS Waterhen in Sydney.

All six ships, HMA Ships *Huon*, *Hawkesbury*, *Norman*, *Gascoyne*, *Diamantina* and *Yarra*, have been delivered to the Navy and were accepted into Naval service in November 2003.

Expenditure for 2003-04 exceeded the revised estimate due to improved progress on finalisation of prime contract issues.

This project contributes to Navy capability.

Australian Light Armoured Vehicles

Achieved

Prime contractor: General Dynamics Land Systems (Canada)

This project is for the acquisition of wheeled light armoured vehicles that provide the basis of the Army's armoured reconnaissance and surveillance capability.

Phase 3 of the project includes the acquisition of an additional 144 new vehicles and the standardisation of the Phase 2 fleet both by completing Phase 2 elements (surveillance suite, gunnery trainer and commander's weapon station) and by improving it to Phase 3 standard. Also included in Phase 3 is the rapid acquisition of spall liners, a device that increases the survivability for the crew and passengers, and remote weapons systems for vehicles deployed in Operation Catalyst.

The expanded fleet will enable the equipping of a second Land Command unit, 2/14 Light Horse Regiment (Brisbane, Queensland) with these vehicles in addition to the 2 Cavalry Regiment (Darwin, Northern Territory).

Phase 3 is proceeding on schedule. As at 30 June 2004, 140 vehicles had been delivered to the Australian Government. The project's actual expenditure was slightly ahead of target due to improved delivery schedules for vehicles and spare parts.

This project contributes to Army capability.

Upgrade of M113 Armoured Vehicles

Achieved

Prime contractor: Tenix Defence

This project is upgrading 350 of the Army's fleet of M113 armoured vehicles, which provide mobility and fire support to the Army's mechanised infantry forces, to improve protection, firepower, mobility and habitability. A contract for the upgrade was signed in July 2002 with Australian company Tenix Defence.

The project remains largely on schedule and within budget. Stage one of the contract, for the construction and initial testing of two demonstration vehicles, was successfully completed on time in December 2003. Work is progressing on the construction of the initial production vehicles and continued vehicle testing, with full production planned to commence in 2005 for introduction of the first Company group of vehicles in-service in late 2006. Actual expenditure for 2003-04 slightly exceeded forecast expenditure with the earlier delivery of some major components for the initial production vehicles.

This project contributes to Army capability.

Joint Strike Fighter

Achieved

Memorandum of Understanding: United States Government

This project aims to introduce a new air combat capability with the air dominance and strike functions currently provided by the F/A-18 and F-111 aircraft fleets.

In October 2002, Australia formally joined the system development and demonstration phase of the Joint Strike Fighter program, with the expectation that the F-35 Joint Strike Fighter will meet Australia's future air combat and strike requirements. This represents a new approach to international participation in combat aircraft programs by involving Defence and industry in the design and development phase. A procurement decision is expected in 2006.

Actual expenditure exceeded the revised estimate as a result of system development and demonstration payments being brought forward into 2003-04.

This project contributes to Air Force capability.

Explosive Ordnance Reserve Stocks

Substantially Achieved

Prime contractors: SAAB Bofors, ADI and Pains Wessex

This project involves the progressive acquisition of a range of explosive ordnance items to increase Defence's reserve stock holdings. This phase of the project is funded at \$195m, spread over five years from 2003-04 until 2007-08. Expenditure in 2003-04 was used to procure RBS70 missiles from SAAB Bofors Sweden, small arms ammunition and general purpose bombs from ADI, flares and distress signals from Pains Wessex, as well as a number of other minor items from a range of suppliers.

The balance of Phase 1B will procure some 120 different items of explosive ordnance covering tank and anti-armour ammunition, medium and field artillery ammunition, mortar ammunition, demolition stores, pyrotechnics, naval shells and additional bombs.

Actual expenditure was in accordance with the revised estimate.

This project contributes to Navy, Army and Air Force capabilities.

Lightweight Torpedo Replacement

Partially Achieved

Alliance agreement: EuroTorp and Thales

This phase of the project will acquire the MU90 lightweight torpedo from EuroTorp as a replacement for the aging MK 46 Model 1 and Model 5 shallow water torpedoes. The weapon is to be integrated into the Anzac and Adelaide-class frigates, the Seahawk and Seasprite helicopters and the maritime patrol aircraft.

The first ship to acquire the ability to fire MU90 torpedoes was HMAS *Parramatta* as part of its build program. Installation into the other frigates will be complete by December 2007, depending on the ship maintenance schedule and the fleet activity schedule, which have already impacted on installations. The schedules for integration into the helicopters and maritime patrol aircraft have yet to be determined.

The initial batch of MU90 torpedoes for test and evaluation is scheduled for delivery in July 2005.

Expenditure was below the revised estimate due primarily to delays in the installation schedule.

This project contributes to Navy and Air Force capabilities.

Jindalee Operational Radar Network

Achieved

Prime contractor: RLM Systems

The Jindalee Operational Radar Network consists of the radar network coordination centre at RAAF Edinburgh near Adelaide and two over-the-horizon radars: one near Longreach in Queensland, the other outside Laverton in Western Australia. These radars allow coverage of the sea and air approaches to Australia in an arc from Cairns in Queensland around to Geraldton in Western Australia at ranges of 800 to 3,000 km, and are now key contributors to the ADF's capability for wide area surveillance. The radar network is in full operational service with the ADF and the project has moved into the relatively low risk maintenance and support phase.

Actual expenditure for 2003-04 slightly exceeded the revised estimate due to better than expected performance by the contractor.

This project contributes to Air Force capability.

Air-to-Surface Stand-off Weapon Capability

Substantially Achieved

Prime contractor: Precision Guided Systems United States, through foreign military sales with the United States Government.

The project will acquire and bring into service the AGM-142E missile for use on F-111C aircraft. This will provide the ADF with the ability to strike non-hardened and semi-hardened unitary targets while improving the stand-off range for the aircraft, thereby contributing to its survivability. Aircraft integration is being undertaken by Boeing Australia Ltd at RAAF Amberley, Queensland. The integration activities, after delays in 2003, have been renegotiated on a fixed price basis and are proceeding on time against the revised schedule. Formal ground testing was successfully completed in March 2004. Modifications to the F-111 simulator are now under contract and progressing. Deliveries of missiles into Australia are continuing.

Actual expenditure was in accordance with the revised estimate.

This project contributes to Air Force capability.

Remaining Top 20 Projects by Total Approved Project Cost

Fourteen of the top 20 projects by total approved project cost are also in the top 20 projects by actual 2003-04 expenditure. As such, those 14 projects have been reported in Table 4.2 and detailed on the ensuing pages. The table below provides details of the remaining six projects in the top 20 by total approved project cost, not already reported at Table 4.2.

