

Photo opposite: an Armidale-class patrol boat under construction at the Austal shipyard in Henderson, Western Australia.

# CHAPTER THREE

## Group Contributions

This chapter describes the contribution of the Defence Groups that:

- provide the equipment, infrastructure and other support that help to deliver the Defence outputs; and
- advise and support the Government and Defence to ensure the efficient and effective operation of Defence and the development of future capabilities.



As at 30 June 2004, the Defence Materiel Organisation was managing 248 major capital projects

As at 30 June 2004, the Corporate Services and Infrastructure Group was managing 24 major and 82 medium capital facilities projects

Defence manages approximately 3 million hectares of land and 60 major ADF bases

Defence has over 100 properties on the Commonwealth Heritage List and many others with heritage significance

The Defence Science and Technology Organisation is Australia's second largest government scientific research organisation

Capability Development Group's dedicated test and evaluation directorate undertakes trials and concept demonstrations. Seven major defence trials were completed during 2003-04 including the detonation of five tonnes of explosive to determine the effect on exposed structures

## Vice Chief of the Defence Force Group

In March 2004, the Vice Chief of the Defence Force Group was restructured and the Vice Chief of the Defence Force was assigned the additional responsibility of Chief of Joint Operations, with command over the newly formed Joint Operations Command. Capability Systems Division, which was formerly a part of the Group, was transferred to the Capability Development Group in February 2004 as part of the restructure. The achievements of Capability Systems Division are reported under the Capability Development Group's contribution later in this chapter.

The role of the Vice Chief of the Defence Force is to act as the Chief of the Defence Force in his absence, and to act as Deputy Commander supporting the Chief of the Defence Force in his command of the ADF. The role of Chief of Joint Operations is the delivery of Defence Outcome One – 'Command of Operations in Defence of Australia and Its Interests' (see Chapter Two – Outcome One for further details).

This section outlines the owner-support functions of the Vice Chief of the Defence Force Group comprising Strategic Operations<sup>1</sup>, ADF Reserve and Cadet policy and the ADF Parliamentary Program.

### Strategic Operations

As part of the Joint Operations Group, Strategic Operations Division coordinates and provides military advice relating to operations at the strategic level and supports the Chief of the Defence Force (through the Chief of Joint Operations) in his planning and command of ADF operations.

The Division's primary functions are maintaining strategic situational awareness by:

- liaising with interdepartmental and international organisations;
- monitoring operations in its 24-hour command and control centre;
- leading military planning for operations at the strategic level by coordinating input from senior Defence decision makers, other Defence groups and government departments; and
- providing accurate and timely advice to the Government, Minister, Chief of the Defence Force, Chief of Joint Operations, other senior Defence decision makers, and other government departments.

The division formulated policy relating to operations, developed and issued Chief of the Defence Force orders, and monitored the accomplishment of those orders. The major military operation during 2003-04 was Operation Catalyst, Australia's contribution to the rehabilitation of Iraq. The division was also involved in the planning, monitoring and reporting on Operations Anode, Citadel, Slipper, Relex II, Mistral, Cranberry and Acolyte (see Chapter Two – Outcome One for further details on these operations).

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<sup>1</sup> Strategic Operations Division was transferred to Joint Operations Command (Defence Outcome One) on 16 March 2004.

## Reserve Policy

The Defence White Paper 2000 stated that the Government would show the way as a major employer of Reservists by providing leave policies and employment practices that support the release of Reservists for peacetime training and deployment.

Consistent with this commitment, agreements are now in place to provide Reservists with access to leave for training and deployment:

- The Public Sector Leave Policy for Defence Reservists, released in December 2003, requires Australian Government departments and agencies to include supportive policies for the provision of leave for Reservists in certified agreements.
- The Private Sector Leave Guidelines for Defence Reservists, released in March 2004, provide non-government employers with guidance on supportive leave arrangements and encourages them to support their employees in undertaking Reserve service.

In addition, revised arrangements for the ADF Reserves Employer Support Payment Scheme, authorised under *Defence Determination 2002 (Employer Support Payments)*, became operative on 1 July 2003. These revisions included:

- extending eligibility for employer support payments to include all Australian Government departments; and
- authorising the Chief of the Defence Force to approve additional payments when necessary to provide a required Defence Force capability;
  - under this authority, the Chief of the Defence Force has approved higher levels of employer support payments to employers (or self-employed individuals) of specified Reserve medical, dental, nursing or allied health officers deployed on, or directly supporting, specified operational deployments.

These revised arrangements have enhanced the operation and effectiveness of the Employer Support Payment Scheme.

Through their training, Reservists gain capability and experience which can be used in their civilian workplaces. Reserve training is, in many respects, akin to management and personnel development training and is provided at no cost to the civilian employer. Whenever possible, Reserve training is accredited with registered training organisations under the Australian Quality Training Framework. Following Government direction, the civil accreditation of Reserve training has been accelerated with the result that Defence now has an extensive range of qualifications for which Reservists can seek civil accreditation.

## Australian Defence Force Cadets

The Australian Defence Force Cadets comprises the Australian Navy Cadets, the Australian Army Cadets and the Australian Air Force Cadets. The Cadet organisations are community-based and supported by their parent Services and the Directorate of Defence Force Cadets. This partnership, between the community and Defence, provides opportunities for young people to develop in an adventurous, military-like setting.

Some 24,500 young Australians participate as Navy, Army or Air Force Cadets, in over 480 Cadet units throughout Australia and are supervised by over 2,500 adult volunteers. Former Cadets continue to make up a significant proportion of recruits into the ADF and

studies show that former Cadets are more likely to remain in the Services for a longer period of time.

The Services allocate over \$30m annually to Cadets and the Government has committed additional funding of \$6m per annum through the Cadet Enhancement Program. This program provides funding for a range of initiatives designed to improve the quality of the Cadet experience. The achievements of the Cadet Enhancement Program in 2003-04 are reported separately in Chapter Five – Performance against People Matter Priorities for 2003-04.

## **ADF Parliamentary Program**

The ADF Parliamentary Program aims to provide parliamentarians with a rewarding, memorable and educational experience with the ADF and so enable them to contribute to debate on defence and national security issues in an informed and constructive manner.

