# Contents

<table>
<thead>
<tr>
<th>MINISTER’S INTRODUCTION</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>VII</td>
</tr>
<tr>
<td><strong>SECTION ONE - FOUNDATIONS</strong></td>
<td></td>
</tr>
<tr>
<td>CHAPTER ONE - MAKING DECISIONS ABOUT DEFENCE</td>
<td>3</td>
</tr>
<tr>
<td>The Purpose of the White Paper</td>
<td>3</td>
</tr>
<tr>
<td>Why Now?</td>
<td>5</td>
</tr>
<tr>
<td>Looking Ahead - Strategic Risk Management</td>
<td>6</td>
</tr>
<tr>
<td>The Bigger Picture</td>
<td>7</td>
</tr>
<tr>
<td>CHAPTER TWO - SECURITY AND THE ROLE OF AUSTRALIA’S ARMED FORCES</td>
<td>9</td>
</tr>
<tr>
<td>Force in International Affairs</td>
<td>9</td>
</tr>
<tr>
<td>New Military Tasks</td>
<td>10</td>
</tr>
<tr>
<td>Non-Military Security Issues</td>
<td>12</td>
</tr>
<tr>
<td>CHAPTER THREE - AUSTRALIA’S STRATEGIC ENVIRONMENT</td>
<td>15</td>
</tr>
<tr>
<td>Our Strategic Setting</td>
<td>15</td>
</tr>
<tr>
<td>An Attack on Australia?</td>
<td>23</td>
</tr>
<tr>
<td>The Development of Military Capabilities</td>
<td>24</td>
</tr>
<tr>
<td><strong>SECTION TWO - STRATEGY</strong></td>
<td></td>
</tr>
<tr>
<td>CHAPTER FOUR - AUSTRALIA’S STRATEGIC INTERESTS AND OBJECTIVES</td>
<td>29</td>
</tr>
<tr>
<td>Ensure the Defence of Australia and its Direct Approaches</td>
<td>30</td>
</tr>
<tr>
<td>Foster the Security of our Immediate Neighbourhood</td>
<td>30</td>
</tr>
<tr>
<td>Promote Stability and Cooperation in Southeast Asia</td>
<td>31</td>
</tr>
<tr>
<td>Support Strategic Stability in the Wider Asia Pacific Region</td>
<td>31</td>
</tr>
<tr>
<td>Support Global Security</td>
<td>31</td>
</tr>
<tr>
<td>CHAPTER FIVE - AUSTRALIA’S INTERNATIONAL STRATEGIC RELATIONSHIPS</td>
<td>33</td>
</tr>
<tr>
<td>The US Alliance</td>
<td>34</td>
</tr>
<tr>
<td>Relationships in the Wider Asia Pacific Region</td>
<td>36</td>
</tr>
<tr>
<td>Relationships in Southeast Asia</td>
<td>39</td>
</tr>
<tr>
<td>Our Nearest Neighbours</td>
<td>41</td>
</tr>
<tr>
<td>Strategic Relationships Beyond the Asia Pacific Region</td>
<td>44</td>
</tr>
<tr>
<td>CHAPTER SIX - AUSTRALIA’S MILITARY STRATEGY</td>
<td>46</td>
</tr>
<tr>
<td>Strategic Tasks for the ADF</td>
<td>46</td>
</tr>
<tr>
<td>Capability Priorities for the ADF</td>
<td>53</td>
</tr>
<tr>
<td>Capability Development Principles</td>
<td>54</td>
</tr>
</tbody>
</table>
SECTION THREE - PEOPLE

CHAPTER SEVEN - PEOPLE IN DEFENCE
People are Capability 61
The Dimensions of the Challenge 62
Leadership 63
Retention 66
Recruitment 66
Education and Training 68
Reserves 69
Cadets 72

SECTION FOUR - CAPABILITY

CHAPTER EIGHT - THE DEFENCE CAPABILITY PLAN
A New Approach to Capability Planning 77
Land Forces 78
Air Combat 84
Maritime Forces 87
Strike 91
Information Capability 94

CHAPTER NINE - INDUSTRY
The Role of Industry in our Defence 98
The Importance of Australian Defence Industry 99
Our Current Industrial Scene 101
Strengthening Our Defence Industry Capability 102

CHAPTER TEN - SCIENCE AND TECHNOLOGY
Technology Trends and the Revolution in Military Affairs 107
Exploiting the Opportunities 109
Being a Skilled User of Technology 111
DSTO - Its Role 112

SECTION FIVE - FUNDING

CHAPTER ELEVEN - DEFENCE FUNDING
A New Approach to Defence Funding 117
Why Do We Need to Spend More? 118
Future Reform and Efficiency Savings 119
Minister’s Introduction

Six months ago, when the Prime Minister and I launched the Public Discussion Paper on Defence, we said that the Government would be making important decisions about the future of Australia’s defence force towards the end of the year. Those decisions have now been made and are presented and explained in this White Paper.

The review of our defence needs has been one of the Government’s top priorities in 2000 and remains so. We have spent a lot of time on Defence this year because tough decisions were needed. As we said in the Public Discussion Paper, Defence had reached the point where we could not maintain our present range of capabilities at our present levels of spending. We needed to make a choice to spend more on Defence or expect Defence to do less.

After reviewing Australia’s regional environment, and our strategic interests and objectives, it was clear that the Government could not responsibly consider cutbacks in Australia’s military capabilities. But we also recognised that just promising more money would not fix the problem. We needed to take a new approach to defence planning.

This White Paper is set apart from its predecessors in three key ways.

The first is the degree of ministerial involvement in the development of this policy. Over the past year my colleagues in the National Security Committee of Cabinet have spent many hours in discussion about all aspects of defence policy. This has resulted in the most comprehensive process of ministerial-level decision-making about Australia’s defence policy for many years.
The second is the Government’s decision - announced in this White Paper - to lay down the most specific long-term defence funding commitment given by any Australian Government in over 25 years. This commitment is important because of the unique demands on Defence for long-term funding clarity and reflects the special priority we give to Defence as a core responsibility of Government. However, before we could make that commitment, it was necessary to embark on a series of reforms to Defence’s administration and management. We needed to demonstrate to taxpayers that any additional funding provided to Defence would be managed wisely. But having made that funding commitment does not mean that there are no further efficiencies to be made. The Government remains strongly committed to continuing improvement in Defence.

The third is a clear statement of the Government’s requirements of its Defence Organisation. The decisions in this White Paper provide Defence with a plan - the Defence Capability Plan - for the development of Australia’s armed forces over the next decade. The Plan has been developed by the Government as the most cost-effective way to meet Australia’s strategic objectives. The job for Defence is now to implement that Plan.

Together, the Government’s development of the White Paper, the Defence Capability Plan and the long-term funding commitments in this White Paper establish an historic benchmark for the development of Australia’s defence force. They are what make this White Paper so different.

We are very proud of this achievement. We would like to pay particular tribute to the work of the people of Defence - military and civilian - in developing this White Paper. Their contribution has been outstanding.

John Moore, MP
Minister for Defence

The National Security Committee of Cabinet
Executive Summary

Foundations
Making Decisions about Defence

Following the last federal election, the Government made a commitment to publish a Defence White Paper in this term of parliament. That decision reflected a recognition that the Defence Force was under real pressure to meet an increasingly complex and diverse range of tasks within a budget that had remained relatively constant in real terms over the past 15 years. The Government had become concerned that a mismatch had arisen between our strategic objectives, our defence capabilities and our levels of defence funding.

In response to those concerns the Government has produced in this White Paper - the first since 1994 - the most specific and detailed defence plan in more than 25 years. It announces and explains the Government’s decisions about Australia’s strategic policy over the next decade, and it outlines the Government’s plan for the development of our armed forces, matched by a commitment to provide the funds required. It is the culmination of a year of intensive government review of Australia’s defence needs. This review included an extensive community consultation program, led by The Hon. Andrew Peacock, AC. In a parallel activity, the views of the people in Defence were also sought by a Defence Consultation Team.

The defence of our country and our community from armed attack is one of our highest national priorities. But we need to be sure that the defence budget is spent wisely and that we are not spending more than is necessary. Defence decisions therefore need to balance two of the most powerful imperatives on government - security and fiscal responsibility - and these decisions need to bear in mind competing priorities for government expenditure and the Government’s overall fiscal strategy.
There is another perspective. Our armed forces are not simply a service provided by the Government. The Australian Defence Force (ADF) reflects the kind of country we are, the role we seek to play in the world, and the way we see ourselves. The sense of security that our armed forces give us underpins our optimistic outlook and the confidence with which we engage the region.

Security and the Role of Australia’s Armed Forces

Armed force will remain a key factor in international affairs. While resort to force will continue to be constrained by many aspects of the international system, governments cannot dismiss the possibility of major conflict between states. That risk is as high in the Asia Pacific region as it is elsewhere in the world.

At the same time, military operations other than conventional war are becoming more common. Since the end of the Cold War, there has been a worldwide upsurge in intra-state conflicts. These disputes have placed new demands on the armed forces of many countries, including for humanitarian relief, evacuations, peacekeeping and peace-enforcement. The Government believes this is an important and lasting trend with significant implications for our Defence Force. Over the next 10 years the ADF will continue to undertake a range of operations other than conventional war, both in our region and beyond. Many of these operations will be at the lower end of the spectrum, but often they will be more demanding. The boundary between a benign situation and open conflict can become blurred.

Australia also faces many non-military threats to our national life, such as cyber attack, organised crime, terrorism, illegal immigration, the drug trade, illegal fishing, piracy and quarantine infringement. The ADF will continue to have a major part to play in coastal surveillance and enforcement activities. Our patrol boats, maritime surveillance aircraft and intelligence capabilities are fully engaged in the day to day monitoring and policing of our maritime approaches, and their efforts are closely integrated with other agencies. Our approach is to draw on the expertise of the ADF where it is most appropriate to do so, but not to allow these roles - important as they are - to detract from the ADF’s core function of defending Australia from armed attack.

Australia’s Strategic Environment

At the global level, two interrelated trends seem likely to shape our strategic environment most strongly - globalisation and US strategic primacy. These factors will help strengthen global security and promote economic, social and political developments that align with Australia’s interests and values. Increasingly, the United Nations has
been responding to a growing sense in the international community that crises causing avoidable human suffering cannot be ignored just because they happen within the borders of a sovereign state. The trend to a more active and effective UN security role is also welcome.

The most critical issue for the security of the Asia Pacific region is the nature of the relationships between the region’s major powers - China, Japan, India, Russia and the United States. These countries are important to Australia’s security because they are the ones with the power - actual or potential - to influence events throughout the Asia Pacific region. Their relationships will set the tone for the whole region. Overall, the prospects for those relationships are good; however, there remains a small but significant possibility of confrontation.

Generally, Southeast Asia remains an area of great promise. Political and social evolution is strengthening the robustness, legitimacy and resilience of the political systems in many countries. ASEAN continues to provide a focus for the sense of shared interests and common goals which has been so important to Southeast Asia over the past several decades. There remain, however, a number of security issues in Southeast Asia that will need to be handled carefully if regional security is to be maintained. Countries in our immediate neighbourhood - Indonesia, East Timor, Papua New Guinea, and the island states of the Southwest Pacific - face large economic and structural challenges.

Notwithstanding the complexity of our regional environment, Australia today is a secure country, thanks to our geography, good relations with neighbours, a region where the prospect of interstate conflict is low, our strong armed forces and a close alliance with the United States. A direct military attack on Australia is unlikely.

A key factor in the evolution of Australia’s strategic environment is the development of military capabilities in the Asia Pacific region. In recent times the region has seen the fastest growth of military capabilities in the world, and this will continue over the next decade in ways which are important for Australia’s defence planning. The most significant trends are likely to be continued growth in fighter aircraft...
with beyond-visual-range targeting capability, more highly capable anti-ship missiles, and increasingly sophisticated strike and land forces.

**Strategy**

**Australia’s Strategic Interests and Objectives**

Highest priority is accorded to our interests and objectives closest to Australia. In some circumstances a major crisis far from Australia may be more important to our future security than a minor problem close at hand. But in general, the closer a crisis or problem is to Australia, the greater the likelihood that it would be important to our security and the greater the likelihood that we would be able to help to do something about it.

Australia’s most important long-term strategic objective is to ensure the defence of Australia and its direct approaches. Our second strategic objective is to foster the security of our immediate neighbourhood. We would be concerned about internal challenges to the stability and cohesion of neighbouring countries and concerned about any threat of external aggression against them. Our third strategic objective is to work with others to promote stability and cooperation in Southeast Asia. Our key strategic interest in Southeast Asia is to maintain a resilient regional community that can cooperate to prevent the intrusion of potentially hostile external powers and resolve peacefully any problems that may arise between countries in the region.