	Approved Project Cost ⁽¹⁾	Cumulative Expenditure ⁽²⁾	2003-04 Budget Estimate ⁽³⁾	2003-04 Revised Estimate ⁽⁴⁾	2003-04 Actual
	\$m	\$m	\$m	\$m	\$m
Aerospace					
ADF Air Refuelling Capability	1,771	1	3	3	1
Strategic Airlift Capability	1,041 ⁽⁵⁾	969	13	9	6
Lead-in Fighter Capability	1,020	938	24	20	12
Maritime					
New Submarine	5,119	5,060	23	19	21
Armidale-class Patrol Boat	455	23	30	12	19
Electronic and Weapon Systems					
High Frequency Modernisation	595	275	14	10	5

Notes

1. December 2004 prices.
2. Cumulative expenditure to 30 June 2004.
3. December 2002 prices.
4. January 2004 prices.
5. The reduction in the approved project cost was as a result of a real cost decrease of \$49m approved by Government in January 2004.

ADF Air Refuelling Capability

Substantially Achieved

Preferred tenderer: European Aeronautic Defence and Space Company with Qantas Defence Services

This project will provide five new generation tanker aircraft and through-life support services including engineering, maintenance, spares, technical data, software and training support for the new fleet.

The evaluation of tenders and selection of the preferred tenderer occurred on schedule. The Military Transport Aircraft Division of the European Aeronautic Defence and Space Company, teamed with Qantas Defence Services, has been announced as the preferred tenderer for the supply and through-life support of five Airbus A330 multi-role tanker transport aircraft. The project office has successfully undertaken tender development activities with the preferred tenderer, European Aeronautic Defence and Space Company and Qantas Defence Services, as a risk mitigation strategy ahead of formal contract negotiations, which commenced in early August 2004. The awarding of the acquisition and through-life support contracts is planned for later in 2004.

The lower than expected expenditure in 2003-04 was due primarily to some project administrative costs not occurring as originally planned.

This project contributes to Air Force capability.

Strategic Airlift Capability

Substantially Achieved

Prime contractor: Lockheed Martin

Twelve C-130J-30 Hercules aircraft were delivered in 1999-2000 to replace the C-130E aircraft. The fleet is now fully integrated into the Air Lift Group. A role expansion program has certified the aircraft for the roles of air logistics support, paratroop drop, search and survivor assistance, Papua New Guinea operations and restricted medical evacuation.

Interim in-service support contracts are in place, but are progressively being replaced by long-term in-service support contracts developed during 2003-04. These contracts will deliver training, engineering support, propulsion system repair and overhaul and aircraft deeper maintenance for the C-130J-30 fleet and are all expected to be in place in 2005.

The purchase of spares necessary to support the fleet was largely completed in 2003-04.

Defence and the United Kingdom's Ministry of Defence, are continuing a long-term venture involving full-scale fatigue testing of the C-130J wing assembly and a modified C-130K fuselage.

The lower than expected expenditure in 2003-04 was due primarily to the decision to suspend the purchase of mobile engine test stands as they may now be provided under a proposed Propulsion Systems Support Contract.

This project contributes to Air Force capability.

Lead-in Fighter Capability

Partially Achieved

Prime contractor: BAE Systems

This project involves the acquisition of 33 Hawk 127 aircraft to perform lead-in fighter and ADF support roles. Aircraft delivery was completed in October 2001. The full contracted capability for radar simulation and radar emulation functions that are required for the ADF support role has been delayed due to difficulties with the proposed design solutions. The initial radar emulation capability is expected to be achieved in the third quarter of 2005. The initial radar simulation capability is also planned for 2005.

Planned expenditure in 2003-04 was only partially achieved, primarily due to delays with the design solution for the radar emulation pods.

This project contributes to Air Force capability.

New Submarine

Achieved

Prime contractor: Australian Submarine Corporation

The new Collins-class submarines provide a conventional submarine capability with long endurance and stealth capability. All six submarines have been delivered. Chief of Navy approved 'operational release' of the class in February 2004, which acknowledges the

submarine's ability to achieve defined operational outcomes laid down in Defence's preparedness documentation. Intellectual property issues with the submarine designer, Kockums, have been resolved, as have outstanding claims between Defence, the Australian Submarine Corporation and Kockums.

Expenditure for 2003-04 was in line with the revised estimate.

The project contributes to Navy capability.

Armidale-class Patrol Boat

Achieved

Prime contractor: Defence Maritime Services (ships being built by Austal Ships)

This project will deliver 12 Armidale-class patrol boats to replace the ageing Fremantle-class patrol boats. The patrol boats will make a critical contribution to coastal surveillance and enforcement capability. The preferred contractor was announced in August 2003, and the contract was signed on 17 December 2003. The contractor will also provide through-life support for the Austal-designed-and-built boats under the single contract. This will link the acquisition and support to provide required levels of availability for a minimum 15-year operating term. In total, the new vessels will provide a capability for the Navy to achieve up to 3,000 available days per year for Coastwatch and ADF support operations, plus a surge capacity of up to 600 additional available days per year. The new boat will be larger than the Fremantle-class and will be capable of operating in higher sea states.

The project is currently running on schedule and on budget. Following preliminary and detailed design reviews, cutting of aluminium commenced in May 2004 and fabrication of the first hull is assessed as being on target for a January 2005 launch and a May 2005 delivery.

Annual expenditure exceeded the revised estimate due to early achievement of a contracted milestone.

This project contributes to Navy capability.

High Frequency Modernisation

Not Achieved

Prime contractor: Boeing Australia Ltd

The High Frequency Modernisation project will replace Navy high frequency radio stations in Canberra, Darwin, Exmouth, Sydney, Cairns and Perth, and Air Force high frequency radio stations in Sydney, Townsville, Darwin and Perth. The new network will provide enhanced high frequency radio communications capabilities and compatible high frequency radio equipment in selected ADF mobile platforms.

The project will deliver the new capability in two stages. The first stage will replace the existing facilities. The second stage will build on the first stage and provide increased levels of automation, improved capability, enhanced security and survivability, and reduced reliance on operating staff, and incorporate the new equipment into mobile platforms.

Completion of integration, system-testing and acceptance of the first stage system, originally scheduled for the second half of 2002 and then rescheduled for late 2003-04, was not achieved due to continuing delays by Boeing Australia in software development and integration. Delivery is now scheduled to occur in the third quarter of 2004, with contract acceptance to follow two months after delivery. The transition of the Navy and the Air Force's radio network operational capability and staff to the new integrated system is now scheduled for the fourth quarter of 2004. The second stage will be introduced progressively between 2005 and 2008 with installation into mobile platforms potentially extending to 2010.