The 2004 program offered a number of options comprising 21 different attachments for the consideration of parliamentarians. This year's attachments included Exercise RIMPAC (an international naval exercise), an attachment to 4 RAR (Commando) and a week with an F/A-18 squadron. A total of 17 parliamentarians participated in the various options during the 2004 program.

In June 2004, the program also conducted the first mature ADF exchange program with six ADF personnel attached to either a senator or member's office at Parliament House.

Since its inception, 40 parliamentarians have participated in various opportunities offered by the program.

## Defence Science and Technology Organisation

The Defence Science and Technology Organisation has focused on implementing the directions outlined in the Defence White Paper 2000 and *Defence Update 2003* by seeking to make best use of technology and expanding the skills required to exploit technology to benefit Australia's defence. This included major contributions to Defence outcomes and the Government's national research priorities such as safeguarding Australia and frontier technologies for building and transforming Australian industries. The organisation also contributed significantly to Government reviews: mapping Australia's science and innovation activities, a review of closer collaboration between universities and major publicly-funded research agencies<sup>2</sup>, the work of the National Research Infrastructure Taskforce<sup>3</sup> and the evaluation of knowledge and innovation reforms<sup>4</sup>.

These contributions are outlined below.

### Results for 2003-04

#### Outcome One – Command of Operations

The research conducted and support given to Command of Operations included:

**Command of Operations Research** – improving the effective application of information technologies in a collocated headquarters, and technical support to enhancing a continuous situational awareness capability for command decision making. The organisation also conducted research into developing advanced modelling and simulation tools for operations planning, enhancing information fusion capabilities for headquarters' environments, and enhancing existing systems that support the command and control of coalition operations.

**Defence Force Military Operations and Exercises** – deploying personnel to provide on-site technical advice and support to both Operation Anode and Operation Catalyst. Additionally, the organisation provided technical support to develop security architectures to protect Defence information environment connections to both allied and coalition networks.

**Contribution to National Support Tasks** – providing support and technical advice to other government organisations. This included technical support to Customs in developing a facial recognition system for access control, collaborative research with the CSIRO to enhance proposed protection measures for national critical infrastructure, and command and control analysis support for national counter-terrorism exercises for the Attorney-General's Department.

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<sup>2</sup> The review was coordinated by the Department of Education, Science and Training. Additional information is available at: <http://www.dest.gov.au/collaboration/default.htm>.

<sup>3</sup> The taskforce was coordinated by the Department of Education, Science and Training. Additional information is available at: [http://www.dest.gov.au/highered/ri\\_taskforce/default.htm](http://www.dest.gov.au/highered/ri_taskforce/default.htm).

<sup>4</sup> The evaluation was coordinated by the Department of Education, Science and Training. Additional information is available at: [http://www.dest.gov.au/highered/ki\\_reforms/default.htm](http://www.dest.gov.au/highered/ki_reforms/default.htm).

## Outcome Two – Navy Capabilities

The maritime science and technology research program included research in the following areas:

**Capability for Major Surface Combatants** – providing support to concept of operations development for capability assessment, maximising the potential capability improvements gained from implementing network-centric warfare technologies, and enhancing existing above and below-water sensors and systems.

**Capability for Naval Aviation Operations** – providing technical advice on life-management issues associated with the Sea King, Seahawk and Super Seasprite helicopters and component systems, and on missile system tactical capabilities and limitations.

**Capability for Patrol Boats** – providing advice on optimum crewing strategies and other human-factor issues, and supporting the specification and procurement of sensors for the replacement patrol boats.

**Capability for Submarine Operations** – providing advice on the replacement combat system, issues relating to the structural integrity of the hull and on propulsion systems. Support was provided to maximise the availability and effectiveness of the current submarine fleet including: technical advice relating to acoustic signature control, battery performance and propeller life management. The organisation also provided support in relation to the procurement, testing and deployment of torpedoes.

**Capability for Mine Warfare** – supporting the mine hunter coastal platform through advice on signature reduction for reduced vulnerability and for improved structural reliability in the event of damage.

**Capability for Amphibious Lift and Afloat Support** – providing advice on the procurement of future amphibious systems.

## Outcome Three – Army Capabilities

The land science and technology research program included research in the following areas:

**Capability for Special Forces Operations** – enhancing existing communication and information systems, providing technical advice on large-strike and unconventional capabilities, and improving mobility, insertion and extraction techniques.

**Capability for Mechanised Operations** – providing science and technology support to the acquisition and introduction into service of the main battle tank replacement. Technical advice and support was also provided in enhancing the communications and navigation systems of armoured fighting vehicles, identifying the required battlefield effects of future combat vehicle weapon systems, and providing through-life support for existing vehicle fleets.

**Capability for Light Infantry Operations** – supporting development of the urban operations capability, improving collective training evaluation, and providing technical support to improving soldier performance as part of the soldier combat system project.

**Capability for Army Aviation Operations** – providing science and technology support to the acquisition and introduction into service of the armed reconnaissance helicopter and

troop-lift helicopter. Technical advice and support was also provided on enhancing collision avoidance systems, improving night flying performance and optimising the performance of aircrew equipment.

**Capability for Regional Surveillance** – research into determining the capabilities and technologies required in future networked battlefield surveillance systems. Technical advice and support was also provided to enhance existing active and passive sensor systems and systems architecture.

**Capability for Protective Operations** – enhancing current biomedical threat assessment and diagnostic techniques, improving protective personal equipment and ensembles, and developing a chemical decontamination and collective protection program.

## **Outcome Four – Air Force Capabilities**

The air science and technology research program included research in the following areas:

**Capability for Air Combat** – providing support to the current F/A-18 and F-111 fleets to improve operational effectiveness and survivability including operational advice prior to deployment in the Middle East, reducing the cost of Defence ownership through investigation and advice on structural integrity management issues, as well as providing technical support on the evaluation and acquisition of future air combat capabilities.

**Capability for Strategic Surveillance** – providing technical advice on enhancing secure datalinks and communications systems, improving airborne surveillance systems' interactions with the national surveillance network, and research into improving the Australian air defence system. The organisation also conducted research into force development and simulation using the virtual air environment, and provided significant technical support for the evaluation and acquisition of the airborne early warning and control aircraft.

**Capability for Maritime Patrol Aircraft** – undertaking capability analysis for the replacement of the maritime patrol and response capability, providing technical advice on extending the life of the current airframe and engine systems, and technical advice and support for current radar and multi-static sonar systems, as well as providing advice on operational tactics development.