Our fourth strategic objective is to contribute in appropriate ways to maintaining strategic stability in the wider Asia Pacific region. We would want to avoid the emergence in the Asia Pacific region of a security environment dominated by any powers whose strategic interests might be inimical to Australia’s and to avoid destabilising competition between the region’s major powers. Our fifth strategic objective is to contribute to the efforts of the international community, especially the United Nations, to uphold global security. We will continue to support the United States in the major role it plays in maintaining and strengthening the global security order. Australia also has a strong interest in non-proliferation regimes that prevent the spread of weapons of mass destruction.

**Australia’s International Strategic Relationships**

Most of the time, Australia pursues its strategic objectives in close cooperation with its allies, neighbours and regional partners. Our strong alliance with the United States, in particular, is a key strategic asset that will support our bilateral, regional and global interests over the next decade and beyond.

In the wider Asia Pacific region, Australia will pursue its objective of supporting strategic stability by developing bilateral dialogues with key countries in the region and contributing
to the development of multilateral security forums. In Southeast Asia, we will maintain and develop strategic relationships to encourage regional cooperation and help, where we can, in the development of appropriate military capabilities.

In our immediate neighbourhood, the Government is committed to working with the Indonesian Government to establish, over time, a new defence relationship that will serve our enduring shared strategic interests. Consistent with our goal of developing a network of defence relationships with regional countries, Australia will also seek to build a defence relationship with East Timor. New Zealand will remain a very valued defence partner. Australia will seek to remain Papua New Guinea's primary defence partner, offering substantial support to PNG defence reforms. Likewise, the Government seeks to maintain our position as the key strategic partner in the Southwest Pacific and will continue to remain active in this region.

Beyond the Asia Pacific, Australia values its relationships with the United Kingdom, Canada and a number of European countries.

**Australia's Military Strategy**

The priority task for the ADF is the defence of Australia. Our approach is shaped by three principles. First, we must be able to defend Australia without relying on the combat forces of other countries - self-reliance. Second, Australia needs to be able to control the air and sea approaches to our continent - a maritime strategy. Third, although Australia's strategic posture is defensive, we would seek to attack hostile forces as far from our shores as possible - proactive operations.

The second priority for the ADF is contributing to the security of our immediate neighbourhood. In the highly unlikely event of unprovoked armed aggression against any of our immediate neighbours, Australia would want to be in a position, if asked, to help our neighbours defend themselves. The capability to provide such help would be drawn from the forces we have developed for the defence of Australia. Lower level operations, such as evacuations, disaster relief and peacekeeping operations of different sorts, are the most likely types of operation that we might need to undertake in our immediate neighbourhood. In general, the capabilities we develop in the ADF for defending Australia provide forces appropriate for these tasks, but some important enhancements might be needed to meet unique demands.

The third priority for Australia's forces is supporting Australia's wider interests and objectives by being able to contribute effectively to international coalitions of forces to meet crises beyond our immediate neighbourhood. We would do this by contributing to international
coalitions, drawing on the forces we develop for higher priority tasks.

In addition to these core tasks in support of Australia’s strategic objectives, the ADF will also be called upon to undertake a number of regular or occasional tasks in support of peacetime national tasks. This includes specific and ongoing commitments to coastal surveillance and emergency management, as well as ad hoc support to wider community needs.

To achieve these key tasks, the ADF will maintain and further develop an integrated and balanced joint force that can provide capabilities appropriate to the two highest tasks identified above. First, Australia will maintain maritime capabilities - mostly air and naval forces - that can defend Australia by denying our air and sea approaches to any credible hostile forces. Second, Australia will maintain land forces - including the air and naval assets needed to deploy and protect them - that can operate as part of a joint force to control the approaches to Australia and respond effectively to any armed incursion onto Australian soil. Both those sets of capabilities would also be able to support the security of our immediate neighbourhood and contribute to coalition operations.

People
People in Defence

The key to maintaining the ADF as a first-class military force is having the right people, with the skills and experience they need to succeed in complex military operations.

The enhanced force structure outlined in this White Paper requires the current strength of the ADF of 51,500 to be increased to about 54,000 full time personnel by 2010. The composition of that force will need to adapt to meet evolving needs. Recruiting and retaining sufficient skilled and experienced people will be one of the most significant challenges in building the ADF of the twenty-first century.

To meet this challenge, Defence will need high quality leadership. The Government will explore tailored remuneration packages to meet specific needs of various categories of personnel and measures to address career development and location stability issues. As well, recruitment processes are being redesigned, and a pilot scheme implemented to evaluate the advantages of a commercial service provider. As part of its strategy to attract and retain high quality people, Defence is investing in modern, effective and efficient education and training. This is a critical investment in future capability.

The strategic role for the Reserves has changed from mobilisation to meet remote threats to that of supporting and sustaining the types of contemporary military operations in which the ADF may be engaged. Increasingly, the
Reserves will provide those skills not held within the permanent forces or held only in small numbers. The contribution of the Reserves will be essential to the maintenance of the ADF’s operational capabilities. The Government has proposed amendments to Commonwealth legislation to extend the options available for the use of the Reserves.

Also, the Government is committed to expanding the participation of young Australians in the Cadet Scheme and to providing the resources needed to achieve that. This includes a commitment to widening the range of institutions offering participation in the cadets and to ensuring that units are properly resourced. The Government will increase annual funding for the Cadet Scheme to $30 million by 2002 and provide ongoing funding as necessary to ensure these objectives are met.

**Capability**

**The Defence Capability Plan**

The Government has launched a new approach to capability planning by preparing a detailed, costed plan for our Defence Force over the next 10 years. The aim is to provide the ADF with clear long-term goals for its development, and the funding needed to achieve these goals. This is an important element of the Government’s program of continuous improvement in defence management and the plan will also provide a firm basis to develop and monitor further efficiency reforms in the delivery of capability.

The Plan has been developed on the basis of through-life costing estimates for the different types of capability the Government believes the ADF should have, covering not only the initial capital investment required, but also personnel, operating, support and upgrade costs. It will be revised annually, within the 10 year budget constraint, to take account of changing strategic circumstances, new technologies and changed priorities. Individual projects will need to be considered and approved by government before proceeding. Nevertheless, the Defence Capability Plan will provide a clear basis for defence capability decisions now and into the future.

The emphasis will be on a professional, well-trained, well-equipped force that is available for operations at short notice, and one that can be sustained on deployment over extended periods. This type of force will provide the flexibility to deal with operations other than
conventional war, and contribute to coalition operations.

The Army will be structured and resourced to ensure that we will be able to sustain a brigade on operations for extended periods, and at the same time maintain at least a battalion group available for deployment elsewhere. Increased attention will be paid to sustainment of deployed forces, with the Reserves given a key new role following changes to legislation to allow easier call-out and better compensation. There will be substantial new investment in combat weight, logistics, transport and other enhancements to land force capability.

Overall spending on the maintenance of current land force capabilities is planned to average around $5.9 billion per year over the decade. The estimated capital expenditure needed for the capability enhancements will total around $3.9 billion over the decade. Additional personnel and operating costs amount to around $1.1 billion over the decade.

We will maintain air-combat forces that are at least comparable qualitatively to any in the region. The Government has decided to continue the upgrade program for the F/A-18, to proceed now with the acquisition of four Airborne Early Warning & Control aircraft, to replace and upgrade our air-to-air refuelling capability, and to make major provision for the acquisition of a new combat aircraft to follow the F/A-18, and potentially the F-111. Overall spending on the maintenance of current air combat capability is planned to average around $1.3 billion per year over the decade. The estimated capital expenditure needed for the capability enhancements will total around $5.3 billion over the decade. Additional personnel and operating costs will amount to about $300 million over the decade.

The Government’s primary goal for our maritime forces is to maintain an assured capability to detect and attack any major surface ships, and to impose substantial constraints on hostile submarine operations, in our extended maritime approaches. We also intend to maintain the ability to support Australian forces deployed offshore, to contribute to maritime security in our wider region, to protect Australian ports from sea mines, and to support civil law enforcement and coastal-surveillance operations.

The ANZAC class frigate will be provided with a reasonable level of anti-ship missile defence and other enhancements. A new class of at least three air-defence capable ships will replace the guided missile frigates at the end of their service life. HMAS Westralia and Success will be replaced by specialist ships when they pay off. The Collins class submarines will be brought to a high level of capability by major improvements to the platform and combat systems. Overall spending on the maintenance of current
The maritime capability is planned to average around $3.5 billion per year over the decade. The expected capital expenditure needed for the capability enhancements will total around $1.8 billion over the decade. Additional personnel and operating costs will amount to about $300 million.

Our strike capability will be upgraded with improvements to the F-111's electronic warfare self-protection systems and by the acquisition of additional types of stand-off weapons. The F-111 fleet is expected to leave service between 2015 and 2020 and, for planning purposes, provision has been made for the acquisition of up to 25 aircraft of the same type as the follow-on for the F/A-18. Overall spending on the maintenance of current strike capability is planned to average $500 million per year over the decade. The expected capital expenditure needed for capability enhancements will total around $800 million over the decade, with no additional personnel and operating costs.

Effective use of information is at the heart of Australia's defence capability. Accordingly, the Government plans substantial enhancements to intelligence, surveillance and communications capabilities; and command, logistics and business systems. Overall spending on the maintenance of information capabilities is planned to average around $1.3 billion per year over the decade. The expected capital expenditure needed for the capability enhancements will total around $1.9 billion over the decade. Additional personnel and operating costs amount to about $630 million.

**Industry**

Industry is a vital component of defence capability. A combination of government policy and market pressures has brought significant improvement in the capability of Australian defence industry. In many areas, it is now highly cost-competitive. Major projects, when well managed, can introduce new technologies and skills into Australian industry.

The Government's objective is to have a sustainable and competitive defence industry base, with efficient, innovative and durable industries, able to support a technologically advanced ADF. This will require a close partnership between Defence and those industries. The Government's approach will be to capitalise on, and foster, industry's innovative use of advanced technologies. Improved linkages between industry and the Defence Science and Technology Organisation will be a high priority.

The program of capability enhancements outlined in this White Paper provides a solid basis for long-term planning by Australian industry. There are significant opportunities for many industry sectors. They will
engage the existing strengths of Australian industry and have the potential to introduce new skills and capacities. These include essential systems engineering and integration skills in the modernisation of aircraft, ships and vehicles; the construction of new ships; the development of Airborne Early Warning & Control aircraft systems; and a range of communications, command and control, and information systems.

Initiatives that are part of the acquisition reform program in the new Defence Materiel Organisation will lead to improved defence-industry relations. Defence will issue an annual report on progress with partnering arrangements to the Defence and Industry Advisory Council.

Science and Technology

Australia’s future defence capability, as set out in the Defence Capability Plan, will require access to advanced technology - for both equipment and training.

The Defence Science and Technology Organisation is undertaking key cooperative research and development programs, including with our allies, to ensure that we are well placed to make informed choices in the selection of technology and its applications. This will be critical if Australia is to retain its ‘knowledge edge’ and if we are to invest wisely in future capability.

Defence, in collaboration with others, will continue to lead a research and development program in technologies related to the Revolution in Military Affairs to ensure that Australia is prepared for the adoption of new technologies as they mature. As well, the Office of the Revolution in Military Affairs has been established to identify those aspects of technological change that are most likely to affect major long-term capabilities. The ability to identify and incorporate those technologies that sustain the capability of the ADF will be guided by simulation and modelling, through both qualitative and quantitative war games.

The Defence Science and Technology Organisation has an important role to play in supporting and upgrading, through life, those platforms unique to Australia. The organisation will continue to work closely with industry and universities to ensure that we are able to maintain and exploit current technology and emerging opportunities in a timely and cost-effective manner. Improved linkages with industry will be important in transferring knowledge and fostering innovation, particularly in small to medium enterprises.
Funding

Defence Funding

The Government estimates that defence spending will need to grow by an average of about three percent per annum in real terms over the decade and has directed Defence to plan within that budget. Funding for 2001-02 and 2002-03 is programmed to increase by $500 million and $1,000 million respectively in order to provide substantial funding for a number of key initiatives. By the end of the decade, defence spending in cash terms will stand at approximately $16 billion per year in today’s dollars, compared with $12.2 billion this year. In all, defence spending over the decade is expected to increase by a total of $23.5 billion.

The defence spending figures provided in this White Paper are the most specific long-term defence funding projections provided by any Australian government in more than 25 years, and mark a new approach to defence funding. This approach will provide an improved basis for accountability by Defence to government and the public for the efficient and effective use of defence funds. The Government has introduced a defence planning and budgeting process, built around a new, annual Defence Financial and Management Plan. The first of these will be produced this year as part of the 2001-02 budget cycle. In this new process, Defence will move to output-based budgeting arrangements within the constraints of the 10 year overall budget.