Because of the delays, the contract baseline was renegotiated in early 2004 to provide more achievable targets. As part of the negotiations for the revised contract baseline, the contractor provided compensation to Defence. The contract delays are reflected in the lower than expected expenditure in 2003-04. The total approved project expenditure increases by \$10m due to variations in price indices and exchange rates.

This project contributes to Command of Operations capability.

Former Top 20 Projects

The table below provides details on projects that were reported as top 20 projects in the *Portfolio Budget Statements 2003-04* on the basis of budget estimates, but do not rank in the top 20 on the basis of the revised estimates.

	Approved Project Cost ⁽¹⁾	Cumulative Expenditure ⁽²⁾	2003-04 Budget Estimate ⁽³⁾	2003-04 Revised Estimate ⁽⁴⁾	2003-04 Actual
	\$m	\$m	\$m	\$m	\$m
Maritime					
Replacement Heavyweight Torpedo System	405	72	34	17	17
Electronic and Weapon Systems					
Air-to-Air Weapons Capability	311	235	31	27	14
Milsatcom – Military Satellite Payload	347	338	12	14	9
Air-to-Air Weapons Follow-on Buy	176	117	32	8	6

Notes

1. December 2004 prices.
2. Cumulative expenditure to 30 June 2004.
3. December 2002 prices.
4. January 2004 prices.

Replacement Heavyweight Torpedo System

Achieved

Prime contractor: United States Navy

The new heavyweight torpedo is being developed jointly with the United States Navy under a cooperative armaments project. Initial stocks of weapons will be delivered in late 2005 to support the integration of the replacement combat system into the Collins-class submarines.

An initial shipment of spare parts, support, and test equipment has arrived in Australia to support the introduction of the new heavyweight torpedo in-service date of 2007. The

upgrade of the Torpedo Maintenance Facility in Western Australia has commenced and is scheduled for completion in March 2005.

A portable shallow water tracking range will be developed to support the new heavyweight torpedo test and evaluation program. Operational testing of the new torpedo will be conducted jointly with the United States Navy in Australian waters in 2005.

Expenditure for 2003-04 was in line with the revised estimate.

This project contributes to Navy capability.

Air-to-Air Weapons Capability

Substantially Achieved

Prime contractors: Raytheon, through foreign military sales with the United States Government, and MBDA UK Ltd.

This project seeks to maintain a credible air-to-air weapons capability for F/A-18 aircraft through the acquisition and integration of new beyond-visual-range and within-visual-range missiles.

The majority of within-visual-range missiles have been received and introduced into operational service on the F/A-18 aircraft. A decision was made this year to invest in an Australian deeper maintenance and software support capability for the within-visual-range missile.

Expenditure was below the revised estimate due to delays in signing the in-service support contract.

This project contributes to Air Force capability.

Milsatcom - Military Satellite Payload

Achieved

Prime contractor: SingTel Optus Pty Ltd (formerly Cable and Wireless Optus Satellites Pty Ltd)

This project provides Defence with a communications satellite capability across Australia and throughout the Asia Pacific region in the X, Ka and UHF communications frequency bands.

The satellite was launched successfully in June 2003 and operational control of the Defence payload was transferred to Defence in July 2003, following completion of satellite in-orbit testing. The C1 satellite also provides Sing Tel Optus with commercial telecommunications services over Australia, New Zealand and parts of Asia. Arrangements have been established for the joint operation and management of the shared satellite asset.

The project was completed \$28m under budget.

This project contributes to Command of Operations capability.

Air-to-Air Weapons Follow-on Buy

Substantially Achieved

Prime contractors: Raytheon, through foreign military sales with the United States Government, and MBDA UK Ltd.

This project will complete the air-to-air weapons capability for the F/A-18 aircraft through the acquisition of new beyond-visual-range missiles and within-visual-range missiles and associated aircraft launchers.

All beyond-visual-range missiles (the advanced medium-range air-to-air missiles) have now been delivered. The introduction into service of the new version of the missile encountered test data transmission problems, which delayed final testing until April 2004. The new variant missile will enter operational service by December 2004. Only five within-visual-range missiles (the advanced short-range air-to-air missiles) out of the total inventory remain to be delivered. These deliveries are expected by December 2004.

Actual expenditure was lower than expected due to the delays.

This project contributes to Air Force capability.

Capital Facilities Projects (-\$35.1m)

Defence has implemented a new infrastructure asset development process. The process involves a strategic screen and two stages of approval based on a strategic business case and a detailed business case. The strategic screen tests proposals for alignment with broader Government and Defence planning priorities and requires the preparation of a corporate services infrastructure requirement. The strategic business case is developed from that requirement at a cost certainty of ± 30 per cent and approved at the first stage. Further development of the proposal leads to the detailed business case at a cost certainty of ± 10 per cent and approval at the second stage.

Capital facilities projects are categorised by thresholds. Major capital facilities projects have a cost of \$6m or greater and are subject to Government approval and review by the Joint Standing Committee on Public Works. Medium capital facilities projects have a cost of between \$250,000 and \$6m. Medium capital facilities projects between \$5m and \$6m are subject to Government approval but are not reviewed by the Joint Standing Committee on Public Works. Projects under \$5m are approved by departmental delegates. Details of these projects are provided in this chapter.

The capital facilities program is designed to give priority to projects that support the Defence Capability Plan, sustain current capability requirements, support other Government initiatives, meet legislative obligations and assist initiatives that support Defence people. A significant proportion of the program funding is directed towards the provision of basic engineering and infrastructure services, either in support of new projects or upgrades or existing facilities.

Total expenses on Defence's major capital facilities program in 2003-04 were \$35.1m below the projected result of \$421.1m. This was primarily due to delays in major and medium projects and in project approvals. The underspend was partially offset by the purchase of additional information technology assets (\$17.9m) in order to partially reduce a backlog in the information technology replacement program. Expenditure on the operating component of Defence's major capital facilities program was \$8.4 m above the projected result of \$10m, primarily due to the additional costs resulting from implementing the 'two pass' approval process.

Approved Major Capital Facilities Projects

Over the 2003-04 financial year, the Government approved nine major facilities projects. Six of these projects were referred to the Joint Standing Committee on Public Works for consideration and a further three were granted an exemption from a public hearing. Four of the six projects referred to the Committee have been approved, with public hearings held for a fifth project and pending for the sixth. During the same period, 19 medium projects received either departmental or Ministerial approval to proceed.