**Capability for Airlift** – providing acquisition support for replacing the air refuelling capability, research into optimising aircrew workloads, and technical advice and through-life support provided for the C-130 and Caribou fleets. The organisation also developed an innovative and cost-effective solution to correct propeller balance in the C-130J, and provided vital technical support to optimise the survivability of the C-130H/J on deployment.

## **Outcome Five – Strategy**

The research conducted and support given to Strategy Group included:

**Military Strategy and Strategic Operations** – providing technical recommendations to senior managers on how best to improve strategic Defence capabilities. Technical advice was provided to improve Defence capability in the following areas: strategic interoperability, current and future force structures, capability option analysis, whole-of-force readiness and whole-of-force sustainability, the ADF lift capability, maritime patrol and maritime response, ground-based air defence, ADF helicopter platform rationalisation and the ADF air-to-air refuelling capability.

**Strategic and International Policy, Activities and Engagement** – maintaining effective science and technology relationships with other countries. The most important element was ongoing participation in The Technical Cooperation Program with the United States, the United Kingdom, Canada and New Zealand; a significant additional activity was hosting the rotating annual meeting of program principals in October 2003. The Defence Science and Technology Organisation also continued separate bilateral science and technology arrangements with nations including the United States, the United Kingdom, Canada, New Zealand, France, the Netherlands, Singapore, Thailand, Malaysia and Indonesia. In addition, the organisation provided technical advice and support on UN disarmament and arms control initiatives and contributed to the science and technology research annex of the United States-Australia agreement on missile defence.

## **Outcome Six – Intelligence**

Research conducted and support given included evaluating the effectiveness of selected systems, applications and tools for use in the Defence intelligence system; providing technical advice on developments in science and technology that have the potential to threaten the security of Australia; and providing technical assistance to develop solutions to identified intelligence problems.

## **Making the Best Use of Science and Technology and Australian Industry**

The Defence Science and Technology Organisation began implementing a new planning framework that centres around three core planning processes: strategic, technology capability and program planning. The new framework introduces a new science and technology capability plan to allow the organisation to better adapt its science and technology capabilities and workforce to future requirements. It will support the alignment of the organisation's future science and technology capabilities with known client needs, while taking into account trends in defence technologies.

The organisation also commenced implementing change strategies and organisational improvement recommended by the Defence Procurement Review. Achievements in this area included:

- developing policy on, and a structure for, conducting technical risk assessments on all projects being presented to the Government for first and second pass approval (for more detail on the 'two pass' implementation process, refer to Chapter One – New Capability Development and Acquisition Process section);
- establishing a dedicated cell to support Defence's new Capability Development Group; and
- developing an agreement with the Defence Materiel Organisation for the provision of science and technology support during its transition to the prescribed agency model in 2005-06.

The organisation was well represented in the science, engineering and technology unit established in the Department of the Prime Minister and Cabinet to develop a coherent, focused research program in support of Australia's counter-terrorism efforts.

Under the direction of the Minister, an external consultant, Mr Robert Trenberth<sup>5</sup>, reviewed the organisation's external engagement and contribution to Australia's wealth. The organisation received favourable comment from the review and has embraced the review's recommendations for further improvement by developing plans to:

- improve technology access for industry, especially for small to medium enterprises;
- deliver more strategic external engagements;
- expand the existing capability and technology demonstrator program; and
- enhance existing commercialisation mechanisms for technology transfer to industry.

## Network Security Support to Network Centric Warfare

A secure information infrastructure that protects the confidentiality, integrity and availability of information is pivotal to conducting network-centric warfare. To this end, significant research effort was applied during the year to maintaining and enhancing the security of the Defence information infrastructure, with special emphasis placed on work to develop and improve large-scale mobile secure networking. Continued close collaboration with United States' Government agencies, in particular the Defense Advanced Research Projects Agency, ensured the installation and initial testing of an Australian prototype network intrusion-detection system. Other important research activities included providing technical advice and support to position Defence to utilise the next generation internet protocol, IPv6, in order to maintain and improve Australia's secure interoperability with its allies, especially the United States.

## Backing Australia's Ability and National Research Priorities

The organisation supported the Government's 2001 innovation statement *Backing Australia's Ability* by contributing to national research priorities in a number of areas, including:

- improving support for transformational defence technologies by conducting research programs in counter-terrorism, network-centric warfare, battlespace automation, joint experimentation, and reducing the costs of ownership; and better support to enhancing Defence capability through developing frontier technologies for building and transforming Australian industries and by adopting initiatives to address smart materials; and
- entering into an umbrella collaborative research agreement with National Information and Communications Technology Australia Limited to conduct joint research in information and communications technology.

## Industry Involvement

The organisation's contribution to national wealth creation was confirmed by Mr Trenberth's review. Commitment to this objective was evidenced by continued strengthening of links with industry, other government research organisations, cooperative research centres and universities.

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<sup>5</sup> Mr Trenberth's work is reported under 'DomainOne' consultancy in Table 7.21 of the External Consultants section of the Appendices to this report.

In July 2003, the organisation joined the existing 'Coastal Zone, Estuary and Waterway Management', as well as the new 'Integrated Engineering Asset Management' and 'Advanced Composite Structures' cooperative research centres, bringing the total number of cooperative research centres to ten with which the organisation collaborated on various research activities during 2003-04.

Further licences to transfer dual-use defence technologies to industry were also approved. These included a licence agreement with Pacific Marine Batteries to commercialise the Defence Science and Technology Organisation's specific gravity sensor technology, and an intellectual property licence with Anatomical Surrogate Technologies to allow the company to develop and market the organisation's frangible surrogate limb technology.

Research agreements and centres of expertise with universities were further developed and expanded. These included:

- an additional memorandum of understanding between the organisation and other parties on the Australian Hypersonics Initiative;
- establishing two centres of expertise and two corresponding university chair positions, in photonics and microwave radar respectively, at the University of Adelaide; and
- a new collaborative agreement with the Royal Melbourne Institute of Technology to develop and commercialise photonics optical modulator technology.

The organisation's support to Australian industry also included undertaking research and development under its outsourcing program, a number of new collaborative research programs with industry and universities, and also three new industry alliance agreements with Tenix Defence, Saab Systems Pty Ltd and the University of Adelaide.

## People Matter

The organisation consolidated its existing people initiatives and extensively re-evaluated its leadership and learning programs during 2003-04.