The Government is committed to pursuing substantial efficiency savings in areas that include property disposal, contracting out, improved information technology management and reduced personnel overheads. Any further savings achieved, and that the Government decides will be retained in Defence, will be offset from the projected funding guidance for Defence.
Section One | Foundations
1 – Making Decisions About Defence

The Purpose of the White Paper

1.1 This Defence White Paper announces and explains the Government’s decisions about Australia’s strategic policy over the next decade. It sets out a plan for the development of our armed forces, and makes a commitment to provide the funds required.

1.2 These decisions are the culmination of a year of intensive government review of Australia’s defence needs. The Government has examined the fundamentals of our strategic policy, including Australia’s strategic environment, our national interests and objectives and the role of our alliances and regional strategic relationships. Based on this examination, we have reviewed the changing roles of armed forces, Australia’s military strategy, the capabilities we have today - including the vital role of the serving men and women of the Australian Defence Force - and broader budget and value for money considerations, including the ongoing requirement for efficient management of Defence.

1.3 We have also considered the opportunities and challenges of science and technology and the important role of Australian industry. All of these issues are addressed in the White Paper.

1.4 We have listened to the views of the Australian people. The Government’s Community Consultation Program, led by The Hon. Andrew Peacock, AC, has been the most extensive and successful effort in many years to engage Australians in decisions about defence policy.

1.5 The Public Discussion Paper, published in June this year, posed the key questions about our future defence needs. The Community Consultation Team held 28 public meetings around Australia, as well as many
meetings with State and local governments, interest groups, business and industry associations. The Team received over 1,100 written submissions.

1.6 The Team’s report, received by the Government in October, provides a unique snapshot of the views that were put forward. In a parallel activity, the views of people within Defence were sought by a Defence Consultation Team. The key findings of the Community Consultation Report, and many of those of the Defence Consultation Team Report, are highlighted in boxes throughout the White Paper.

1.7 The result of this process of review and consultation is the most specific and detailed defence plan produced by any Australian government in more than 25 years.

1.8 We believe it is important to provide Australians with a comprehensive account of our strategic policy. The Community Consultation Process has confirmed the deep interest many Australians have in the foundations of our national security.

1.9 It is also important to provide our Defence Force with a clear statement of what the Government and the people of Australia expect of its members. The decisions set out in this White Paper provide the direction they need to do their job, and underline the Government’s commitment to ensuring the Defence Force will be an attractive career for young Australians. The decisions will also help the efficient management of Defence, by setting out exactly what the Government expects from it.

1.10 Finally, this White Paper explains our defence and strategic policies to Australia’s allies, friends and neighbours. Australia has long been an advocate of transparency between countries in our region about national policies on strategic issues, including the basis of force development. By understanding better the foundations of one another’s strategic policies, countries find it easier to work together and avoid misunderstandings. This has been recognised by many countries in our
region in recent years, with a growing number of governments now publishing detailed defence policy statements.

**Why Now?**

1.11 This is the first Defence White Paper since 1994, and only the fourth since 1976. Following the last federal election, the Government made a commitment to publish a Defence White Paper in this term of parliament. We believed the Defence Force was under real pressure in trying to meet a complex and diverse range of tasks within a budget that had remained relatively constant in real terms over the past 15 years.

1.12 In 1997 the Government reviewed its strategic policy, and concluded that, with the end of the Cold War and with dynamic economic growth in Asia, Australia’s strategic circumstances had become more demanding and the potential demands on our armed forces had grown. We said that Australia would need progressively to upgrade its forces to assure our future capacity to defend our territory, and to enhance our capacity to contribute to the security of the region.

1.13 At the same time, following the Defence Efficiency Review, the Government undertook major reforms to the management of Defence, designed to improve efficiency and maximise the capability that could be delivered from the defence budget. Further reforms are now being undertaken, especially in the acquisition and financial management areas. These reforms are a critical part of the Government’s new approach to defence planning.
1.14 Nonetheless significant questions have remained about the ability of the ADF to sustain the full range of its capabilities at appropriate levels of sophistication and readiness from within its present resources. The Government has been concerned for some time that a mismatch had developed between our strategic objectives, our defence capabilities and our levels of defence funding.

1.15 These questions were highlighted by the deployment of INTERFET to East Timor last year. This was the largest and most demanding military operation undertaken by the ADF in a generation. It was a major achievement, reflecting great credit on the men and women of the Australian Defence Organisation, and on the overall quality of their training, equipment and preparation. But INTERFET also provided an invaluable opportunity to test and evaluate many aspects of our military capabilities, and to learn important lessons about how we could do things better. The Government has drawn on these lessons in this White Paper.

Looking Ahead - Strategic Risk Management

1.16 Defence is a difficult area of public policy. The defence of our country and our community from armed attack is one of our highest national priorities. The Government has a responsibility to make sure that Australia has the armed forces we need to protect our country if it is threatened. But our Defence Force is also one of our largest national expenses, costing around 1.9 per cent of our gross domestic product. We need to be sure that we are spending enough on defence, but we also need to be sure that the defence budget is spent wisely and that we are not spending more than is necessary.

1.17 Defence decisions therefore need to balance two of the most powerful imperatives on government - security and fiscal responsibility - and these decisions need to bear in mind competing priorities for government expenditure and the Government’s overall fiscal strategy.

1.18 Striking that balance is made harder by the environment of uncertainty in which defence decisions must be made. We cannot predict with certainty when or where Australia might need to use its armed forces. Today we are among the more secure countries in the world. But our defence policy must take account of the possibility that changes in the international situation, especially in the dynamic Asia Pacific region, could produce a more unstable and threatening strategic situation. The end of the Cold War showed how major changes in our strategic environment can happen, and we need to look a long way ahead. Decisions about the development of our armed forces can
have time frames of 20 years or more. Our defence decisions today therefore need to consider the strategic environment we might face after 2010. We must take account of the possibility of major changes over that time, including for the worse.

1.19 Of course we cannot guard against all possibilities or eliminate strategic risks. We have looked for the most cost-effective ways to minimise such risks, taking account not only of the likelihood of a particular threat but also of how serious it would be for Australia if it materialised.

The Bigger Picture

1.20 Making decisions about our armed forces involves a lot of detailed analysis: regional trends and scenarios, risks and probabilities, interests and obligations, cost-effective force options and new technologies. But there are, in addition, other important factors that we need to keep in mind. There is a bigger picture.

1.21 Our armed forces are not simply a service provided by government. They are part of our national identity. The ADF reflects the kind of country we are, the role we seek to play in the world, and the way we see ourselves.

1.22 This is particularly the case in rural and regional Australia, where many local communities have a close affinity with the local ADF base or Reserve unit. Some of these communities, such as Darwin, Cairns and Townsville, derive significant economic benefits from the defence presence, while in other areas the capacity of local industry to support defence projects is often seen as critical to efforts to attract new work.

In making decisions about the future of Defence, the Government will focus not just on what it can do to improve the ADF, but also on what Defence and the ADF can do for local communities, and the responsibilities Defence has as an employer...
and contributor to local and regional economies.

1.23 These factors are not only important to us in times of crisis. The sense of security that our armed forces give us underpins our optimistic outlook and the confidence with which we engage the region. Our defence capability and our commitment to shared interests help to strengthen regional security. In the final resort, Australia’s defence forces serve as the decisive deterrent to any country contemplating armed action against us.
2 – Security and The Role of Australia’s Armed Forces

Force in International Affairs

2.1 The Government has considered the future role of force in international affairs, including the argument that changes in the structure of the international system will reduce the importance of force in relations between nations over coming years.

2.2 The Government does not dismiss these views, and indeed it places a high priority on working with others, at both the regional and global level, to further minimise, and if possible to eliminate, the risk of war. The continuing threat of proliferation of weapons of mass destruction makes those efforts all the more important.

2.3 Resort to force will continue to be constrained by many aspects of the international system, and armed conflict between states will remain less common than in earlier centuries. But there remains a risk that circumstances may still arise in which these constraints are not effective. That risk is as high in the Asia Pacific region as it is elsewhere in the world. It is best minimised by realism about the challenges still to be faced in strengthening peace in our region, and a commitment to work with others, both locally and globally, to build a more robust and resilient international system.

2.4 This requires strategic policy which is integrated with wider diplomatic and political policies. The ways in which we do that are described in Section Two of this White Paper. But it also means we need to maintain a
capable defence force, that is trained and equipped to meet the demands of conventional wars between states.

**New Military Tasks**

2.5 Australia has been engaged in only one conventional conflict since the Vietnam War, and that was the Gulf War of 1990-91. But our armed forces have been busier over the last decade, and especially the past two years, than at any time since our involvement in Vietnam. This reflects a worldwide trend.

2.6 It is clear that various forms of military operations other than conventional war are becoming more common. Since the end of the Cold War, there has been a worldwide upsurge in intra-state conflicts. These disputes have accounted for the vast majority of armed conflicts, and have placed new demands on the armed forces of many countries, including for humanitarian relief, evacuations, peacekeeping and peace-enforcement.

2.7 The ADF is no exception. Over the past decade we have deployed the ADF to places as diverse as Namibia, Somalia, Western Sahara and Rwanda in Africa; the Gulf and elsewhere in the Middle East; and Cambodia, the Solomon Islands, Papua New Guinea (Bougainville), Indonesia (drought relief in Irian Jaya) and East Timor in our nearer region. In these places, the ADF has undertaken tasks from famine and disaster relief to peacekeeping and humanitarian assistance.

2.8 The Government believes that this is an important and lasting trend, with significant implications for our Defence Force. Over the next 10 years the ADF will continue to undertake a range of operations other than conventional war, both in our own region and beyond. Preparing the ADF for such operations will therefore take a more prominent place in our defence planning than it has in the past.

2.9 In many cases, especially at the lower end of the spectrum of intensity, we are likely to need to deploy quickly and operate effectively in dangerous and uncertain situations that may not necessarily require the use of force. Our tasks might include distribution of relief supplies, evacuation of civilians, providing medical help or monitoring a peace agreement.

2.10 But often these operations will be more demanding. The boundary between a benign situation and open conflict, either against local irregulars or more capable armed forces, can become blurred.
Australian Defence Force Involvement in Overseas Humanitarian Relief, Evacuations, Peacekeeping and Peace-Enforcement Operations
1990 – present

ADF Involvement in multinational peace operations
1. Lebanon/Syria/Israel – UN Truce Supervision Organisation, 1956–
2. Sinai – Multinational Force and Observers, 1993–

ADF Contribution to humanitarian relief and evacuation of civilians
22. South Pacific – Periodic disaster relief and other assistance
2.11 Even in benign situations, an evident capability to use force can help to keep things peaceful. When trouble starts, the ability to respond promptly with a clear predominance of force will often restore peace quickly, which is important not just for achieving the mission, but also for protecting our servicemen and servicewomen.

2.12 This means that the capabilities we need for these types of operations will have a lot in common with those we develop for more conventional conflicts.

Non-Military Security Issues

2.13 Australia faces many security concerns other than those involving military force. These include the potential for non-military threats, such as cyber attack, organised crime and terrorism. They also include concerns over illegal immigration, the drug trade, illegal fishing, piracy and quarantine infringements.

2.14 Many of these problems, such as illegal immigration, involve the challenge of effective surveillance, patrolling and policing of our maritime approaches. Illegal incursions into our Exclusive Economic Zone and territorial waters, and onto our territory, constitute an on-going problem for Australia. Given the size of our maritime jurisdiction, this is a significant challenge.

2.15 The Government has recently undertaken a major review of our coastal surveillance and enforcement activities, including the significant contribution made by Defence to these efforts. That review proposed important enhancements, including improved surveillance capacity through the acquisition of two extra aircraft, and the establishment of an integrated surveillance centre. The Government has allocated $124 million over four years to fund these and other measures.

2.16 The ADF will continue to have a major part to play in these activities. Our patrol boats, maritime surveillance aircraft and intelligence capabilities are fully engaged in the day to day monitoring and policing of our maritime approaches, and their efforts are closely integrated with other agencies. These capabilities will be maintained and enhanced. A senior naval officer has been placed in charge of the integrated surveillance centre as Director-General Coastwatch.

Most people believe the ADF should be structured to maintain a war-fighting capability for the defence of Australia and its interests. They argued that such a force could readily be adapted for other roles, such as peacekeeping, but the reverse is not true.

Report of the Community Consultation Team: Key findings
2.17 New defence capabilities have the potential to make an even bigger contribution to coastal surveillance in the future. Within a few years, the ADF’s wide area surveillance system will provide the potential for continuous real-time coverage of our northern air and sea approaches. This system will be fully integrated with other national coastal surveillance capabilities, to provide a comprehensive coverage of ships and aircraft approaching our shores. The Government is giving high priority to this capability and to ensuring that it contributes effectively to our peacetime surveillance needs.

2.18 The ADF maintains counter-terrorist capabilities for resolving situations that are beyond the capacity of our police forces. It also helps in sea search and rescue and special circumstances such as the Olympics, bushfire fighting, and in responding to other types of natural disaster.