In the 2003-04 financial year, three major capital facilities projects and 13 medium capital facilities projects were completed.

The following tables provide details of estimated and actual expenditure on works during 2003-04 and the status of projects foreshadowed for approval in 2003-04 by state, federal electorate and location.

Table 4.5 and accompanying descriptions provide details on progress and expenditure during 2003-04 on major capital facilities projects, which are those projects which cost over \$6m.

Table 4.5	Approved Major Capital Facilities Projects by State and Federal Electorate				
	Total Estimated Expenditure	Cumulative Expenditure ⁽¹⁾	2003-04 Budget Estimate	2003-04 Revised Estimate	2003-04 Actual Expenditure
	\$'000	\$'000	\$'000	\$'000	\$'000
New South Wales					
Eden-Monaro					
Eden					
Naval Ammunitioning Facility	43,300	43,298	9,600	18,500	12,210
Gilmore					
Nowra – HMAS Albatross Base Redevelopment	110,000	100,918	5,400	2,500	868
Hughes					
Holsworthy					
Special Forces Training Facilities ⁽²⁾	79,600	623	-	-	623
Kingsford Smith					
Randwick					
Disposal and Rationalisation – Interim Works ⁽³⁾	8,750	2,952	-	-	2,952
Macquarie					
Richmond – RAAF Richmond Reinvestment ⁽⁴⁾	35,000	685	-	5,000	685
Parramatta					
Ermington					
Pre-Disposal Site Works	33,106	7,188	9,800	7,000	1,802
Paterson					
Williamstown – RAAF Williamstown Redevelopment Stage 1 and Airborne Early Warning and Control Works ⁽⁵⁾	129,200	18,333	19,000	14,000	14,945
Total New South Wales	438,956	173,997	43,800	47,000	34,085
Victoria					
Melbourne Ports					
Fishermans Bend					
Relocation of DSTO Platforms Sciences Laboratory	61,200	49,027	26,500	25,000	18,030
Total Victoria	61,200	49,027	26,500	25,000	18,030
Queensland					
Forde					
Canungra					
Defence Intelligence Training Centre	17,400	16,381	6,500	7,500	7,564
Groom					
Oakey					
Oakey Base Redevelopment	76,200	69,789	40,000	40,000	45,289
Herbert					
Townsville – Lavarack Barracks					
Redevelopment Stage 2	151,587	149,941	1,200	-	1,407
Redevelopment Stage 3	170,649	114,111	57,000	57,000	59,672
RAAF Townsville					
Redevelopment Stage 2	72,546	71,205	37,500	33,000	32,345
Total Queensland	488,382	421,427	142,200	137,500	146,277

South Australia					
Bonython					
Edinburgh – RAAF Edinburgh Redevelopment Stage 1	41,491	37,873	3,500	12,400	10,433
DSTO Edinburgh Extension to Joint Electronic Warfare Building ⁽⁶⁾	19,890	-	-	-	-
Total South Australia	61,381	37,873	3,500	12,400	10,433
Western Australia					
Brand					
Garden Island – HMAS Stirling Base Development Stage 2D	39,741	31,768	2,000	500	178
Total Western Australia	39,741	31,768	2,000	500	178
Northern Territory					
Lingiari					
Timber Creek Bradshaw Field Training Area Infrastructure	64,783	13,264	15,000	4,000	448
Katherine – RAAF Tindal Security Fence ⁽⁷⁾	9,250	331	-	3,000	331
Solomon					
Darwin 1 st Aviation Regiment Relocation ⁽⁸⁾ RAAF Darwin Base Redevelopment	75,000	6,240	-	6,000	6,240
Development of Operational Facilities	61,900	61,425	1,000	1,700	2,034
Total Northern Territory	222,603	90,598	20,000	19,100	11,456
Australian Capital Territory					
Fraser					
Canberra HMAS Harman Defence Network Operations Centre	19,600	18,880	4,600	2,300	2,406
Canberra Multi-User Depot	13,500	11,792	-	12,500	11,756
Russell Offices Intelligence Facilities ⁽⁹⁾	14,900	10,400	14,900	11,700	10,400
Total Australian Capital Territory	48,000	41,072	19,500	26,500	24,562
TOTAL	1,360,263	845,762	257,500	268,000	245,021

Notes

1. Cumulative Expenditure to 30 June 2004.
2. Approved by the Government on 27 May 2004.
3. Approved by the Joint Standing Committee on Public Works on 2 June 2004.
4. Approved by the Joint Standing Committee on Public Works on 15 October 2003.
5. Total estimated expenditure reduced to reflect turnkey project for airborne early warning and control support centre being delivered by Boeing at \$19.8m. These funds are held in the major capital equipment program. Total estimated cost is adjusted accordingly.
6. Approved by the Government on 10 June 2004.
7. Approved by the Joint Standing Committee on Public Works on 8 September 2003.
8. Approved by the Joint Standing Committee on Public Works on 21 August 2003.
9. Approved by the Government on 6 November 2003.

New South Wales

Eden – Naval Ammunitioning Facility

Achieved

This project provided a naval ammunitioning facility to replace both the former facility at Newington on the Sydney Olympics site and the Point Wilson interim facility. Construction of the wharf and the ammunition storage depot commenced in March 2002 and March 2003 respectively and was completed in October 2003 and March 2004 respectively.

This project contributes to Navy capability.

Nowra – HMAS Albatross – Base Redevelopment

Partially Achieved

This project replaces existing facilities and services that are beyond economical repair and includes the redevelopment of the operational and administration support facilities. Major work elements that have been completed include aircraft support, storage and maintenance facilities, the air traffic control tower, explosive ordnance facilities, training facilities and aircraft pavements. During 2003-04, design of the flight deck procedural trainer has progressed, some elements of engineering services have been delivered and demolition works have been completed. Outstanding elements, such as engineering services and the flight deck procedural training facilities, are now due for completion by late 2005 given delays associated with National Code of Practice issues.

This project contributes to Navy capability.

Holsworthy – Special Forces Training Facilities

Achieved

This project forms part of the project previously referred to as the Holsworthy Redevelopment and Special Forces Infrastructure project. That project is now to be delivered in two separate packages – the approved Holsworthy Special Forces Training Facilities and the unapproved Holsworthy Special Operations Working Accommodation and Base Redevelopment Stage 1. The training facilities project provides specialised ranges and training facilities to support Special Forces units based at Holsworthy. The Federal Executive Council provided exemption from consideration of the project by the Joint Standing Committee on Public Works on 27 May 2004. Design work was completed in August 2004, with construction expected to commence in November 2004 and completion expected by October 2006.