Workshops were designed and facilitated to develop the skills and knowledge of managers within a principles-based environment, and an award framework was developed to help recognise the significant contributions of the organisation's staff.

The organisation's Continuing Education Initiative was enhanced through additional courses and program development. Staff participation in postgraduate science and technology studies under this initiative increased significantly during the year.

## Intelligence and Security Group

The intelligence function of the Intelligence and Security Group is reported in Chapter Two – Outcome Six. The achievements of the security function of the Group are detailed below.

### Defence Security Authority

The Defence Security Authority's role is to coordinate security across Defence. Under the leadership of Deputy Secretary Intelligence and Security, the Authority works with ADF commanders, Defence executives and Defence industry to protect Defence's people, information and assets. The Authority is responsible for:

- development of security policy;
- provision of specialist security services, such as vetting and threat assessment;
- delivery of security training and awareness across Defence;
- management of security performance assessment;
- undertaking serious and complex security investigations; and
- security advice to Defence industry.

### Results for 2003-04

The Defence Security Authority works with the Service Chiefs and Group Heads on the five strategic themes that guide its performance:

- help Defence to secure its capability;
- fulfil stewardship expectations;
- integrate security into Defence capability;
- strive for business excellence; and
- build an effective and adaptive security authority.

The strategic themes were reviewed and updated in November 2003 and remain consistent with previous themes. Achievement against these themes is outlined below.

#### Help Defence Secure its Capability

During 2003-2004, the Defence Security Authority reviewed the currency and application of protective security policy and re-drafted the Defence Security Manual. The manual is designed to reflect the most recent draft of the Commonwealth Protective Security Manual and world best-practice. In addition, the Authority worked with the Defence Intelligence Organisation and the Services to revise counter-intelligence policy to better integrate this activity across Defence. This has led to an improvement in Defence's ability to conduct counter-intelligence in a coalition environment.

Defence has significantly reduced the backlog of personnel security vetting requests. There are now minimal delays in processing clearances and significant business improvements have been achieved. Electronic vetting packs were introduced during 2003-04 and are being progressively implemented. The Authority has re-validated all overdue Top Secret

and Secret clearances and, where necessary, work has commenced on the re-evaluation of these clearances.

The security performance assessment program continues to provide assurance to Defence senior leadership on the Defence Security Authority and the whole-of-Defence security performance through self-assessment, evaluations of Defence sites and targeted site reviews. The first review was conducted in December 2003, and lessons learnt from the program are being integrated into Defence policy and security awareness campaigns.

Defence continues, through the Safebase security alert system, to implement coordinated, incremental protective security measures, in response to the assessed level of threat to personnel and assets within Australia. Under this system, various Defence facilities received security upgrades during 2003-04 including the installation of surveillance cameras, upgraded alarm systems and improved security of base perimeters. Ongoing funding provides personnel to control access to, patrols of, and conduct mail examination at, Defence facilities. Security at Defence establishments is regularly reviewed and Defence works closely with a number of Government agencies to determine the appropriate level of alert.

### **Fulfil Stewardship Expectations**

The Defence Security Authority maintains a strong commitment to ensuring accurate and transparent performance reporting and regularly provides reports on its protective security status to the Defence Committee and Commonwealth forums. The Defence Security and Counter Intelligence Committee, chaired by Deputy Secretary Intelligence and Security, provides oversight and coordination of Defence's security and counter-intelligence activities.

### **Integrate Security into Defence Capability**

The Defence Security Authority conducts security training and awareness primarily for Defence civilians and ADF personnel in joint units. The Authority has trained 932 Unit/Facility Security Officers during 2003-04 and provided 212 security awareness presentations for 8,514 personnel.

Security-specific questions in the 2003 annual Defence attitude survey indicated an improvement in individuals' perception of their supervisor's security awareness and reflected the investment Defence has made in security awareness activities.

The Defence Security Authority has continued to expand the variety of methods used to improve security awareness. During the past year, the Authority introduced a quarterly security newsletter, issue-specific brochures and orientation packs for personnel receiving a security clearance. The Authority has placed emphasis on drawing from lessons learnt from security incidents to develop these products.

### **Strive for Business Excellence**

The Defence Security Authority continues to work with the Navy, Army and Air Force to ensure that Defence security issues and policy are addressed in line with Service-specific requirements and are consistent with Commonwealth security policy.

Personnel security requirements within Defence have been critically examined to determine the extent to which recruitment and vetting processes are aligned with, and supportive of, each other.

## **Build an Effective and Adaptive Security Authority**

The Defence Security Authority's national recruitment campaign in 2001 provided a strong foundation for the development of a stable and flexible workforce of generalists and security specialists, from both the public and private sector. The Authority has built upon this foundation and, with the re-integration of the positive vetting area into the Authority, has consolidated a professional and dedicated workforce to provide high quality security services to Defence. A substantial part of that workforce has been focused on, and reduced, the personnel security clearance backlog.

## Capability Development Group

The Capability Development Group was established on 16 February 2004 as a result of key recommendations of the *Defence Procurement Review 2003* (also known as ‘the Kinnaird Review’). The Chief of the Capability Development Group was appointed on 22 December 2003, and is responsible and accountable for assessing and defining new capabilities that the ADF should have now and in the future.

The Group is responsible for taking capability proposals through initial Government consideration, and financial endorsement, to final approval by Government. In June 2004, the Chief of the Capability Development Group endorsed a series of ‘implementation tasks’, both short-term and strategic, to establish the Group, and ensure the successful carriage and execution of the applicable Kinnaird Review recommendations.

The Group was formed by an amalgamation of previously dispersed Defence capability elements: Capability Systems Division, Capability Investment and Resources Division, Capability and Plans Branch, the Australian Defence Simulation Office, the Directorate of Trials and the Office of Interoperability.

The Group works closely with a wide range of stakeholders, both internal and external to Defence, and is developing a close partnership with the Defence Materiel Organisation to ensure the effective implementation of the Kinnaird recommendations and efficient and timely delivery of capability to Defence.

### Results for 2003-04

The following section outlines the Group’s roles and its achievements during its first few months of operation.

#### Capability Systems

The Capability Systems Division resided within the Vice Chief of the Defence Force Group in the earlier part of 2003-04, but moved to Capability Development Group in February 2004.