2.19 Defence will also be among the key contributors to the Government’s efforts to develop responses to cyber attack on Australia’s critical information infrastructure. This new security challenge is being taken seriously by the Government, and a comprehensive national approach is currently being developed.

2.20 The ADF can and will play an increasing role in helping to address a wide range of these non-military security concerns. But the rise of these new types of security problems has not made the old kinds of threats less important. And using the ADF - trained and equipped for armed conflict - is not necessarily the most cost-effective way to address new non-military security concerns. Civilian responses may be more appropriate. Our approach is to draw on the expertise of the Defence Force where it is most appropriate to do so, but not to allow these roles - important as they are - to detract from the ADF’s core function of defending Australia from armed attack.

Many participants argued that the most immediate threats are non-military, namely illegal immigration, drug smuggling, attacks on information systems and terrorism. Some communities were concerned that our sea and air borders may be being breached and would welcome an increased ADF presence across the north.

Report of the Community Consultation Team: Key findings
3 – Australia’s Strategic Environment

3.1 This Chapter outlines those aspects of Australia’s strategic environment that will influence the overall direction of our strategic policy and force development over the next 10 to 20 years. Section Two of the White Paper will describe how our strategic policy will seek to influence this environment.

Our Strategic Setting
The Global Context

3.2 At the global level, two interrelated trends are likely to shape our strategic environment - globalisation and the primacy of the United States. The trends of globalisation especially in trade, investment and communications are increasing cross-border integration and interdependence around the world. This is changing the ways countries work and - especially in economic fields - is powerfully shaping the options available to governments. Overall, globalisation looks likely to be good for security because it strengthens the stake that governments and people have in the smooth working of the international system. For example, increased international flows of trade, investment and technology increase the benefits of a stable international environment and the costs of any disruption.

3.3 However, the security benefits of globalisation are limited by countervailing pressures. First, nation-states remain the most important strategic actors. Moreover, nationalism in various forms remains potent and in some areas is an increasingly powerful motivator. Second, globalising trends are being accompanied by growing regionalism, especially in the field of security, where the end of the Cold War has moved attention
from the global power balance to a series of regional strategic systems - including the Asia Pacific. Third, the integrative trends of globalisation themselves are not irreversible and could be especially vulnerable to a deteriorating security environment.

3.4 The United States today has a preponderance of military capability and strategic influence that is unique in modern history. That preponderance supports a generally stable global strategic environment. The primacy of the United States is built on the strength of its economy, the quality of its technology, the willingness of US governments and voters to accept the costs and burdens of global power, and the acknowledgement by most countries that US primacy serves their interests. All these factors are likely to endure. The Government believes this will serve the strategic interests of the Asia Pacific region including Australia, and will promote economic, social and political developments that align with our interests and values.

3.5 However, we should be careful not to take US primacy for granted. Over the coming years the US global role may come under pressure, both from within the United States and from other countries.

3.6 Domestically, the United States will continue to accept the human and material costs of supporting causes that directly touch its vital interests. But the willingness of the United States to bear the burden of its global role where its interests are less direct could be eroded, especially if it faces protracted commitments, heavy casualties or international criticism.

3.7 Abroad, no country in the world will have the military or economic power to challenge US global primacy over the next few decades. But the United States could be obstructed and
frustrated at the regional level. With adroit diplomacy, the United States should be able to minimise such regional challenges. The key will be to show that US primacy can work in the interests of less powerful countries.

3.8 A third significant global trend has been the evolution of the United Nations. Over the past decade the UN has become more active and effective. In doing so it has broadened the range of its activities and responsibilities in the security area. The UN has grappled with internal problems and crises from the Balkans to Rwanda, Cambodia and East Timor, responding to a widespread recognition that international security can be affected by problems within, as well as between, states.

3.9 The United Nations has also been responding to a growing sense in the international community that crises causing avoidable human suffering cannot be ignored just because they happen within the borders of a sovereign state. It is too early to say whether a new principle of humanitarian intervention is being established. If so, it would need to be applied with caution as well as compassion. But the trend to a more active and effective UN security role is welcome.

3.10 Outside the Asia Pacific region, strategic problems continue to be most likely in the Middle East, and potentially also in Central Asia. European security problems, such as those in the Balkans, will be managed primarily by NATO and European security structures. Russia’s future place in the European and global strategic environment remains unclear. Security and stability in Europe will continue to depend on the maintenance of an effective working relationship between Russia, and the United States and its European allies. Africa will continue to suffer from crises which may require international engagement to minimise suffering and help towards solutions.

**The Asia Pacific Region**

3.11 Although there remains a risk of localised or more widespread economic downturn from time to time, the Asia Pacific is set to be the most dynamic region in the world over the next few decades. Economic growth should help build stability. But it will also put strains on old relationships, raise new expectations and perhaps offer new temptations.

3.12 The most critical issue for the security of the entire region is the nature of the relationships between the region’s major powers - China, Japan, India, Russia and the United States. These countries are important to Australia’s security because they have the power - actual or potential - to influence events throughout the Asia Pacific region. Their relationships will set the tone for the whole region.
3.13 The United States is central to the Asia Pacific security system, and its role will be critical in maintaining security over the coming decades. It will be in Asia that the United States is likely to face the toughest issues in shaping its future strategic role - especially in its relationship with China.

3.14 The trilateral relationship between China, Japan and the United States will define the East Asian strategic framework. Both Beijing and Washington clearly understand the importance of managing the US-China relationship effectively, and recognise the costs to both of them - and to the rest of the region - if they fail to do so. The benefits of a stable and cooperative relationship would be very great. Important steps have been made, for example in progress towards China’s accession to the World Trade Organisation. But significant problems remain in the relationship - especially concerning the issue of Taiwan. It is therefore possible that US-China relations may be a significant source of tension in the region in coming years. This could be important to Australia’s security.

3.15 The US-Japan relationship is the key pillar of US strategic engagement in Asia. The strength of US security commitments to Japan, and the scale of US military deployments in Northeast Asia, which the US-Japan relationship facilitates, is critical to maintaining strategic stability in the whole region. The US-Japan relationship has great depth and resilience, and both sides have worked effectively in recent years to overcome problems and adapt to new conditions. This has provided a welcome framework in which Japan has been able to take a larger role in regional and global security issues. Without the reassurance provided by the US relationship, Japan would face difficult strategic choices with security consequences for other countries in the region.

3.16 The Korean Peninsula is clearly a key dynamic factor in the Northeast Asian strategic balance. Reconciliation between North and South Korea, leading to a reduced level of military confrontation, seems closer now than for many years. But it could also introduce new pressures - including over the future of US forces in Korea - which would need careful management.

3.17 Russia has significant interests in the Asia Pacific region, particularly in Northeast Asia. It has moved to improve its relationships with China and India, partly to try to counterbalance US strategic influence in the region. The way those relationships develop will be
important to the future strategic dynamics of the Asia Pacific region.

3.18 India’s economic growth is enhancing its strategic potential and influence in the region. Its nuclear tests, and the development of an operational nuclear capability, have made the regional nuclear balance more complex. There are elements of strategic competition between China and India that have been amplified by the development of India’s nuclear capability. The future of this relationship will be important for the security of the whole region. The risk of war - and even of nuclear war - between India and Pakistan remains significant and disturbing, but it is India’s growing role in the wider Asia Pacific strategic system that will have more influence on Australia’s security.

3.19 In general, we believe the forces for peace and stability in the Asia Pacific region are strong, helped by the growth of regional multilateral structures and frameworks. The likelihood is that over the coming decades the region will enjoy growing economic integration and political cooperation. But there will inevitably be tensions between the major powers of Asia over the next 20 years, and their relationships may change significantly. There is a small but still significant possibility of growing and sustained confrontation between the major powers in Asia, and even of outright conflict. Australia’s interests could be deeply engaged in such a conflict, especially if it involved the United States, or if it intruded into our nearer region.

The Nearer Region and Immediate Neighbourhood

3.20 The security of the nearer region - Southeast Asia and the Southwest Pacific - could be affected directly by instability and conflict among the region’s major powers, but countries of the nearer region also face major challenges of their own.

3.21 Overall, Southeast Asia remains an area of great promise. Economic liberalisation and institutional reform provide hope that in many countries a return to high growth rates can be sustained over the longer term. Political and social evolution is strengthening the robustness, legitimacy and resilience of the political systems in many
countries. And despite the strains of economic crisis and rapid enlargement of its membership, ASEAN continues to provide a focus for the sense of shared interests and common goals which has been so important to Southeast Asia over recent decades. There remain a number of security issues, such as conflicting claims in the South China Sea, which will need to be handled carefully if regional security is to be maintained.

3.22 The countries of our immediate neighbourhood - Indonesia, East Timor, Papua New Guinea, and the island states of the Southwest Pacific - face large economic and structural challenges.

Indonesia

3.23 Indonesia is at a critical point in its history. The political evolution of the past few years has seen a vibrant democracy emerge with unexpected speed. The successful conduct of elections throughout the country in June 1999 and the subsequent installation of a democratic government have been an historic achievement for the people of Indonesia. Since May 1998, they have shown a determination to make democracy work. This is a major cause for optimism about Indonesia’s future.

3.24 But at the same time there are challenges ahead. Three issues in particular stand out. The first is the challenge of political evolution through democratisation and decentralisation. The second is the need for wide-ranging economic reforms to put Indonesia back on the path to sustainable growth. The third is the resolution of religious, separatist and other challenges to the cohesion and stability of Indonesia.

3.25 The Government believes the interests of Indonesia’s neighbours, and of the Indonesian people themselves, will best be served by a country that is united, stable and democratic; well-governed and prosperous; cohesive and peaceful at home; and responsible and respected abroad.

3.26 But it is not for Australia, or other outsiders, to tell Indonesia how these goals can best be achieved. It is important that we convey effectively our understanding of the problems that Indonesia faces, our respect for the efforts they are making, and our deep support for Indonesia’s national cohesion and territorial integrity. In particular, we should continue to affirm the strength of the strategic interests we share in the security of our two countries.

3.27 Indonesia’s size, its huge potential, and its traditional leadership role in Southeast Asia mean that adverse developments there could affect the security of the whole of our nearer region, and beyond. While not regarding developments of such seriousness as
likely, Australia needs to recognise the possibility that, were they to occur, Australia's security could be affected.

**East Timor**

3.28 East Timor's emergence as an independent state is a new factor in our security environment. The willingness of Presidents Habibie and Wahid to facilitate East Timor's transition, and to build a friendly bilateral relationship between Indonesia and East Timor, are most welcome. But important security issues remain, which may not be resolved by the time the UN-sponsored transition to independence is completed, probably by the end of 2001.

3.29 There is a significant risk of continued security challenges from armed militias opposed to independence. It is clearly important that East Timor should be allowed to develop in peace, without the threat of intimidation or violence. The prospect of continued insecurity is therefore disturbing. That insecurity could also pose problems for relations between Indonesia and East Timor. Australia will look to the Indonesian Government to continue to work to prevent militia activity in East Timor from being supported from West Timor.

3.30 East Timor, for its part, will need to establish a national approach to security and defence issues that serves
its interests and matches its resources. This will be important both for the security of East Timor and for the stability of our near neighbourhood. A positive approach to relations with Indonesia will play a major role in achieving this stability.

Papua New Guinea

3.31 Twenty-five years after independence from Australia, Papua New Guinea has maintained many of the key foundations of progress and prosperity, including an active democracy, free press, and an independent judiciary. Its economic potential is exemplified by abundant mineral resources.

3.32 But as its leaders have acknowledged, Papua New Guinea has made little progress over the past few years, and in important respects has slipped backwards. Economic growth has been slow, corruption has afflicted public life, social progress in areas like education and health has been limited, and law and order have deteriorated. Many of these problems can be traced to weaknesses in its parliamentary, governmental and administrative arrangements. Prime Minister Morauta has taken important steps to address these issues. Nonetheless Papua New Guinea faces a long and uncertain road to prosperity and stability. Without progress, important problems that have significance for security and stability beyond its borders will remain. One is the threat to national cohesion from secession movements, most particularly in Bougainville. Another is the potential for threats to the security of legitimate government from unlawful and violent challenge, including by elements within the armed forces.

3.33 More broadly, if Papua New Guinea’s problems continue, its ability to handle future challenges will be hampered, and its viability as an effective state could come into question.

Southwest Pacific

3.34 Australia, New Zealand and Papua New Guinea share the Southwest Pacific with 13 other countries. They are all unique, with different histories, cultures, institutions, opportunities and problems, but they have some things in common. These include the inherent problems of national development for small and isolated nations, many with an unsustainable relationship between population and resources.

3.35 Current problems in Fiji and the Solomon Islands provide important evidence of deep-seated ethnic and political problems that pose threats to law and order, legitimate government and even national cohesion in some Pacific Island states. In others, such as the small states of
Polynesia and Micronesia, economic and environmental challenges are uppermost.