This project contributes to Army and joint capabilities.

Randwick – Disposal and Rationalisation – Interim Works

Achieved

This project, which is related to the Defence property disposal program, will allow the disposal of surplus land at Randwick and associated redevelopment of the portion of the barracks to be retained. To date, there has been progressive remediation of the surplus land, together with infrastructure works, to allow its release. Construction of the interim works commenced in June 2004 and completion of the works is expected in September 2005.

This project contributes to Army capability.

Richmond – RAAF Richmond – Reinvestment

Partially Achieved

This project involves a limited capital reinvestment to address pressing infrastructure deficiencies. The building works associated with the reinvestment project will support the current operations of the Air Lift Group as well as providing an upgrade of the base engineering infrastructure. The project received Parliamentary approval in October 2003. National Code of Practice issues raised throughout the tendering process caused a delay in the commencement of construction activities. Construction commenced in June 2004 and will be completed by the end of 2005.

This project contributes to Air Force capability.

Ermington – Pre-Disposal Site Works

Partially Achieved

This project involves preparing the Ermington site for disposal. It includes two elements: progressive site filling and stabilisation of the soil, and the installation of infrastructure services. This will enable the site to be sold progressively over the coming years. The off-site works commenced in December 2003 with the on-site works commencing in February 2004. The sale of Stage 1 was achieved on schedule in June 2004. Stage 2 is planned to be sold by June 2005. Planning of the site is proceeding in close consultation with the Ermington Residents' Committee.

This project contributes to Command of Operations.

Williamtown – RAAF Williamtown – Redevelopment Stage 1 and Airborne Early Warning and Control Works

Achieved

This project provides a range of new and redeveloped facilities and infrastructure necessary for the introduction into service of the airborne early warning and control capability at RAAF Williamtown. Construction of the No. 2 Squadron Headquarters facility and initial infrastructure was completed in March 2004. The managing contractor for the remaining works has been appointed and the planning phase is complete, with construction expected to commence in late November 2004. Total estimated expenditure for this project has been reduced from \$149m to \$129.9m to reflect the turnkey project for airborne early warning and control support centre being delivered by Boeing at \$19.8m with funds held in the major capital equipment program. The total estimated facilities cost has been adjusted accordingly.

This project contributes to Air Force capability.

Victoria

Fishermans Bend – Relocation of Defence Science and Technology Organisation’s Platforms Sciences Laboratory

Partially Achieved

This project will relocate Defence Science and Technology Organisation functions from Maribyrnong to Fishermans Bend and includes the integration of common functions and the construction of enhanced research and laboratory facilities. Construction commenced in mid-2002. The Chemical, Biological, Radiological and Nuclear Defence Centre was completed in July 2004, along with the bulk of the Maritime Platforms Division laboratory, excluding fit-out.

This project contributes to Navy, Army and Air Force capabilities.

Queensland

Canungra – Defence Intelligence Training Centre

Achieved

This project collocated the dispersed and inadequately accommodated headquarters, administrative and instructional elements into a modern, purpose-built and secure facility. The project also included field training facilities.

This project was completed in December 2003 and contributes to Navy, Army, Air Force and Intelligence capabilities.

Oakey – Oakey Base Redevelopment

Achieved

This project has redeveloped the Oakey base for optimal support of Army rotary-wing flying training, including the armed reconnaissance helicopter. Construction is largely complete, with the exception of the armed reconnaissance helicopter simulator facility, which is due for completion in February 2005.

This project contributes to Army capability.

Townsville – Lavarack Barracks – Redevelopment Stage 2

Achieved

This project was completed in July 2004. The redevelopment provided new industrial facilities, 1,004 units for single soldier accommodation and three combined messes. These facilities and infrastructure will ensure the long-term viability of Lavarack Barracks as the major base of the ADF Rapid Deployment Force.

This project contributes to Army capability.

Townsville – Lavarack Barracks – Redevelopment Stage 3

Achieved

This project provides new working facilities for Army units at Lavarack Barracks to replace existing facilities. Construction commenced on new facilities for 2nd Battalion Royal Australian Regiment in August 2002 and was completed in September 2003. Similar construction on new facilities for 1st Battalion commenced in January 2003 and was substantially completed in June 2004. The remaining elements of the project are expected to be complete by late 2005.

This project contributes to Army capability.

Townsville – RAAF Townsville – Redevelopment Stage 2

Achieved

This project provides a range of new domestic facilities and working accommodation to replace existing facilities. Major elements completed in 2003-04 include transit accommodation, main base entrance, physical fitness facilities, combined mess, central emergency power station, and air movements facilities. The remaining minor elements were completed in August 2004.

This project contributes to Air Force capability.

South Australia

Edinburgh – RAAF Edinburgh – Redevelopment Stage 1

Substantially Achieved

This project provides enhanced administrative, workshop and warehousing facilities, an upgrade of engineering services and an aircraft shelter. Provision of the Joint Logistics Unit (South) warehouse is included in the scope of works. Construction is now substantially complete, with the main works completed by mid-2003 and the warehouse completed in November 2003. The remaining minor works are due for completion in October 2004.

This project contributes to Command of Operations.

Edinburgh – DSTO Edinburgh – Extension to Joint Electronic Warfare Building

Achieved

This project will provide facilities to support the collocation of electronic warfare activities, and additional space for the software support facilities for a number of different ADF platforms that are, or will shortly be, fitted with electronic warfare equipment. It is expected that construction will commence in January 2005, with a target completion date of January 2006.

This project contributes to joint capability.

Western Australia

Garden Island – HMAS Stirling – Base Development Stage 2D

Partially Achieved

The project has provided new and upgraded facilities for helicopter support, fuel storage, training accommodation, torpedo maintenance and electrical power house supply. Works are complete with the exception of a static frequency converter, which provides direct current power to ships. Technical difficulties have prolonged delivery and an assessment is currently being undertaken to determine how these can be overcome. Provided that an appropriate strategy can be initiated, the works will be completed in late 2006.

This project contributes to Navy capability.

Northern Territory

Timber Creek – Bradshaw Field Training Area Infrastructure

Partially Achieved

This project provides engineering services and infrastructure to allow the use of Bradshaw as a field training area for 1st Brigade. Following the completion of the negotiation of the Indigenous Land Use Agreement, the initial civil works contract was let in June 2004. The construction is expected to be completed by October 2005.

This project contributes to Army capability.

Katherine – RAAF Tindal – Security Fence

Partially Achieved

This project will provide a perimeter security fence for the base designed to detect and delay intruder access. Approval from the Joint Standing Committee on Public Works has been granted and the project was approved by Parliament on 8 September 2003. The civil construction component will be completed by December 2004. Completion of the technology component has been delayed by six months and is scheduled for completion by mid-2005.