Notable projects progressed for Government approval included:

- acquisition of five air-to-air refuelling aircraft (Project AIR 5402 – ADF Air Refuelling Capability);
- acquisition of an additional two airborne early warning and control aircraft (Project AIR 5077 – Airborne Early Warning and Control – Project Wedgetail);
- a range of upgrades and refurbishment programs for F/A-18 aircraft (Project AIR 5376 Various Phases – Hornet Upgrade);
- acquisition of a main battle tank for land operations (Project LAND 907 – Main Battle Tank Replacement);
- acquisition of additional explosive ordnance warstocks (Project JP 2085 Phase 1B - Explosive Ordnance Warstocks);
- acquisition of improved anti-ship missile defences for Anzac-class frigates (Project SEA 1448 Phase 2A – ANZAC ASMD Upgrade); and

- acquisition of an auxiliary oiler to replace HMAS *Westralia* (Project SEA 1654 Phase 2A – Maritime Operational Support Capability – *Westralia* Replacement).

Other initiatives undertaken in support of capability development included:

- heading the development of the latest version of the Defence Capability Plan, under the auspices of the *Defence Capability Review 2003*. This included a review of all cost estimates associated with unapproved major capital projects and the development of new capability proposals to respond to the war against terrorism and to satisfy other identified capability gaps;
- development of departmental processes and procedures associated with the recommendations of the Defence Procurement (Kinnaird) Review 2003. A new version of the Capability Systems Lifecycle Management Manual will reflect those changes and is due for completion by February 2005; and
- development and implementation of the ADF Requirements Development Information System. This is an information/knowledge management system being established within Capability Systems Division that will manage all information, regardless of type or form, for all Defence projects and capabilities. The system will reach maturity in late 2005.

## Capability Investment and Resources

The Capability, Investment and Resources Division provides independent analysis and review of capability issues including the overall balance of investment in capability (current and future), the future structure of the ADF, major investment proposals and priorities. It is also responsible for the development of the forward program of new major capital investment, and the coordination of capability information for the annual Defence Plan and the associated Defence Management and Finance Plan.

The division is responsible for implementing the arrangements for the ‘two pass’ approval process between Defence and other government departments, to codify the arrangements with the Government and to provide an earlier, more comprehensive consideration of capability options, their costs, risks and likely schedule. For more detail on the ‘two pass’ implementation process, refer to Chapter One – New Capability Development and Acquisition Process section.

The division will implement a more rigorous project-costing methodology which aims to ensure that more accurate project and whole-of-life costs are analysed in support of decisions taken at first and second pass.

## Capability and Plans

The Capability and Plans Branch was created by integrating elements from Strategy Group (Preparedness and Capability Guidance) and Continuous Improvement Division (Output Evaluation). The branch provides guidance on the preparedness of the force-in-being and the strategy against which the future force structure for the ADF is developed. Capability and Plans staff contribute to Defence planning guidance, which will provide the following annual advice to the Government.

## Directorate of Trials

The Directorate of Trials manages Defence equipment trials and concept demonstrations that cross Service, Defence and international boundaries. The directorate was previously located in the Defence Science and Technology Organisation.

The directorate is engaging with other Capability Development Group staff to conduct trials to support pre-first and second pass decisions. Examples are the '*Ground-Based Air Defence System transmission of the Recognised Air Picture Trial*', and the '*High Frequency Surface Wave Radar Operational Trial*' which will be completed over the coming two-year period.

## Australian Defence Simulation Office

The Australian Defence Simulation Office, previously part of the Office of the Chief Information Officer, formally joined the Capability Development Group on 1 July 2004.

The office is responsible for policy direction, collaboration and coordination of simulation activities across Defence. It has prime responsibility for developing and overseeing the implementation of Defence simulation policy and the Defence Simulation Plan.

The office promotes the development of approaches to gaining and sustaining knowledge, via simulation, for Defence to make the best use of this technology to enhance capabilities, save resources and reduce risk.

## Office of Interoperability

The Secretary and the Chief of the Defence Force established the Office of Interoperability on 1 July 2004. The office consists of a small team that addresses issues of interoperability with the United States Armed Forces and other potential coalition partners. The Director-General Interoperability is responsible to the Chief of Capability Development Group and is responsive to the Chief of Joint Operations, for interoperability issues with an operations perspective, and to the Strategy Group for policy issues that might affect Australian and coalition allies.

## Future Directions

The Capability Development Group's future focus is on setting the future capability agenda for Defence. This will be achieved through annual decision making advice to the Government and delivering against the milestones of the Defence Capability Plan. The Group will continue to refine the business and governance processes implemented in 2003-04 and build on relationships with defence industry.

## Corporate Services and Infrastructure Group

With representatives at every Defence site around the country, the Corporate Services and Infrastructure Group provides essential services and support to more than 90,000 personnel. The overriding objectives of the Group are to be an accountable and responsive organisation to the Government and Parliament, to our customers, to our industry partners and to the communities in which the Defence estate is located.

The Group consists of four divisions that are responsible for the delivery of corporate support (including maintenance and garrison support to over 60 major Defence bases); information infrastructure; the acquisition, development and disposal of Defence property; and Defence's legal services.

### Results for 2003-04

#### Capital Facilities

The Corporate Services and Infrastructure Group develops facilities to support major capital equipment projects forecast in the Defence Capability Plan, sustain current capability requirements, to support other government initiatives and to meet legislative obligations. During 2003-04, a total of \$306m was spent on delivering major and medium capital facilities projects.

The Government endorsed the infrastructure asset development process during 2003-04, which links directly to the 'two pass' Defence Capability Plan approval process. The linkage between the two processes ensures that the facilities implications and costs are identified when Government is considering a major capital equipment project. During the reporting period, the group delivered three major capital facilities projects (over \$6m) and 13 medium capital facilities projects (between \$250,000 and \$6m). The major projects were the Defence Intelligence Training Centre in Queensland, RAAF Darwin Development of Operational Facilities in the Northern Territory, and the Canberra Multi-User Depot at HMAS Harman in the Australian Capital Territory. More details on the major and medium facilities projects approved by Government in 2003-04 can be found in Chapter Four (Capital Budget).

#### Capability Upgrades for Training Areas

The Standard Training Area Range Safety Net project will deliver comprehensive safety communications to the 24 major land training areas. Commencing in 2002, the safety net system was commissioned on a total of 14 training areas this year, with the remainder to be commissioned by the end of 2004-05. The system contributed to the success of Exercise Crocodile 03 in Shoalwater Bay in Queensland during August-September 2003.