3.36 Pacific Island leaders are well aware of many of these problems, and are taking steps to different degrees to address them. Even so, the stability, cohesion and viability of some of these nations will remain under significant pressure over the years ahead. Their resulting vulnerability will continue to be a strategic concern for Australia.

An Attack on Australia?

3.37 Australia today is a secure country, thanks to our geography, good relations with neighbours, a region where the prospect of inter-state conflict is low, our strong armed forces and a close alliance with the United States. Of these positive factors, only the benefits of our strategic geography are immutable. But the chances of an attack on Australia remain low.

3.38 A full-scale invasion of Australia, aimed at the seizure of our country and the erasure or subjugation of our national polity, is the least likely military contingency Australia might face. No country has either the intent or the ability to undertake such a massive task. The region's major powers could conceivably develop the capabilities to undertake an invasion of the continent, but none has anything like that level of capability at present, and it would take many years of major effort to develop. They would also need to establish major bases near Australia. Such developments are not credible unless there were to be major changes in the region's security environment.

3.39 A major attack on Australia, aimed at seizing and holding Australian territory, or inflicting major damage on our population, infrastructure or economy, remains only a remote possibility. The capabilities to undertake such an attack would be easier to develop than those needed for an invasion, especially if bases near Australia were accessible. Such developments are highly unlikely in our current strategic environment, but our defence planning cannot altogether dismiss the possibility that they might occur. Some countries have weapons of mass destruction - nuclear, biological or chemical weapons - which, delivered by long-range ballistic missiles, could
reach Australia. But it is very unlikely that any of those countries would see advantage in attacking Australia with such weapons, not least because of our alliance with the United States.

3.40 Minor attacks on Australia, aimed at harassing or embarrassing Australia, or putting pressure on our policies, would be possible with the sorts of capabilities already in service or being developed by many regional countries. But such attacks would become credible only if there were a major dispute. Even then, it would be most unlikely that another government would miscalculate so badly as to think that it would gain by attempts at military intimidation. Nonetheless such miscalculations do occur, and sometimes with little warning.

The Development of Military Capabilities

3.41 A key factor in the evolution of Australia’s strategic environment is the development of military capabilities in the Asia Pacific region. This will influence the relationships between countries in the region, and it is a critical issue to consider in deciding Australia’s own future capability needs. In recent times the Asia Pacific has seen the fastest growth of military capabilities in the world. There have been four factors underpinning that trend: economic growth, development of managerial and technical skills, changing strategic perceptions and priorities, and access to technology. All of these factors seem likely to endure over the next two decades. Our defence planning therefore needs to take account of the likelihood that capabilities in our region will continue to show substantial and sustained growth, in ways which are important to Australia’s military situation.

Air Combat Capabilities

3.42 Over the last 10 to 15 years, a number of regional defence forces have begun to develop sophisticated air combat capabilities. They have introduced new-generation fighters with the weapons and sensor systems for Beyond Visual Range air combat - which means the ability to detect and attack hostile aircraft from ranges of up to 60 or 70 nautical miles. Until the mid-1990s Australia was one of very few countries in the Asia Pacific region with BVR capabilities. By 2005, at least
nine regional countries, apart from the United States and Australia, will have developed these capabilities, and some will have built up substantial numbers of BVR-capable fighter aircraft.

3.43 In a parallel development, some countries in the region are expected to acquire Airborne Early Warning and Control aircraft over the coming decade. These aircraft provide a key edge in air combat, because they allow earlier detection of hostile forces, and more effective deployment of aircraft in action. They also contribute critically to maritime and strike operations. By 2010, some seven regional countries apart from the United States and Australia are expected to have acquired various levels of AEW&C capability.

3.44 These developments, and others including air-to-air refuelling and relatively low-cost stealth modifications to make aircraft harder to detect, will mean that across the region - including in some countries of Southeast Asia - there are likely to be significant increases in air-combat capability over the coming decade.

**Naval Forces**

3.45 Naval forces will become more capable over the coming decade as a result of a number of well established trends. One is the proliferation of high-capability anti-ship missiles such as Harpoon, Exocet and their Russian equivalents. Over the past decade a number of regional countries have acquired more sophisticated anti-ship missiles with longer range, better guidance, and more capable systems which allow several missiles to be launched at a target simultaneously from different directions. The number of types of platform that can launch these missiles has also increased to include not just ships but submarines and several types of aircraft. These trends are expected to continue over the current decade. For example we expect to see supersonic anti-ship missiles enter service in several countries in the region over that time and the capability to target ships at long range will improve. Regional navies will also deploy improved defences against these missiles on their ships.

3.46 Another key development is the expansion of submarine capability in the region. Over the coming decade it is likely that the capabilities of submarines being operated by regional navies will improve significantly, and a number of navies will acquire submarines for the first time. Anti-submarine warfare capabilities will also improve.
Strike Forces
3.47 Strike capabilities will continue to improve in the region with the introduction of more capable aircraft, supported by air-to-air refuelling in some cases, and able to be fitted with longer range stand-off weapons. Ships and submarines in some regional navies may also develop enhanced strike capabilities, as they acquire long-range cruise missiles and shorter range stand-off weapons. Such weapons will carry increasingly sophisticated guidance systems and warheads and will be supported by more advanced reconnaissance and targeting systems.
3.48 Defences against strike will also improve, with better air combat capabilities and more advanced surface-to-air missiles coming into service in the region.

Land Forces
3.49 Most land forces throughout the region already have a numerical advantage in troop numbers over Australia’s. Land forces in the region will become more sophisticated, with the wider introduction of important technologies such as night-vision equipment, unmanned aerial vehicles for reconnaissance and improved communications. Firepower and mobility will be enhanced in many armies by acquisition of more helicopters, including reconnaissance and fire-support helicopters, and new types of armoured vehicles.
3.50 At lower levels of technology, but still very important in many types of operation, we expect to see a wide range of non-state actors, including criminals and insurgents, continuing to gain access to modern, sophisticated weaponry. The proliferation of light guided weapons such as shoulder-fired anti-aircraft missiles is likely to continue.

Information Capabilities
3.51 Developments in information technology, and the rapid changes they are bringing to the nature of warfare, will enhance the operational effectiveness of armed forces over the coming decade. Intelligence, surveillance, communications, command and control capabilities, and the whole spectrum of information warfare, will expand significantly. To take one example, the increased availability of high-quality satellite imagery from commercial sources will significantly enhance the information-gathering capabilities of many countries.

Weapons of Mass Destruction
3.52 Weapons of mass destruction remain a concern for the region’s strategic stability. Nuclear, chemical and biological weapons, and their chief means of delivery - ballistic missiles - are all aspects of weapons of mass destruction over which we need to remain vigilant. The trend towards proliferation of weapons of mass destruction globally will require our continued focus.
Section Two | Strategy
4.1 This Chapter explains the Government’s decisions about Australia’s broad strategic policy: our strategic interests, objectives and priorities.

4.2 At its most basic, Australia’s strategic policy aims to prevent or defeat any armed attack on Australia. This is the bedrock of our security, and the most fundamental responsibility of government. But there is more we can do to prevent attack on our territory than building armed forces, and our armed forces need to be able to do more than simply defend our coastline. We have strategic interests and objectives at the global and regional levels. Australia is an outward looking country. We are engaged in many different ways – economic, cultural and personal – with the region around us and the world beyond. We are a major trading nation, with our prosperity dependent on our engagement with other countries.

4.3 Australia therefore cannot be secure in an insecure region, and as a middle-size power, there is much we can and should do to help to keep our region secure, and support global stability. Working with others we can do a lot more than we can do by ourselves.

4.4 At the same time we must be realistic about the scope of our power and influence and the limits to our resources. We need to allocate our effort carefully. To do that we need to define and prioritise our strategic interests and objectives. We do that in the following paragraphs, listing our interests and objectives in priority order.

4.5 We have given highest priority to the interests and objectives closest to Australia. In some circumstances a major crisis far from Australia may be more important...
to our future security than a minor problem close at hand. But in general, the closer a crisis or problem to Australia, the more important it would probably be to our security and the more likely we would be able to help to do something about it.

4.6 The existence of strategic interests in a situation does not determine how Australia would respond in the event of a crisis which challenged those interests. Australia would always have a range of options, and the government of the day would need to determine how best to respond. In particular, careful consideration would always need to be given before the serious step of deploying forces was taken. That consideration would need to balance the Australian interest at stake with the human, financial, political and diplomatic, and wider costs of committing military forces. Nevertheless, our defence planning recognises that the Government may decide that such a commitment could be warranted in some circumstances.

Ensure the Defence of Australia and its Direct Approaches

4.7 Australia’s most important long-term strategic objective is to be able to defend our territory from direct military attack. We therefore have an overriding strategic interest in being able to protect our direct maritime approaches from intrusion by hostile forces. As outlined in Chapter Three, a major attack on Australia is not at all likely in current circumstances, and even minor attacks are improbable. But we do not rule out the possibility, especially over the longer term, that circumstances might change in ways that make the prospect less unlikely. Even if the risk of an attack on Australia is low, the consequences would be so serious that it must be addressed.

Foster the Security of our Immediate Neighbourhood

4.8 Our second strategic objective is to help foster the stability, integrity and cohesion of our immediate neighbourhood, which we share with other countries’ sovereignty and territorial integrity.

Most people believe that the first and foremost task for the ADF is the defence of Australia.

An integral part of this belief is an expectation that the ADF, alone or with coalition partners, should be able to undertake significant operations within the region, particularly in our nearer region.

Report of the Community Consultation Team: Key findings
Indonesia, New Zealand, Papua New Guinea, East Timor and the island countries of the Southwest Pacific. We would be concerned about major internal challenges that threatened the stability and cohesion of any of these countries. We would also be concerned about any threat of outside aggression against them. We have a key interest in helping to prevent the positioning in neighbouring states of foreign forces that might be used to attack Australia.

**Promote Stability and Cooperation in Southeast Asia**

4.9 Our third strategic objective is to work with others in Southeast Asia to preserve the stability and cooperation which has been such a notable achievement over the past few decades. Our key strategic interest is to maintain a resilient regional community that can cooperate to prevent the intrusion of potentially hostile external powers and resolve peacefully any problems that may arise between countries in the region. We would be concerned about any major external threat to the territorial integrity of the nations in our nearer region, especially in maritime Southeast Asia, whether that threat came from outside or inside the region.

**Support Strategic Stability in the Wider Asia Pacific Region**

4.10 Our fourth strategic objective is to contribute in appropriate ways to maintaining strategic stability in the Asia Pacific region as a whole, and to help contribute to building a stronger sense of shared strategic interests. Australia has a direct interest in the stability of the Asia Pacific region as a whole, and especially in the relations between the major powers. We would want to avoid the emergence in the Asia Pacific region of a security environment dominated by any powers whose strategic interests might be inimical to Australia’s. We would also want to avoid destabilising strategic competition between the region’s major powers, and preserve a security environment in which the region’s economic development can proceed unhindered by threats to trade.

**Support Global Security**

4.11 Our fifth strategic objective is to contribute to the efforts of the international community, especially the United Nations, to uphold global security. The success of the UN in nurturing the principle that armed aggression by one state against another
is not to be tolerated, and the effectiveness of its mechanisms in marshalling an international response when the principle is flouted, are important Australian strategic interests. That is a key reason why Australia is among the UN’s most consistent supporters. We will also continue to support the United States in the major role it plays in maintaining and strengthening the global security order.

4.12 Australia also has an interest in preventing the spread of weapons of mass destruction (WMD). This interest has both a humanitarian and a strategic aspect. We have an interest in helping to ensure that no-one should experience the horrors of nuclear, chemical or biological warfare. We have a strategic interest in minimising the risk that WMD might one day be used or threatened against us. Effective global non-proliferation regimes are vital to limit the spread of WMD in our region.
5.1 This Chapter explains how Australia works with other countries to achieve our strategic objectives. That cooperative work is possible because Australia’s strategic interests are compatible with the interests of so many other regional countries. This is important to Australia’s security, because we do not have the power or reach to protect many of our interests on our own.

5.2 We work through the growing range of multilateral security forums and arrangements in our region, as well as a network of bilateral defence and security relationships, including Australia’s most important single strategic relationship - our alliance with the United States.

5.3 This work is integral to Australia’s foreign policy, which places the highest priority on supporting our strategic interests. Australia has a highly professional and capable diplomatic service, which works continually in Australia, at missions abroad and in international organisations to help build the kind of security environment we want and to maximise Australia’s influence on events to Australia’s advantage. Assistance provided to other countries under our aid program is also important in advancing Australian interests.