This project contributes to Air Force capability.

Darwin – 1st Aviation Regiment Relocation

Achieved

This project provides new facilities for 1st Aviation Regiment at Robertson Barracks in Darwin and includes purpose-built working, training and domestic accommodation facilities. Approval was granted by Parliament on 21 August 2003. Construction has commenced and will be completed by the end of 2005.

This project contributes to Army capability.

Darwin – RAAF Darwin – Base Redevelopment

Substantially Achieved

This project provides enhanced support facilities at RAAF Darwin, including an air movements facility, Air Force police and ground defence facilities. The majority of the facilities have been completed and are in use. The base medical facilities were substantially complete in June 2004 and the upgrade of the firefighting water supply is scheduled for completion by early 2005.

This project contributes to Air Force capability.

Darwin – RAAF Darwin – Development of Operational Facilities

Achieved

This project provides enhanced operational works at RAAF Darwin, including aircraft loading aprons, a fuel farm, a workshop and a base command post. All of the facilities have now been completed and are in use.

This project contributes to Air Force capability.

Australian Capital Territory

Canberra – HMAS Harman – Defence Network Operations Centre

Achieved

This project has provided basic facilities at HMAS Harman to allow later installation of a range of communications facilities to support the increased population at the base. The building was substantially completed in July 2003. Associated roadworks were postponed until construction of the multi-user depot was completed. The roadworks are planned to commence in October 2004 and will be completed in December 2004.

This project contributes to Command of Operations.

Canberra – HMAS Harman – Canberra Multi-User Depot

Achieved

This project provided a multi-user depot at HMAS Harman that enabled Navy, Army and Air Force operational units, Reserves and Cadets units to be collocated. The requirement resulted from the sale of RAAF Fairbairn, the proposed sale of the Army depot in Canberra and cost savings arising from the collocation of these units into one facility. The project was completed in July 2004.

This project contributes to joint capability.

Canberra – Russell Offices – Intelligence Facilities

Achieved

This project has provided increased working accommodation for Defence Imagery and Geospatial Organisation staff through the refurbishment of Russell Building R4.

Construction commenced in January 2004 and was completed in September 2004.

This project contributes to Intelligence capability.

Status of Major Capital Facilities Projects Foreshadowed for Joint Standing Committee on Public Works Consideration in 2003-04

Defence foreshadowed a number of major capital facilities projects (those expected to cost over \$6m) for consideration by the Joint Standing Committee on Public Works in 2003-04. The following table provides details of the progress of the proposed projects.

Table 4.6 Status of Major Capital Facilities Projects	
Program of Major Works (by state, federal electorate and locality)	Status
New South Wales	
Eden-Monaro	
Headquarters Joint Operations Command (formerly Headquarters Australian Theatre Project)	Public hearing held 18 June 2004
Hughes	
Holsworthy – Special Forces Training Facilities	PWC exemption granted 27 May 2004
Holsworthy – Special Operations Working Accommodation and Base Redevelopment Stage 1	Planned for referral in 2004-05
Kingsford Smith	
Randwick – Disposal and Rationalisation Project – Interim Works (previously referred to as Redevelopment and Disposal of Surplus Land)	Project approved by PWC 2 June 2004
Macquarie	
RAAF Richmond - Reinvestment	Project approved by PWC 15 October 2003
Victoria	
McEwen	
Puckapunyal – ADI Limited Explosive Ordnance Storage	Project cancelled
Queensland	
Blair	
9 Force Support Battalion and 21 Construction Squadron relocation to Amberley	Planned for referral in 2004-05
RAAF Amberley – Infrastructure Upgrade	Planned for referral in 2004-05
Forde	
Canungra Redevelopment	Planned for referral in 2004-05
South Australia	
Bonython	
Edinburgh – RAAF Edinburgh – Extension to Electronic Warfare Building	PWC exemption granted 10 June 2004
Port Wakefield – Ammunition Facility	Project referred 24 June 2004
Northern Territory	
Lingiari	
Katherine – RAAF Tindal – Security Fence	Project approved by PWC 8 September 2003
Solomon	
Darwin – 1 st Aviation Relocation	Project approved by PWC 20 August 2003

Australian Capital Territory

Fraser

Canberra – Intelligence Facilities – Russell Offices

PWC exemption granted 6 November 2003

Approved Medium Capital Facilities Projects

The following table provides details of expenditure in 2003-04 for medium capital facilities projects. Medium facilities projects are those expected to cost between \$250,000 and \$6m.

Table 4.7 Approved Medium Capital Facilities by State and Federal Electorate

	Total Estimated Expenditure	Cumulative Expenditure ⁽¹⁾	2003-04 Budget Estimate	2003-04 Revised Estimate	2003-04 Actual Expenditure
	\$'000	\$'000	\$'000	\$'000	\$'000
New South Wales					
Macquarie					
Richmond – RAAF Richmond					
Fuel Arm Upgrade	3,010	295	2,900	1,900	267
Upgrade Liquid Oxygen Compound ⁽²⁾	590	-	-	590	-
Paterson					
Williamstown – RAAF Williamstown					
Child Care Facility	2,200	328	2,069	500	283
Advanced Short-Range Air-to-Air Missile / Captive Air Test Module Facility ⁽³⁾	1,000	20	-	300	20
Fuel Farm Rectification	584	584	-	538	584
Air Weapons Range Security Works	710	56	-	710	56
Hughes					
Holsworthy					
Camp Sapper Environmental Works ⁽⁴⁾	909	-	-	909	-
Building 106 Refurbishment ⁽³⁾	1,765	1,765	-	1,750	1,765
Sydney					
Garden Island					
Building 77 Replacement	1,200	1,028	-	1,200	1,028
Redevelop Gangway ⁽⁴⁾	909	-	-	909	-
Replace West Dock Fender System ⁽²⁾	1,363	-	-	1,363	-
Effluent Recovery System ⁽³⁾	3,511	3,511	-	3,500	3,511
Total New South Wales	17,751	7,587	4,696	14,169	7,514
Victoria					
Ballarat					
Ballarat					
Construction of Army Multi-User Depot	5,830	4,485	1,135	1,500	1,476
Corio					
Geelong					
Construction of Army Multi-User Depot	4,000	172	3,263	20	13
Flinders					
HMAS Cerberus					
Weapons Training Simulation System	1,400	37	-	-	37