The final marksmanship training range was commissioned at the Army Recruit Training Centre at Kapooka, New South Wales, on 25 September 2003. This was the 11<sup>th</sup> range to be upgraded, providing the ADF with a capability offering the world's best practice in marksmanship training. The procurement of 600 portable infantry target systems enhanced the capacity for realistic training, with delivery commencing in March and concluding in July 2004. Target systems for armoured vehicles were also upgraded at Puckapunyal, Victoria, in May and at Mount Bunday, Northern Territory, in July 2004.

The continued development of the national training area safety and management information system also enhanced Defence's capacity for safe and sustainable management of its training area resource. This project will be completed during 2004-05 and will assist in the safe operation and sustainable use of these training areas.

## **Operational Support**

The Group provided administrative, garrison and information support services to ADF units and commands involved in the mounting and drawdown phases of ADF operations in the Solomon Islands. Training range, environment and garrison support services were provided by the Group to the Australia-United States bilateral Exercise Crocodile 03. Support was also provided to the ADF's involvement in the Rugby World Cup 2003, and to ADF units involved in ongoing peacetime national tasks. Further details on these exercises can be found in Chapter Two – Outcome One.

## **Legal Services**

During 2003-04, significant progress was made to improve the independence and transparency of the military justice system. This was achieved through the appointment in January 2004 of the Chief Judge Advocate (a military judge) as a statutory appointment, independent of the ADF chain of command, and the appointment of an interim Director of Military Prosecutions. Similar to a civil Director of Public Prosecutions, the Director of Military Prosecutions determines whether to prosecute offences under the *Defence Force Discipline Act 1982*. Once the necessary legislation is passed, the director will become a statutory appointment independent of the ADF chain of command.

Operational legal issues, in the international arena particularly, have rarely been more complex over the past 12 months. During 2003-04, approximately 20 ADF legal officers from the Navy, Army and Air Force were deployed in support of Operations Catalyst (Iraq), Anode (the Solomon Islands) and Citadel (East Timor). These deployed legal officers, together with their Australian-based counterparts, provided advice to commanders on a range of complex legal issues at the strategic, operational and tactical level of operations. The legal officers were instrumental in ensuring that Australia and the ADF complied with our domestic and international legal obligations. In Iraq, some were also embedded in other commands of the Coalition Provisional Authority.

## **Environmental and Heritage Management**

A highlight for Defence's environmental and heritage management has been improved levels of awareness over the last few years to ensure that environmental and heritage considerations are integrated into Defence's business processes. During 2003-04, Defence's achievements included a risk assessment of Defence activities conducted in the marine environment; a study to identify contaminants of concern, their use by Defence, and their impacts; and the establishment of the new Environment and Heritage Panel. Further information on Defence's performance on environment and heritage issues can be found in the Ecologically Sustainable Development and Environmental Performance section of the Appendices.

## Office of the Chief Information Officer

In the Defence White Paper 2000, the Government directed that Defence ensure a focus and priority on information capabilities to position the ADF to harness advances in information technology. To meet the Government's requirements, the Chief Information Officer was appointed as the coordinating capability manager for the Defence information environment encompassing Defence's information management and operational systems and supporting information infrastructure, and the relevant planning, policy and governance functions.

The role of the Chief Information Officer has evolved during 2003-04, with additional responsibilities allocated as a result of reviews of the organisational, governance and funding arrangements of the Defence information environment. Recent improvements to the information environment concentrated on refining its framework and articulating the manner in which it supports the achievement of Defence outcomes.

### Results for 2003-04

During 2003-04, Defence reaffirmed its approach to developing an overall framework for its communications and computing systems that also encompassed the information architecture outlined in the Network Centric Warfare Roadmap. The outcomes of this work were:

- a vision of the 2010 architecture, including descriptions of the future target states for information capability that were developed as part of the Network Centric Warfare Roadmap;
- validation of the Defence Architecture Framework which provides the common methodology for the consistent description of enterprise processes and Defence capability; and
- validation of the work undertaken on enterprise processes, which is the highest level description of processes within Defence.

Defence continues to experience many issues arising from both legacy systems and process issues, and the effectiveness of current systems and processes to deal with reporting requirements. Defence commissioned three studies looking separately into the organisational, governance and funding arrangements for the Defence information environment. The study into organisational arrangements noted that there were issues concerning non-operational enterprise systems and their development in isolation from each other and from the infrastructure on which they are hosted. Defence will implement the recommendations of all three studies, enhancing the responsibilities of the Chief Information Officer to encompass all aspects of the Defence information environment. This will include strategy and planning through to development, implementation, support, operations and disposal to meet enterprise, Group, and Service requirements.

Progress against the initiatives forecast in the *Portfolio Budget Statements 2003-04* and the *Portfolio Additional Estimates Statements 2003-04* is discussed below. These paragraphs include progress made by the Chief Finance Officer Group, Defence Personnel Executive and the Defence Materiel Organisation in information environment areas pertaining to their responsibilities.

## **Enhance the Defence Information Environment's Contribution to Defence Capabilities**

Improvements have been made to Defence's preparedness management system to assist in a better understanding and management of the linkages between preparedness levels and costs. The work on the decision support systems project should enable Defence to more accurately cost force element groups and this has facilitated a more comprehensive understanding of the through-life costs.

Considerable concept definition work has been carried out to identify how Defence information management can support a networked ADF. These concepts will enhance our warfighting capability by promoting the sharing and use of information to achieve situational awareness, improved performance and decision making and the coordination of desired effects. A strategic intent for the Defence information environment has been developed and will provide a basis for future planning. It articulates the requirements of the future information environment and how performance may be measured. It also foreshadows improvements to overcome current deficiencies and considers the implications for the Defence Management and Finance Plan.

The Corporate Information Facility, a component of the Defence Decision Support Project, has been developed and is being progressively populated. This tool will enhance Defence's strategic decision making by providing a central point of access to trusted and authoritative information.

## **Develop Funding Methodologies for Joint Information Capabilities**

Reforms to the ADF command and control structures, and the implementation of the Defence Procurement Review, have established a framework to enable seamless planning and conduct of joint operations in a networked environment. The process now involves robust up-front study, planning, formulation and evaluation of options early in the development cycle to ensure information capabilities are better integrated before they reach the acquisition stage.