5.4 Australia’s strategic objectives are also supported by the efforts of Australians outside Government. Australian companies build important economic linkages, our schools and universities help establish enduring bonds of understanding and affection through the education they provide to individuals all through the region, and some Non-Governmental Organisations contribute by helping to solve major problems of human welfare that could erode regional stability.
5.5 Our armed forces complement and support the frontline work of our diplomats. Australia’s influence on security issues in our region and beyond is, to a significant degree, dependent on our willingness and ability to commit forces to operations when necessary. The quality and capability of the ADF is therefore an essential underpinning to the day to day diplomacy that shapes our strategic environment.

The US Alliance

5.6 In 2001, Australia’s formal alliance with the United States will reach 50 years of age with the anniversary of the signing of the ANZUS Treaty in September 1951. Our strategic links of course go back further than that, to 1941 and the start of the Pacific War. But for the past 50 years ANZUS has given the relationship shape, depth and weight. The Treaty remains today the foundation of a relationship that is one of our great national assets.

5.7 Since the end of the Cold War the United States and its allies have refashioned and reaffirmed their alliances to meet contemporary needs. As the Asia Pacific region has emerged as a focus of global security in the coming decades, so the US-Australia alliance is as important to both parties today as it has ever been.

5.8 The renewed vigour of the US-Australia alliance is founded on enduring shared values, interests and outlook, as well as common sacrifices that extend back almost a century. It also reflects our awareness of the challenges that we face in the region over the coming years and the benefits we stand to gain by cooperation. For Australia, continued US engagement will support our defence capabilities and play a critical role in maintaining strategic stability in the region as a whole. For the United States, Australia is an important ally, a key partner in regional security efforts and a significant potential contributor to coalitions.

5.9 The US-Australia alliance works at three closely connected levels. First, there is a vast array of bilateral cooperation in the practical business of defence and security. Training and exercising opportunities allow our defence personnel to stay equal to the best. New arrangements established
this year give Australia even better access to US military technology, including in highly critical and sensitive areas that could give us a vital edge in combat. The kind of ADF that we need is not achievable without the technology access provided by the US alliance. Intelligence cooperation and sharing play a central role in enhancing our understanding of the world around us.

5.10 The Government expects that these forms of practical cooperation will continue to grow over coming years. Technology offers new opportunities to work together, and to deepen cooperation in many areas. It also provides new imperatives to achieve closer integration and interoperability of capabilities and systems. In an era of high technology warfare, effective alliances will need systems that can operate at a level of detail in real time. Those systems will need to be built in peacetime if they are to be of value in a crisis.

5.11 Second, our alliance works at the regional level. One of the main benefits we seek from the alliance is the support it gives to sustained US engagement in the Asia Pacific region. The alliance is important to the United States as one of the key elements of its network of Asia Pacific bilateral alliances that also includes Japan, Korea, Thailand and the Philippines, as well as close defence relationships with other important regional powers such as Singapore. This network of alliances and close strategic relationships is at the heart of the US strategic posture in Asia, and is thus central to regional stability. This serves key Australian interests and objectives.

5.12 Our strong support for US engagement in the region complements and reinforces our commitment to an inclusive and cooperative approach to regional security. Our participation in the network of alliances is about regional security. It is not about constraining other countries from pursuing their legitimate objectives and interests.

5.13 Third, the US-Australia alliance will continue to be founded on our mutual undertakings to support each other in time of need. These undertakings are stated clearly in the ANZUS Treaty, which does not commit either of us in advance to specific types of action, but which does provide clear expectations of support.

5.14 The Government views these undertakings very seriously. We believe that, if Australia were attacked,
the United States would provide substantial help, including with armed force. We would seek and welcome such help. But we will not depend on it to the extent of assuming that US combat forces would be provided to make up for any deficiencies in our capabilities to defend our territory. A healthy alliance should not be a relationship of dependency, but of mutual help. In the long run, dependency would weaken the alliance, both in the eyes of Australians and in the eyes of Americans. For that reason, self-reliance will remain an inherent part of our alliance policy.

5.15 There is one important exception to this principle of self-reliance. Australia relies on the extended deterrence provided by US nuclear forces to deter the remote possibility of any nuclear attack on Australia.

5.16 Australia’s undertakings in the ANZUS Treaty to support the United States are as important as US undertakings to support Australia. Those undertakings reflect Australia’s own strong interests in sustaining a strong US strategic presence in the Asia Pacific region.

5.17 Over the next decade and beyond, our alliance with the United States will help us to pursue all of the strategic objectives that we set out in the preceding part of this White Paper. It is the breadth of benefit we receive from the alliance, as well as its depth, which makes it such an important element of our overall strategic policy. But we should not take the health of our alliance for granted. We will need to work hard with the United States to ensure its continuing viability and relevance in a period of change.

5.18 Australia’s alliance with the United States works as a two-way relationship. We are a dynamic, independent-thinking and, on occasion, constructively critical partner of the United States. The alliance provides excellent access to and significant influence on US thinking and policy on the Asia Pacific, and we provide a distinctly regional perspective in our contribution. At times, of course, the United States and Australia will differ in our approaches to issues, or on the priority we give them. When that happens, it is important that Australia has an ability to pursue our interests independently.

**Relationships in the Wider Asia Pacific Region**

5.19 Australia pursues its objective of supporting strategic stability in the wider Asia Pacific region by developing bilateral strategic dialogues with countries in the region, and contributing to the development of multilateral security forums and mechanisms.

5.20 Over the past few years Australia has made a major effort to establish regular exchanges with regional
countries on strategic issues. These have covered the regional security situation, the management of sources of tension and ways to enhance shared strategic interests.

5.21 These discussions have broken new ground in the evolution of Australia’s strategic policy, as we have sought to project our views and perspectives more directly to regional countries. We have recognised in particular that more fluid and complex strategic relationships are evolving among the major powers, and that Australia’s interests could be deeply engaged in them. The Government therefore believes it is important that Australia take a long-term approach to building up our access to those countries’ strategic thinking, and our influence in their decision making.

5.22 Our aims are realistic. We seek first simply to ensure that countries in the region understand Australia’s approaches to key issues, and that we understand theirs. We also hope to be able to explore ways to narrow any differences and build on common perceptions. Over the longer term we hope there will be opportunities to deepen our discussions to the point that we can establish clear common agendas and pursue common goals.

5.23 Our strategic dialogue with Japan is well developed and longstanding. As a country of great power and potential, it is an important partner. Over the past 50 years, Australia and Japan have built a close and multifaceted bilateral relationship, based not only on a major trading relationship, but also on people-to-people linkages, and an increasing sense of shared values, interests and objectives.

5.24 We share with Japan a commitment to a strong and enduring US role in regional security and a willingness through our respective alliances to work hard to support US engagement. We also share a wide range of other strategic interests and objectives, including freedom and security of navigation and trade, and strong support for the UN’s role in global security. We have already worked together on key security issues including non-proliferation, Cambodia and East Timor - where Japan provided INTERFET with generous help.

5.25 China, as the country with the fastest growing security influence in the region, is an increasingly important strategic interlocutor for Australia. The Government places a high priority on working with China to deepen and develop our dialogue on strategic issues.
5.26 All countries in the region have an interest in finding approaches to regional security issues which serve shared interests in a stable and cooperative international environment. Nonetheless, some hard issues will need to be addressed frankly, such as different perceptions of the value and importance of the US role in the region. Our strategic dialogue with China provides an opportunity to contribute to that process.

5.27 In 1998 we established strategic dialogue with Russia. Russia has influence and expertise in many Asian security issues, especially in Northeast Asia. We have therefore welcomed the opportunity to compare notes on a range of topics and hope to deepen our dialogue.

5.28 India is increasingly important to the wider regional strategic balance. This has not only increased Australia’s interest in building contact on security issues with India; it has also made India more interested in Australia’s distinctive approach and outlook on regional security affairs. The Government hopes that early progress can be made in setting up the kind of dialogue that will allow us to explore and better understand one another’s perspectives.

5.29 Finally, we are seeking to strengthen our strategic relationship with South Korea. It seems likely that South Korea will continue to become a more important and influential element of the Northeast Asian security community, especially if the current promise of improved relations with the North bears fruit. Whatever happens, the Korean Peninsula will continue to be a key focus for Northeast Asian security concerns for many years and thus important to the security of the whole region. We are therefore keen to develop our strategic dialogue with South Korea, both to improve our understanding of events on the Peninsula itself, and to benefit from Korean perspectives on wider regional security issues. We also welcome South Korea’s increased engagement in regional affairs, as reflected for example in its important support for INTERFET and UNTAET.

5.30 In all of these relationships the key focus has been, and is expected to continue to be, strategic dialogue. But in many of them, to different degrees, we will also seek to build a greater sense of transparency and familiarity by undertaking programs of contact between our armed forces and defence organisations. Activities such as ship visits and naval passage exercises, staff-college and officer-cadet exchanges and visits, and technical exchanges on issues of mutual interest, will provide valuable opportunities for further deepening our strategic relationships with these key countries.
Relationships in Southeast Asia

5.31 Australia’s aim is to promote our strategic objectives in Southeast Asia by helping to shape and support a network of multilateral and bilateral relationships that enables countries to work together to manage any differences and which could, if necessary, help in responding to challenges to shared interests.

5.32 Our policy has been to emphasise the close alignment of our strategic interests with those of our Southeast Asian neighbours, to encourage regional cooperation among the Southeast Asian states, and to help where we can in the development of appropriate regional military capabilities.

5.33 In pursuing these policies over the past 30 to 40 years, Australia has built up strong bilateral defence relationships with almost every country in Southeast Asia. Overall there is probably no country, either within the region or outside it, that has greater range and depth of defence contact with the countries of Southeast Asia than Australia. This effort is underpinned by a substantial and sustained pattern of deployments by all kinds of ADF units to Southeast Asia. This provides helpful benchmarks for the pace of activity we should aim to sustain if we are to continue to achieve our strategic objectives in Southeast Asia.

5.34 Each of our defence relationships in Southeast Asia is unique, with its own history, context, approaches and goals. In each of them, in different ways and to different degrees, we work with our partners by training together, undertaking combined exercises, technical cooperation, and the exchange of staff college students and other personnel. In addition we aim to build substantive dialogue on key strategic issues.

5.35 The economic crisis of the late 1990s slowed the momentum of development in a number of our defence relationships as resource constraints limited some types of activity. But it also stimulated significant management reform in many defence organisations and we have been able to contribute usefully
to this process by drawing on our own reform experience. We expect the pace of development to pick up again as defence budgets return to sustained growth.

5.36 Australia’s close defence relationship with Singapore is characterised by shared strategic perceptions, and includes extensive exercises and training by the Singapore Armed Forces in Australia. As Singapore’s forces are the most capable in Southeast Asia, exercising with them provides important benefits to the ADF.

5.37 Australia and Malaysia have a long history of military cooperation, demonstrated over the years by Australia’s support for the territorial integrity of Malaysia in earlier crises and through the ongoing ADF presence at Butterworth. A wide range of practical bilateral cooperation underlines the durability of our shared interests in regional security.

5.38 Australia’s membership of the Five Power Defence Arrangements (FPDA) commits Australia, along with New Zealand and the United Kingdom, to assist Malaysia and Singapore against external aggression. Membership of the FPDA serves enduring Australian interests in the security of maritime Southeast Asia, and complements our bilateral relationships in the region. The FPDA is changing in response to increasing complexity in the regional environment and to meet the demands of modern warfare. The FPDA Ministers’ Meeting in 2000 reaffirmed the basic purpose of the Arrangements, and recognised their likely evolution from mainly air defence to a combined and joint operational focus.

5.39 Australia and the Philippines also have a long-standing defence relationship. The Philippines’ support for regional security was recently demonstrated through its commitment to INTERFET and UNTAET. Australia is seeking to build on the relationship by enhancing dialogue and extending cooperation in defence reform and modernisation.

5.40 Thailand’s provision of important support and leadership in East Timor in 1999 and 2000 demonstrated its willingness to act cooperatively with Australia and others in support of regional security. Australia is seeking to consolidate and broaden the defence relationship and deepen our strategic dialogue with Thailand through an expanding program of cooperative activities including maritime surveillance cooperation, further cooperation on financial and management reform, and science and technological cooperation.

5.41 Our strategic relationship with Vietnam is in its early stages. We have conducted a regular dialogue on regional security issues since 1998 and are seeking to establish a broad-based
strategic relationship that would include regular visits and training exchange programs.

5.42 Australia is also maintaining and developing modest defence relationships with other countries in Southeast Asia, notably Cambodia and Brunei.

5.43 In addition to our bilateral relationships with Northeast and Southeast Asian countries, Australia has also been an active supporter of the ASEAN Regional Forum (ARF). The ARF is the key forum for multilateral dialogue on security issues in the Asia Pacific region. For Australia, the Forum complements bilateral security arrangements in promoting transparency and contributing to confidence and trust among regional countries. Participation in the Forum raises the profile of Australia in the region and enables us to contribute to shaping the regional security environment. It would be in Australia's interests to see the ARF play a greater role in regional security through its development and use of preventive diplomacy mechanisms. This might include contributing to the development of regional norms of conduct aimed at avoiding conflict and settling disputes without resort to the threat or use of force.