Gippsland					
East Sale					
East Sale Child Care	1,800	204	1,508	20	18
RAAF East Sale					
Airfield Lighting ⁽³⁾	574	574	-	502	574
Indi					
Bandiana					
Refurbish Building 304	909	440	-	909	440
Simulated Training Facility	909	300	-	909	300
Lalor					
Laverton					
Defence International Training Centre	2,440	86	2,040	20	21
RAAF Band					
Training and Rehearsal Facility	4,100	37	3,900	30	37
McEwen					
Puckapunyal					
Child Care Centre	2,700	223	1,575	200	223
Regional Training and Simulation Centre	2,200	186	2,000	-	-
Mission Essential Training Facility for Australian Light Armoured Vehicle, Phase 3	3,319	55	-	200	55
Total Victoria	30,181	6,799	15,421	4,310	3,194
Queensland					
Blair					
Amberley – RAAF Amberley					
Fire and Security School Working Dog Accommodation	3,085	2,988	450	1,780	1,740
Emergency Generator ⁽⁴⁾	595	-	-	595	-
Kennedy					
Cowley Beach Training Area Refurbishment					
	1,100	694	-	580	694
Forde					
Canungra					
Water Project	5,500	3,642	600	3,300	1,450
Training Area Structural Works ⁽⁴⁾	900	-	-	900	-
Herbert					
Townsville					
Special Operations Forward Mounting Facility	1,400	-	-	-	-
Lavarack Barracks					
Tactical Training	4,900	4,865	1,500	350	454
Combat Training Centre (Live)	5,800	5,521	4,900	4,000	4,116
Helicopter Underwater Escape Training Facility	2,500	15	-	-	15
Regional Training Centre North Queensland Flexible Learning Facilities	3,850	161	-	-	161
Combat Training Centre – Live Simulation, Range Instrumentation and Information System Maintenance and Storage Facility	2,800	-	-	-	-
Frontline Redevelopment of Western Mess	341	-	-	-	-
Mount Stuart	-	-	-	-	-
Training Area Grenade Range	400	-	-	-	-
Total Queensland	33,171	17,886	7,450	11,505	8,630

South Australia					
Bonython					
Edinburgh					
Systems Simulation Centre Extension	2,500	2,116	1,100	850	653
Uninterrupted Power Supply to Electronic Warfare Building	1,400	991	120	300	282
Aerial Test Field Relocation	1,874	1,825	50	50	1
Relocation of DMO Over the Horizon Radar Systems Program Office	5,039	4,433	4,160	4,160	3,645
Corporate Services and Infrastructure Centre	2,850	2,469	2,732	1,820	1,963
Aircraft Signature Turntable	1,132	27	-	150	27
RAAF Edinburgh					
Airfield Defence	3,635	3,520	100	90	110
Defence Science and Technology Organisation (DSTO)					
Hybrid Torpedo Simulator Facility	1,716	1,572	694	450	519
Virtual Ship Facility	903	846	360	240	266
Refurbish DSTO Land Operations Division Facilities	5,600	4,831	25	100	159
Surveillance Analysis Centre ⁽²⁾	1,310	1,088	950	1,190	996
Refurbish Laboratories 180 and 23	2,190	1,031	-	790	1,031
Wakefield					
Port Wakefield					
Ammunition Breakdown Facility ⁽⁵⁾	4,500	300	4,300	300	229
Total South Australia	34,649	25,049	14,591	10,490	9,881
Western Australia					
Brand					
Garden Island – HMAS Stirling					
Periscope Workshop Facility	3,521	3,457	2,000	3,000	3,261
Armoury, Magazine and Gunners Store	1,050	1,017	20	30	33
Wharf Services Upgrade	5,850	2,399	5,000	3,000	1,616
DSTO Submarine and Surface Combatants Science and Technology Facility Extension	2,895	2,365	2,400	2,400	2,308
Training Unit Anzac Ship Support Centre	5,330	1,934	-	2,000	1,934
Guided Weapons Maintenance Facility	3,512	-	-	1,000	-
Joint Ammunition Logistic Organisation West Office Accommodation (formerly Torpedo/Underwater Teams Facility)	1,500	-	-	-	-
Weapons Training Simulation System	1,400	37	-	-	37
Low Level Bridge Corrosion ⁽⁴⁾	545	-	-	545	-
Curtin					
Swanbourne					
Extension to Headquarters Building, Campbell Barracks (formerly 4 Sig Troop Facilities)	3,610	239	3,100	2,000	117
Forrest					
Leeuwin Barracks					
Install Residual Current Devices ⁽⁴⁾	660	-	-	500	-

Pearce					
RAAF Pearce					
Install Supervisory Cables	3,841	3,841	-	1,800	2,441
Total Western Australia	33,714	15,289	12,520	16,275	11,747
Northern Territory					
Lingiari					
Bathurst Island					
Radar Facilities	4,486	14	2,000	-	12
Katherine – RAAF Tindal					
New 400m Range	4,380	4,062	3,000	3,000	2,923
Vehicle Shelters	1,430	465	1,000	800	465
Living-in Accommodation	5,800	5,703	3,200	3,200	3,236
Solomon					
Darwin					
Married Quarters Electrical Upgrade					
	4,850	246	2,000	250	72
Aircraft Hydrant Refuelling					
	5,600	5,597	100	100	107
1 st Brigade Military Operations in Urban Terrain					
	4,835	-	-	1,000	-
1 st Brigade Small Teams Skill Training Facility					
	850	250	-	-	250
Vehicle Shelters					
	2,475	850	-	800	850
RAAF Darwin Joint Logistics Unit North Armouries					
	1,700	632	-	1,700	632
Special Operations Forward Mounting Facility					
	2,500	-	-	-	-
Robertson Barracks					
Tactical Training and Simulation Site					
	5,500	5,180	4,400	4,400	4,579
Security Upgrade					
	1,900	1,245	-	1,850	1,245
Deployed Forces Support Unit Accommodation ⁽⁴⁾					
	1,750	-	-	1,750	-
Total Northern Territory	48,056	24,244	15,700	18,850	14,371
Australian Capital Territory					
Fraser					
Jervis Bay					
Remediation of Mary Creek	1,100	157	10	10	30
HMAS Creswell					
Waterfront Facility for 4RAR	2,410	35	1,300	-	10
Canberra					
Deakin Offices Refurbishment ⁽³⁾	3,278	3,278	-	2,190	3,278
Russell Offices					
Passive Defence Works	3,600	2,067	-	3,600	2,067
Canberra Area Medical Unit Refurbishment					
	727	775	-	727	775
Total Australian Capital Territory	11,115	6,312	1,310	6,527	6,160
Other – Medium Works					
Air Traffic Control Systems – Various Locations					
	3,258	2,936	250	-	43
Total Other	3,258	2,936	250	-	43
Total Medium Facilities Projects	211,895	106,102	72,211	82,126	61,540

Notes

1. Cumulative Expenditure to 30 June 2004.
2. Project deferred.
3. Increase in outturn cost.
4. Project cancelled.
5. Project scope increased. Now part of foreshadowed major project.