## **Optimise Acquisition and Through-Life Management of Information Capabilities**

The *Defence Information Environment Plan 2003-04* coordinates information and initiatives on activities across the Defence information environment. Initiative monitoring will become increasingly robust as Defence has now developed an holistic view of information environment-related expenditure. Establishing this baseline has given visibility to the real cost of information capabilities. The findings of this review will be further examined in 2004-05, in conjunction with the results of the aforementioned studies on organisational and governance arrangements.

## **Embrace a National Approach to Information Management**

During 2003-04, Defence actively participated in the whole-of-government information management strategies and initiatives on spectrum management, information standards and identity management. Additionally, work commenced on information interoperability at the whole-of-government level.

## **Increase the Competence and Sustainability of the Defence Information Environment Workforce**

The initial focus has been developing generic job categories and skill sets for professional staff operating the Defence information environment, users of information management terminology and principles, and personnel working with information environment governance, architecture and standards.

Defence has also developed a short enterprise architecture course for personnel, with further specialist training at the post-graduate level to be made available through the University of New South Wales at the Australian Defence Force Academy.

## **Improve Information Assurance**

The Defence information environment framework helps Defence coordinate its approach to information management and the linkage with the information technology infrastructure. It defines how information is created, manipulated, disseminated and protected across Defence. Further clarity is expected as we expand the framework by defining its relation to Defence's business processes and the systems that support them.

## **Optimise the Integration of Information from Enterprise Resource Systems**

A post-implementation review of the 28 July 2003 Standard Defence Supply System upgrade was conducted in February 2004. As a result of this review, a program of activities was initiated under the banner of the Standard Defence Supply System 'Get Well' program. This program aims by December 2004 to develop and implement continued improvement in the integrity of the operation of the Standard Defence Supply System. This will raise the integrity of the Standard Defence Supply System data applied to Defence's financial statements. Good progress is being made in eliminating software defects and improving system performance across the Defence restricted network.

During 2003-04, high-level enterprise architectural descriptions were completed in order to support development of the Personnel Enterprise Resource Program Systems. A finance enterprise architecture and a financial systems strategy were completed. The strategy provides high-level direction for the upgrade of the enterprise financial system, as well as a framework that will direct and guide improvements in Defence's financial systems. While the Defence Materiel Organisation is undertaking work to further develop their enterprise architecture, and is also developing an architecturally-based strategy for future information systems, some concern remains regarding the deficiencies in the records associated with Defence's main systems. Remediation of these deficiencies will take several years.

## Defence Materiel Organisation

### Introduction

The Defence Materiel Organisation supports the ADF by acquiring and sustaining leading-edge military equipment. It is staffed by 4,400 Australian Public Service personnel and approximately 1,700 ADF members. These numbers reflect the transfer of the Joint Logistic Command from the Defence Materiel Organisation into the Joint Operations Command with effect from 1 May 2004. The move resulted in a net reduction of 1300 staff from within the Defence Materiel Organisation.

The Defence Materiel Organisation has staff located in over 50 locations across Australia, with its headquarters in Canberra. The geographic spread allows staff in the organisation's core functions of acquisition and sustainment to be collocated with their ADF operational customers and to promote closer partnerships with industry.

There are 11 divisions in the organisation. The majority of these divisions are responsible for acquisition, contributing to capability development and whole-of-life support including product disposal. System Program Offices in these divisions are the focal point for procurement, delivery and in-service support for major capital equipment. Three corporate divisions are responsible for standardising business processes, contracting services, information technology, strategic communication, corporate governance, human relations, financial services and strengthening relationships with industry.

The Defence Materiel Organisation contributes to Defence's outcomes by equipping and sustaining the ADF. The organisation was responsible for the management of 248 major capital equipment projects as at 30 June 2004, with a total approved budget of approximately \$52 billion. The organisation manages approximately \$3.4 billion per annum to sustain ADF equipment and deliver the organisation's responsibilities. More detail on the top 20 major capital equipment projects for 2003-04 can be found in Chapter Four (Capital Budget).

### Results for 2003-04

#### Defence Materiel Organisation Business Model

The business model is the basis for establishing the organisation as a prescribed agency from 1 July 2005, under the *Financial Management and Accountability Act 1997*. The model is currently being implemented. The outcomes and outputs delivered by the organisation have been finalised.

#### Agency Agreements

Considerable work has been undertaken to establish the agency agreement framework associated with the business model. Templates for acquisition agreements covering capital projects and sustainment agreements covering sustainment products have been developed. Under the framework, some 300 project agreements and 100 sustainment product agreements will detail the organisation's undertakings to its 'customers', in terms of deliverables, schedule, standard and price, and will be progressively completed during 2004-05.

## **Overarching Business Management System**

A corporate-level quality and environmental management system was established, which is the main source for policies, procedures, tools, templates and reference pages on the Defence Materiel Organisation's business activities. This system collocates up-to-date, internationally recognised processes and practices for easy reference.

## **Project Reporting Tool**

An interim project reporting tool was implemented that focuses on providing an overview of a project's financial performance in a succinct way. The long-term solution will be an improved project schedule and status reporting project management tool, which will provide a uniform approach to progressively standardise project management across all capital projects.

## **Defence Procurement Advisory Board**

The board, which consists of public and private sector representatives, had their inaugural meeting in March 2004, and has continued to meet on a monthly basis. The board provides advice and support to the Chief Executive Officer of the Defence Materiel Organisation, and reports to the Government on the implementation of all Defence Procurement Review recommendations.

## **Delivery of a Commercial Tanker**

In January 2004, Maritime Division contracted several Australian companies, with expertise in the shipping industry, to assist the Commonwealth in identifying ships suitable for purchase and modification for operation as a naval oiler. MT *Delos*, a commercial double hull environmentally-sustainable tanker, was delivered on 17 June 2004 and will be modified for naval purposes by 2006-07. The acquisition demonstrates the organisation's ability to apply innovative procurement processes in response to operational requirements.

## **Delivery of Land Capabilities**

During the period, initial testing of the M113 upgraded demonstration vehicles and Bushmaster infantry mobile vehicles was conducted, and the delivery of the Phase 3 Australian light armoured vehicles. Land Systems Division continued its support to ADF operations in the Middle East, the Solomon Islands and East Timor.