**Our Nearest Neighbours**

**Indonesia**

5.44 Our biggest and most important near neighbour is Indonesia. Over the past 30 years, both Australia and Indonesia have worked hard to establish and nurture a close defence relationship based on a strong sense of shared strategic interests. We have made significant progress despite differences in approach to some issues - for example the role of the military in society.

5.45 Indonesia's democratic transition, and its decision to allow East Timor a referendum on its future, have in many ways removed some of the earlier constraints on the development of a deeper strategic relationship. But the tumultuous events following the East Timor ballot last year, culminating in the
deployment of INTERFET, caused understandable tensions between Australia and Indonesia, which resulted in the suspension of most areas of defence contact.

5.46 Lingering misunderstandings in Indonesia about Australia’s recent role in East Timor have so far made it hard to build on the opportunities offered by Indonesia’s democratising achievements to establish the foundations of a new defence relationship. But Australia’s fundamental interests and objectives in having a good defence relationship with Indonesia remain as important as ever. The Government is committed to working with the Indonesian Government to establish over time a new defence relationship that will serve our enduring shared strategic interests.

New Zealand

5.47 Like other aspects of the trans-Tasman connection, our defence relationship with New Zealand shows the imprint both of our strong similarities and of the sometimes surprising differences between us.

5.48 The similarities start with our strategic interests, which are closely aligned. We both assume that as a matter of course we would come to each other’s help in time of trouble. That assumption is given formal expression in the undertakings of the ANZUS Treaty, which remains in force between Australia and New Zealand, notwithstanding the suspension of its United States-New Zealand element.

5.49 But New Zealand’s strategic perceptions and outlook differ from Australia’s in significant ways. New Zealand’s view that its strategic circumstances may not require the maintenance of capable air and naval forces differs from Australia’s view of our own needs. We would regret any decision by New Zealand not to maintain at least some capable air and naval combat capabilities. Such forces would allow a more significant contribution to be made to protecting our shared strategic interests, especially in view of the essentially maritime nature of our strategic environment.

5.50 On the other hand the high quality of New Zealand’s forces is beyond question. They made an outstanding contribution to INTERFET, and Australia is grateful for the speed and generosity with which they were committed and supported. We appreciate New Zealand’s recent decisions to ensure that its land forces will be equipped adequately for a range of more likely contingencies, and we know that the men and women of the New Zealand Defence Force will continue to constitute a highly professional force. New Zealand will remain a very valued defence partner for Australia.
**Papua New Guinea**

5.51 As our closest neighbour and a country with which we have deep historical associations, Papua New Guinea will always be an important factor in Australia’s strategic thinking. Australia’s enduring strategic interests in the security and stability of Papua New Guinea are evident from our history, and they are embodied in the undertakings contained in the PNG-Australia Joint Declaration of Principles signed in 1987. This reflects the expectation that Australia would be prepared to commit forces to resist external aggression against Papua New Guinea. Over the 25 years since independence, Australia has maintained a substantial defence relationship with Papua New Guinea and has provided significant levels of support to the Papua New Guinea Defence Force (PNGDF). We want to remain Papua New Guinea’s primary defence partner and to maintain a defence relationship based on mutual benefit and reciprocity.

5.52 Events over the last decade, including the Bougainville conflict and the Sandline affair, have placed enormous pressure on the unity and effectiveness of the PNGDF. More recently, endemic funding and administrative problems, and concern over the political role of the PNGDF, have confirmed that it is in need of reform.

5.53 The Morauta Government has stated a clear commitment to pursue comprehensive reform of the PNGDF and it has signalled that it will welcome external assistance in the reform process. Australia will continue to offer substantial support to PNG defence reform. Australian assistance to help stabilise the PNGDF in the short-term will be linked to long-term reform of the force. We share the Morauta government’s assessment that a key aspect of defence reform will be restructuring the PNGDF so that it can perform effectively within the necessarily limited resources available to it. Recent events elsewhere in the South Pacific have underlined the importance of a PNGDF that is loyal and responsive to political control.

**Southwest Pacific**

5.54 In the Southwest Pacific, as in Papua New Guinea, our aim is to maintain our position as the key strategic partner. Australian interests...
in a stable and secure Southwest Pacific are matched by significant responsibilities as leader and regional power. We would be very likely to provide substantial support in the unlikely event that any country in the Southwest Pacific faced substantial external aggression.

5.55 Recent developments in the Pacific underscore the changing dynamics of the region and the need for continued, focused engagement. Instability in Fiji and the Solomon Islands has brought a downscaling of our activities in those countries. But we will retain Defence Attaches and appropriate, cooperative programs.

5.56 The Pacific Patrol Boat Project, which provides assistance for patrol and protection of the large maritime zones of Pacific Islands, is at the core of our Defence Cooperation Program in the South Pacific. The Pacific Patrol Boat Project will continue, with the Government having recently announced the decision to extend it for a further 15 years. Through the Pacific Patrol Boat project and other programs, some 70 ADF advisers are posted to Pacific island states, and about 400 members of Pacific security forces receive military, trade, technical, and professional training in Australia each year. We are also active in the Southwest Pacific in providing help in appropriate ways to their police forces.

**East Timor**

5.57 Within a short time East Timor will pass from UN authority to full independence. Australia will seek to develop an effective defence relationship with East Timor, as we have with all of our near neighbours. East Timor faces formidable security challenges. Our aim will be to provide, with others, an appropriate level of help and support for East Timor as it builds the capabilities and national institutions that it will need to ensure its security and thereby contribute to the security of its neighbourhood.

**Strategic Relationships Beyond the Asia Pacific Region**

5.58 Australia values a number of defence and strategic relationships with countries outside the Asia Pacific region. With the United Kingdom we have important traditional and practical links, with shared strategic perceptions and values, and important day to day activities involving highly valued intelligence, training and technological cooperation. We have a similar relationship with Canada and benefit from the significant common perspectives which flow from our similarity in size.

5.59 We have valued defence relations with a number of European countries, including Germany, Italy and France, with
all of whom we share global perceptions and some challenges in capability development. Our links with France are reinforced by our common interest in developments in the Southwest Pacific, where France remains an important power.

5.60 With all of these countries we have developed valuable defence industry relations. We welcome involvement by them in Australia’s defence industry and access to their defence technology. Finally, the nature of these relations was forcefully demonstrated by their support to INTERFET. This was a timely reminder that we can benefit in direct and specific ways from defence relations with countries far from our shores.
6.1 This Chapter explains the tasks of Australia’s armed forces in achieving our strategic objectives, the consequent priorities for the development of our military capabilities and the principles underpinning our force-development priorities.

**Strategic Tasks for the ADF**

**Defending Australia**

6.2 The Government has reaffirmed that the primary priority for the ADF is to maintain the capability to defend Australian territory from any credible attack, without relying on help from the combat forces of any other country. An attack on Australia would be the most serious and demanding military contingency we could face. We would want a range of options to respond effectively. This provides a clear basis for our defence planning, which is clearly understood both by Australians and our neighbours. And we are confident that forces built primarily to defend Australia will be able to undertake a range of operations to promote our wider strategic objectives.

6.3 The Government’s approach to this task is shaped by the following principles.

**Self-Reliance**

6.4 Our armed forces need to be able to defend Australia without relying on the combat forces of other countries. This principle of self-reliance reflects, fundamentally, our sense of ourselves as a nation. As we made clear in discussing our US alliance in Chapter Five, the Government’s commitment to self-reliance does not reflect any lack of confidence in our allies. Nor does it suggest that we would not seek and expect help from
our allies and friends in time of need. It simply means that we should not rely on others having either the capacity or the willingness to defend our country, especially if we have not taken the effort to provide effectively for our own defence.

6.5 Moreover, self-reliance does not preclude us from planning on a significant degree of support in non-combat areas including intelligence and surveillance, re-supply and logistics.

A Maritime Strategy

6.6 The key to defending Australia is to control the air and sea approaches to our continent, so as to deny them to hostile ships and aircraft, and provide maximum freedom of action for our forces. That means we need a fundamentally maritime strategy. Our strategic geography, our relatively small population and our comparative advantage in a range of technologies all dictate that our defence should focus on our air and sea approaches.

6.7 The nature of our air and sea approaches is such that a maritime strategy includes a vital and central role for land forces. They would assist air and naval forces to control those approaches and would be needed to defeat any incursions onto our territory. A key role would be to ensure the security of the bases from which our air and naval forces operate. They provide the foundations for a maritime defence posture. The scale of our land forces also dictates the strength of forces needed for any hostile lodgment in our approaches or on Australian soil. The larger those forces need to be, the more support they would need - and the more vulnerable they would be to our air and naval forces.

Proactive Operations

6.8 Australia’s strategic posture is defensive in the most fundamental sense. We would not initiate the threat or the use of force, and our objectives in conflict would be to terminate hostile operations against us as quickly as possible, and to our maximum benefit, at minimum cost in lives and resources. But that does not mean that our approach would be operationally defensive. On the contrary, if attacked, Australia would take a highly
proactive approach in order to secure a rapid and favourable end to hostilities.

6.9 We would be concerned to ensure that hostilities were concluded swiftly and decisively, without harming unnecessarily the prospects for future relations with the adversary. However, we would aim to minimise Australian casualties and damage. We would therefore seek to attack hostile forces as far from our shores as possible, including in their home bases, forward operating bases and in transit. We would aim to seize the initiative and dictate the pace, location and intensity of operations.

**Contributing to the Security of our Immediate Neighbourhood**

6.10 Our second priority is to have defence forces able to make a major contribution to the security of our immediate neighbourhood. Australia needs to be able to work with our neighbours to respond in the very unlikely event of armed aggression against them. We also need to be able to join UN-sanctioned international operations to help them manage other challenges to their stability. This might require the ADF to contribute to regional peacekeeping and humanitarian relief operations and help evacuate Australians and others from regional troublespots. We should be prepared to be the largest force contributor to such operations. Our planning needs to acknowledge that we could be called upon to undertake several operations simultaneously, as we are at present in East Timor, Bougainville and the Solomon Islands.

**Resisting Aggression**

6.11 In the highly unlikely event of unprovoked armed aggression against any of our immediate neighbours, Australia would want to be in a position, if asked and if we concluded that the scale of our interests and the seriousness of the situation warranted such action, to help our neighbours defend themselves.

6.12 The capability to provide such help would be drawn from the forces we have developed for the defence of Australia. Fortunately the strategic geography of our neighbourhood makes this feasible. All of our immediate neighbours are island and archipelagic states. Their defences against external aggression would - like Australia’s - rely heavily on the ability to control their air and sea approaches and prevent hostile forces from approaching their shores. The air and naval capabilities we develop for
the defence of Australia would be able to make a valuable contribution to this task. Land forces would also be important for securing bases, and providing specific contributions such as special forces.

6.13 We would provide such support only at the request of a neighbouring government, and would expect to be able to operate from bases in its territory. We would also expect that other regional countries would provide support, most probably in the form of a coalition operating under a UN or international mandate.

**Lower-Level Operations**

6.14 Lower-level operations, such as evacuations, disaster relief and peacekeeping operations of different sorts, are the most likely types of operation that we might need to undertake in our immediate neighbourhood. The ADF needs to be prepared and equipped to undertake such operations should it be required to do so.

6.15 In general, the capabilities we develop in the ADF for defending Australia provide forces appropriate for these tasks. However, the experiences of East Timor, Bougainville, Cambodia and elsewhere have taught us important lessons about the use of forces in lower level contingencies. Such operations have specific characteristics that place strong demands on some elements of the ADF, especially our land forces, logistics capacity and deployment capabilities. Key lessons and their implications for our forces include the following.

- **Training.** Operations like INTERFET and the Peace Monitoring Group on Bougainville place great demands on the training and personal quality of the men and women of the ADF. In sometimes dangerous and ambiguous situations, they can be called upon to make snap judgments that can have life and death significance. Often these decisions must be made on the spot by junior personnel who must have the training, preparation and personal qualities to handle such situations.

- **Readiness and Sustainment.** The need for operations such as evacuations or support for a legitimate government can arise quickly and with little warning, so forces need to be available at high levels of
readiness. Some kinds of operations, such as peacekeeping, can require a relatively large presence on the ground, so significant numbers of personnel might need to be deployed and supported. And while some types of operations such as evacuations are over quickly, others, such as some types of peacekeeping, can last for months or even years. So it is important that forces are sized and structured to allow sustainment and rotation.

- Deployment and Support. Forces may need to be inserted, and evacuees extracted, sometimes in dangerous circumstances, so substantial military air and sealift must be available. Forces must be supported and provided with a wide range of services in difficult conditions. There is often a need to provide relief services to local populations as well. We therefore need adequate logistics and support capabilities, including deployable medical facilities, cargo-handling systems, water and fuel supply facilities, and engineering capabilities.