Status of Medium Capital Projects for Departmental Approval in 2003-04

Table 4.8 Status of Proposed Medium Capital Facilities Projects	
Program of Works (by state, federal electorate and locality)	Status
New South Wales	
Lindsay	
Werrington (formerly Penrith) – Construction of Army multi-user depot	Deferred
North Sydney	
Waverton – HMAS Waterhen – Relocation of DMO mine warfare and clearance diving system program office	Deferred to 2004-05
Victoria	
Flinders	
HMAS Cerberus – weapons training simulation system Jagaga	Approved November 2003
Watsonia – regional training centre facilities	Deferred – now subsumed into a major project
Queensland	
Herbert	
Townsville – Lavarack Barracks – helicopter underwater escape training facility	Approved January 2004
Townsville – Lavarack Barracks – regional training centre North Queensland facilities	Approved January 2004
Townsville – special operations forward mounting facility	Approved April 2004
Townsville – combat training centre (live) storage and maintenance facility	Approved February 2004
Mount Stuart – Mount Stuart Training Area Grenade Range	Deferred to 2004-05
Townsville – field training area air weapons range (formerly Halifax Bay range relocation)	Deferred to 2004-05
Western Australia	
Brand	
Garden Island – HMAS Stirling – Joint Ammunition Logistics Organisation West office accommodation (formerly torpedo/underwater Target Teams Facility)	Deferred to 2004-05
HMAS Stirling – weapons training simulation system	Approved November 2003
Northern Territory	
Lingiari	
Delamere – tactical air defence radar site (formerly Katherine – Delamere radar facilities)	Deferred
Solomon	
Darwin – Tactical Air Defence Vehicle Shelters	Deferred to 2004-05
Darwin – Special Operations Forward Mounting Facility	Deferred
Darwin – 1 st Brigade Small Teams Skills Training Facility	Approved May 2004
Australian Capital Territory	
Canberra	
Canberra – Majura services development	Deferred to 2004-05
Canberra – Federation Guard facilities	Deferred
Canberra – Services study relocation	Deferred to 2004-05
Other	
RAAF Butterworth – building upgrades	Deferred – now subsumed into a major project

Other Capital Purchases (+\$101.9m)

Other capital purchases comprise minor capital equipment projects, purchase of repairable items and other plant and equipment exceeding the capitalisation threshold of \$10,000 (\$50,000 for grouped assets), other property, plant and equipment, software and intangibles. Repairable items are items such as engines, gearboxes and components of platforms. These items are acquired to sustain a pool of spares for use while worn and broken items are repaired, maintained or replaced.

Minor capital projects cover new equipment, modifications to existing equipment or enhancement to new equipment that are generally valued between \$250,000 and \$20m. Minor projects costing between \$8m and \$20m are approved jointly by the Ministers for Defence, and Finance and Administration. The Minister for Defence approves projects costing between \$5m and \$8m. The Service Chiefs and Group Heads, or their nominated delegates approve projects costing below \$5m.

Other capital equipment also includes purchases of information technology and administrative assets costing more than \$2,000 and other property, plant and equipment assets costing more than \$10,000, and software and intangibles.

Total expenses on other capital purchases in 2003-04 were \$101.9m higher than the projected result of \$517.7m. The additional expenses included:

- the purchase of repairable items aimed at clearing backlogs in this area (+\$23.7m);
- the purchase of information technology assets, which was offset by the Major Capital Facilities Program (+\$17.9m);
- additional purchases of other property, plant and equipment assets by the Corporate Services and Infrastructure Group (+\$5.7m);
- the Government-agreed settlement in relation to the intellectual property for the Collins-class submarine (+\$25.0m);
- the enhancement of Defence's human resource software package, PMKeyS, including associated software licensing (+\$5.0m);
- a change in accounting procedures for equipment purchases by the Defence Science and Technology Organisation (+\$8.6m); and
- an underestimate of other plant and equipment purchases in the original budget, together with a range of other offsetting adjustments (+\$16m).

Capital Receipts (-\$4.6m)

The capital receipts program comprises proceeds from property sales which are returned to the Government in the form of equity, and proceeds from the sale of housing annuities by the Defence Housing Authority, sale of specialist military equipment and commercial vehicles, and other plant and equipment items which are retained by Defence.

Net capital receipts for 2003-04 totalled \$101.9m or \$4.6m less than the projected result. Details are shown in Table 4.9 with an explanation of the variations for each category shown below.

	2003-04				
	Budget Estimate	Revised Estimate	Projected Result	Actual Result	Variance
	\$m	\$m	\$m	\$m	\$m
Capital Receipts					
Proceeds from the Sale of Land and Buildings	199.9	199.9	199.9	82.4	-117.5
Less: Capital withdrawal (DoFA requirements)	-199.9	-199.9	-199.9	-82.4	117.5
Proceeds retained by Defence	-	-	-	-	-
Revenue from sale of housing	-	-	-	44.0	44.0
Proceeds from sale of Specialist Military Equipment	23.5	23.5	25.3	12.2	-13.1
Proceeds from sales of other property, plant and other equipment	83.0	83.0	81.2	45.7	-35.5
Net Capital Receipts	106.5	106.5	106.5	101.9	-4.6

Property Sales (-\$117.5m)

In 2003-04, Defence sold property worth \$82.4m, which was \$117.5m below the projected result of \$199.9m. This was primarily due to Government decisions, the need to refer works at Randwick to the Public Works Committee, and variations in project scheduling for various reasons including the lead time required to consider local and state government priority sale proposals. As agreed, all funds from the Defence Property Sales Program were returned to the Department of Finance and Administration as a capital withdrawal.

Sale of Defence Housing and Annuity (+\$44m)

Defence received \$44m from the sale of housing annuities by the Defence Housing Authority in 2003-04.

Sale of Specialist Military Equipment (-\$13.1m)

Defence realised \$12.2m from the sale of specialist military equipment, \$13.1m less than the projected result. This was due to foreign exchange movements and an overestimate of the original estimate.

Sale of Other Property, Plant and Equipment (-\$35.5m)

Receipts from the sale of other property, plant and equipment totalled \$45.7m in 2003-04, which was \$35.5m less than the projected result. This was due to an overestimate of the original budget