## **Electronic and Weapons Capabilities**

ADF operations were supported by the effective deployment and maintenance of communications, command support, electronic warfare systems and explosive ordnance. The Electronic and Weapon Systems Division successfully delivered a new hydrographic database system for the Navy, and air traffic control systems and C-130 aircraft global positioning systems were upgraded for the Air Force. Successful trials of an indigenous phased array radar system were also conducted.

## Contracts

Achievements in this area include the release of new templates and procurement manuals, a new intellectual property policy, and an interim Defence contracts register. The organisation is conducting further investigations into alternative contracting methodologies and, following a review of the current project alliancing contracts, has removed the 'trial' status from project alliancing.

## Purchasing

### Contract Reporting

Defence reports on contracts in three complementary locations:

- in accordance with Australian Government requirements, eligible Defence contracts valued at \$2,000 or more (including orders placed against standing offers, standing offers that have an expected value of \$2,000 or more and amendments to contracts that are valued at \$2,000 or more) are published on the Commonwealth (Purchasing and Disposals) Gazette;
- in response to the Senate Order on Departmental and Agency Contracts (last amended 6 December 2003), Defence makes available on its internet website (under the Industry, Business and Contracting link [http://www.defence.gov.au/dmo/id/cic\\_contracts/cic\\_contracts.cfm](http://www.defence.gov.au/dmo/id/cic_contracts/cic_contracts.cfm)) a list of contracts valued at \$100,000 or over that meet certain criteria; and
- the 'Buying Australia Home Page' (<http://www.defence.gov.au/dmo/buying/>) provides a searchable database that enables users to access details on certain contracts entered into by the Defence Materiel Organisation. The database is focused primarily on issues associated with Australian and New Zealand content.

### Small to Medium Sized Enterprises

Defence requires all purchasing areas to adopt processes intended to maximise the opportunity for small to medium enterprises, (enterprises employing less than the full-time equivalent of 200 persons). In particular, Defence will:

- regularly open restricted supplies to public tender, thus ensuring supplier lists are current and comprehensive;
- for larger purchases, identify opportunities for small to medium enterprises when developing industry requirements;
- ensure procurement methods do not discriminate against small to medium enterprises; and
- where appropriate, establish one-stop shops so that small to medium enterprises can learn more about Defence needs and register their interest.

The Department of Finance and Administration identifies gazetted procurements that are contracted to small to medium-sized enterprises annually. The whole-of-government estimate for 2002-03 is 27.1 per cent by value. It is not expected that the agency breakdown for 2002-03 will be available before early 2005.

## **Australian Industry Involvement**

The Australian Industry Involvement Program is the major program through which Defence leverages its procurement activity to foster critical Australian industry capabilities and ensure that industry delivers more cost effective Defence capability. To achieve these twin industry goals, sector strategic plans and derivatives have been developed. These plans are aimed at identifying, obtaining and sustaining strategic Australian industry capabilities required to support the ADF now and into the future.

## Public Affairs Branch

### Overview

The role of Defence public affairs is to explain the Government's defence policy and promote and defend Defence's reputation. The organisation supports all areas in Defence and provides public affairs services for military operations and support activities.

The increasing emphasis placed on issues management and public affairs support to military operations continued throughout 2003-04, with support given to operations in Iraq, the Solomon Islands and East Timor in a period of high operational tempo. Public affairs services were provided concurrently to the individual Services and Groups. Non-operational support included public affairs advice, media liaison, image and vision management and the publication of the Navy, Army and Air Force newspapers and the *Defence Information Bulletin*.

From July 2003 to February 2004, the Public Affairs and Corporate Communication Division was a separate division, led by the Head Public Affairs and Corporate Communication. In February 2004, the division was amalgamated with the ministerial support, Defence governance and renewal elements of the Defence Improvement Division to form the Ministerial Services and Public Affairs Division within Strategy Group. The division was a central advisory, communication and coordination area designed to improve the level of support to the Ministers, the Parliamentary Secretary and the senior Defence executives.<sup>6</sup>

### Results for 2003-04

During 2003-04, Public Affairs:

- fully integrated public affairs into the military command chain and operational planning and established the deployable military public affairs capability, which gave Defence effective tactical public affairs support during a period of high operational tempo. Since being raised in 2002, the 1<sup>st</sup> Joint Public Affairs Unit has conducted over 75 significant deployments;
- provided a comprehensive media liaison function, fielding 5,392 media inquiries and issuing 1,401 media releases and alerts. The online media room was commissioned early in 2004 with a wide range of material, including up to date imagery, media releases and fact sheets available for immediate downloading by the media and researchers;
- responded to 3,353 public inquiries;
- completed the *Defence 2020 Education Resource Program*. The program was developed in association with teachers and utilised Defence case studies to give students a better understanding of the broader functions of Defence and defence-related issues. Copies were distributed to 3,100 secondary schools during June-July 2003. The program was awarded 'Best Secondary Educational Resource' by the Australian Teachers of Media at its 2004 annual conference;

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<sup>6</sup> See the Organisational Changes section of Chapter One for further changes to the organisation from 26 July 2004.

- received 74 requests to make Defence establishments, resources and equipment available for the production of television programs, including documentaries, motion pictures and books. Of these, 19 requests were completed, a further 26 requests were in progress, 15 were declined and 14 failed to eventuate;
- provided display materials to 35 public information displays, career expos and media launches;
- supported more than 650 events including official farewell and welcome home events for ADF contingents deployed overseas and publication launches on military operations;
- coordinated the 'messages to the troops' facility which received 7,608 messages from the public for deployed ADF personnel;
- received 25 million unique visits over the year on the redesigned Defence internet defence.gov.au domain, which is an increase of more than 31 per cent from 2002-03;
- distributed some 162 hours of vision of Defence activities in response to television and production house requests. Defence produced 62 video news releases to support of public affairs activities; and
- produced 69 issues of Navy, Army and Air Force newspapers, with a total print run per edition of 62,000 copies. This service kept sailors, soldiers, airmen and women abreast of changes to policy and conditions of service. An ongoing program of staff development and adoption of new technologies is improving the content, layout and design of the newspapers.



*Providing tactical public affairs support to the ADF: members of a 1<sup>st</sup> Joint Public Affairs Unit deployable field team interview Australian special forces soldiers in Afghanistan in 2002.*