- Firepower and mobility. Success in pacifying an unstable situation often depends on a demonstrated ability and willingness to use preponderant force swiftly in response to any violence, so forces need to have ample firepower. While such operations might typically involve lightly-armed adversaries, there can be potential for escalation by intervention of well-armed conventional forces. We need to have capabilities available to deter or, if need be, respond to such escalation. This would often involve not just land force capabilities but also air and naval forces to protect force elements as they deploy, maintain lines of supply and provide additional firepower.

- Command and Communications. The task of leading such operations places additional demands on the ADF for command, communications, intelligence and other facilities.

6.16 The Government intends that, within the capabilities we develop for the defence of Australia, we will make sure that we have sufficient forces to meet these demands, so that we are well prepared to respond to credible contingencies in our immediate neighbourhood.

6.17 At the same time, it is important that we recognise the limits to Australia’s ability to influence and help in major crises, even in our immediate neighbourhood. Relatively small crisis situations can require very high levels of resources to manage and control. For example, even if we had had much larger forces than we have today, Australia could not have undertaken to restore peace and security in East Timor under INTERFET except with the help of a large number of coalition partners.
and the cooperation of the Indonesian authorities. Australia would contemplate contributing with armed forces to an international response in our immediate region only if it had the support of our neighbours, and of other countries from the region and beyond.

6.18 More broadly, our approach to lower level regional crises needs to recognise that the use of armed forces is not always a useful or practical response to a crisis. The Government has developed a set of guidelines for commitment of the ADF to lower level operations. These conditions include:

- the nature and extent of Australia’s interests, including strategic, political, humanitarian and alliance issues;
- whether the mission has a clear mandate, goals and end-point;
- whether the mission’s goals are achievable in all the circumstances and with the resources available;
- the extent of international support for the mission;
- costs of Australian participation, including the effect on the ADF’s capacity to perform other tasks;
- training and other benefits to the ADF;
- risks to personnel involved; and
- consequences for Australia’s wider interests and international relationships.

### Supporting Wider Interests

6.19 The third priority for Australia’s forces is to be able to contribute effectively to international coalitions of forces to meet crises beyond our immediate neighbourhood where our interests are engaged. Such coalitions might involve operations ranging from peacekeeping and disaster relief to relatively high-intensity conflict. In general, the closer a crisis to Australia, the larger the contribution we would want to be able to provide.

6.20 We do not envisage that Australia would commit forces to operations beyond our immediate neighbourhood except as part of a multinational coalition. The scale of our contribution would depend on a wide range of factors, but in general we would expect to make a greater contribution to coalition operations closer to home, where our interests and responsibilities are greater. In Southeast Asia we would want to be able to make a substantial contribution to any regional coalition that we decided to support - especially if it involved our undertakings under the FPDA. In the wider Asia Pacific region we would want to have the capacity to make a significant contribution to any coalition we thought it appropriate to join. In most cases the United States would lead such a coalition, and we would expect our forces to operate closely with US forces. Beyond the Asia Pacific region we would normally
consider only a relatively modest contribution to any wider UN or US-led coalition, proportionate to our interests and the commitments of contributors from elsewhere in the world.

6.21 We would be most unlikely to contemplate the leadership of any coalition operations that were focused beyond Southeast Asia or the South Pacific.

6.22 We would apply similar criteria to those outlined above in paragraph 6.18 to deciding whether or not to commit forces in particular circumstances. The Government would always place high priority on force protection arrangements for Australian contingents to ensure that no unnecessary risks were taken with Australian lives.

6.23 We would expect to be able to provide the forces needed to contribute to coalition operations from within the capabilities we develop for the defence of Australia and for operations within our immediate region. The key requirements of such forces would be that they should be able to succeed with an acceptable level of risk in the operational environment expected, taking into account the levels of adversary forces and capabilities that they might encounter. They should also be capable of operating adequately with the other coalition members.

6.24 In broad terms, these conditions suggest that a major Australian contribution to a coalition for higher intensity operations would more likely involve air or naval forces than land forces. The air and naval forces we develop for the defence of Australia will provide the Government with a range of options to contribute to coalitions in higher intensity operations against well-armed adversaries. Our land forces would be ideally suited to provide contributions to lower intensity operations including peace-enforcement, peacekeeping and many types of humanitarian operations. Such operations are much more likely than high intensity operations and would emphasise mobility and the levels of protection and firepower appropriate for our own environment, rather than the kinds of heavy armoured capabilities needed for high intensity continental warfare.

**Peacetime National Tasks**

6.25 In addition to these core tasks in support of Australia’s strategic objectives, the ADF will also be called upon to undertake a number of regular or occasional tasks in support of wider national interests. These include specific and ongoing commitments to coastal surveillance and emergency management, as well as ad hoc support to wider community needs.

6.26 One of the most important of these is the critical contribution that the ADF makes to the security of our coastline from illegal immigration, smuggling, quarantine evasion and
other intrusions on our sovereignty. This contribution has been described in Chapter Two.

6.27 Other peacetime national tasks include counter-terrorist response, maritime search and rescue, and natural disaster relief.

- ADF Special Forces maintain a highly respected capacity for counter-terrorist operations which is among the most sophisticated in the world;
- Emergency Management Australia provides training, national policy coordination and coordinated responses for civil emergencies;
- the ADF’s long-range air and naval capabilities assist maritime search and rescue, undertake navigational and hydrographic work, and also support fisheries management;
- major contributions are made to other events, such as the Sydney 2000 Olympic Games and the coming Centenary of Federation celebrations; and
- ADF units, including Reserve units, make a major contribution to disaster relief in Australia and our immediate neighbourhood.

6.28 The procedures to be followed in using the ADF to support domestic law enforcement and the rights and responsibilities of ADF members on such duties have recently been clarified and made more workable with the passage of new legislation.

**Capability Priorities for the ADF**

6.29 The Government has determined that in order to achieve these strategic tasks, the ADF will maintain and further develop an integrated and balanced joint force that can provide two key sets of capabilities.

6.30 First, Australia will maintain maritime capabilities - mostly air and naval forces - that can defend Australia by denying our air and sea approaches to any credible hostile forces. These forces will also have the ability to support Australian forces deployed in our region and support the security of our immediate neighbourhood, as well as contribute...
to coalition operations in higher intensity conflicts.

6.31 Second, Australia will maintain land forces - including the air and naval assets needed to deploy and protect them - that can operate as part of a joint force to control the approaches to Australia and respond effectively to any armed incursion on to Australian territory. These forces will also have the capability to contribute substantially to supporting the security of our immediate neighbourhood, and to contribute to coalition operations further afield, in lower intensity operations.

**Capability Development Principles**

6.32 The priorities set out in the preceding paragraphs are the basis on which the Government has taken decisions about the development of the ADF’s capabilities. Those decisions have been guided by the following principles.

**Operational Flexibility**

6.33 Nothing can remove the element of the unexpected from our military affairs. Over the next decade, we can be reasonably sure that governments will consider using the ADF in circumstances that we have not envisaged. So our defence planning should not leave us with a set of capabilities that is too narrowly focussed on specific scenarios. Our aim is to provide Australia with a set of capabilities that will be flexible enough to provide governments with a range of military options across a spectrum of credible situations within the priorities set out in this Chapter.

**Integrated Capability**

6.34 Capability is much more than just a piece of equipment. It includes everything that contributes to the ADF’s ability to achieve a particular result at a particular time. That means it encompasses personnel and their training, support and maintenance, logistics, intelligence, doctrine, and many other contributing elements. It draws on the wider national infrastructure, including the key role of industry. It also means that different types of capability themselves need to work together to achieve larger results. The ways in which different elements of capability, and different capabilities themselves, work together are critical to the effective conduct of operations. We have therefore sought to consider how the elements of the ADF can best work together to provide an integrated set of capabilities.

**Interoperability**

6.35 The same factors place a premium on interoperability between our forces
and those of our allies and other countries with whom we might want to operate in coalition. The development of interoperability - within limits of cost and other factors - is an important issue in capability development.

**Fully Developed Capability**

6.36 We need to be realistic about the amount of warning we might receive of the need to use our armed forces. Crises do not usually occur without some indication, so we do not need to keep our forces constantly at the highest pitch of readiness for operations. That would be very expensive, and it would erode our capabilities because forces held at very high readiness cannot undertake the full range of training and exercising.

6.37 But - except in the case of a major attack on Australia - we cannot assume that we would receive enough warning of a crisis to allow us to build major new capabilities, or significantly expand or enhance existing ones. It would take several years at least to replace or upgrade our key platforms and systems, and to train the people to operate and support them.

6.38 The Government therefore believes that Australia should maintain in a fully developed form the capabilities that would be necessary to achieve key tasks. Our aim is to establish a sustained long-term program to develop and upgrade our forces progressively so they retain the required level of capability without the need for crash programs.

**Capability Edge**

6.39 The Government believes that Australia’s defence planning should aim to provide our forces with a clear margin of superiority against any credible adversary. We will plan to give our forces a high chance of success and survival. To achieve that we need to ensure that, working together, our forces have an overall capability edge in key roles. We have taken account of the expected trend of capability developments in the region over the next 10 years and beyond, and have planned for sustained improvements in our capabilities to meet those expected trends. We have not based our planning on the forces or capabilities of any particular country or set of countries, but have looked at capability trends throughout our wider region.

6.40 Maintaining a capability edge will not be easy. In future we will no longer be able to rely, as we have in the past, on an assumption that either our technology or our trained people will be decisively better than those of other regional forces. Our focus, even more than at present, will be on the advantages we can achieve by combining well-trained people with the effective use of technology - what we have called the ‘knowledge edge’.
Our capability edge will also come from the innovative ways in which we develop our doctrine, organisation and logistics.

**Operational Concurrency**

6.41 Problems often come together, so it is important that our Defence Force should be able to do more than one thing at a time. But Australia cannot maintain forces that would allow us to do all the things we might want to be able to do concurrently in different locations. We therefore do not plan on the ability to undertake major operations simultaneously in more than one theatre of operations. However, within a theatre of operation, especially in the defence of Australia, we would need forces large enough to undertake some types of operation simultaneously in widely separated locations. And in our immediate region, we may need to be able to sustain one major deployment and undertake a lesser deployment at the same time.

**Sustainment**

6.42 We must be able to sustain our forces once deployed. A sustainable force calls for different things: the ability to replace combat units in sufficient time and the capacity to supply and support forces operating at high tempos. It therefore needs an effective long-term approach to recruiting and retaining our people, and it needs a capable industry base to draw on for support.

**Technology Focus**

6.43 The Defence Capability Plan places a high priority on maximising the opportunities offered by the information technology revolution to make our forces more effective. Information capabilities have been highlighted in a separate capability grouping to ensure that they receive proper attention and prominence, but in reality information systems will be profoundly important in the development of all our capabilities. For Australia, effective exploitation of information capabilities will be critical to maintaining our edge.

6.44 More broadly, we have given close attention to the potential for revolutionary changes in the nature of warfare and the composition of armed forces flowing from current and prospective technological innovations. We have balanced two
6.45 Our guiding principle has been to plan to exploit technologies that are now under active development, but not to defer investment where no new alternative is now in prospect. Where possible, we have sought to allow time for new technologies to evolve before committing ourselves. More discussion of our approach to the future of technology in our capabilities is provided in Chapter Ten.

6.46 The Government has also taken account of the lessons of the Collins submarine project for the approach we should take, in conjunction with Australian industry, to the development of high-technology capabilities. The difficulties with the Collins project should not deter us from developing high-technology capabilities, because they are essential to our ability to defend Australia. But they should caution us against taking unnecessary technical risks in developing new systems where existing ones may be adequate, and to ensure that risks are better understood and managed in future projects. These lessons are being applied in the reform of our acquisition processes that is now under way. This reform program and our approach to effective partnering with industry are described in Chapter Nine.

**Cost-Effectiveness**

6.47 The Government has sought at all times to provide the maximum capability at the lowest possible cost by seeking the most cost-effective solutions available. For example, we are looking for ways to minimise the number of different types of platforms and systems that the ADF operates, in order to save training, operating and support costs. This has had an important impact on our approach to the planning of some types of capability. While we have provided specific, costed proposals for new and enhanced capabilities in the Defence Capability Plan, any alternative, more cost-effective means of achieving the desired capability result will be considered before final government approval for specific projects.
Section Three | People
7 – People in Defence

People are Capability

7.1 On the basis of the key strategic directions set out in Section Two, the Government has undertaken a thorough review of Australia’s military capability needs. Our first consideration has been to ensure that the ADF will have the right people, with the right skills and experience to create the capabilities we need to undertake complex military operations.

7.2 The strength of Australia’s military forces has always been the quality of its people. Since Federation, Australia’s armed forces have earned an enviable reputation for toughness, resilience and resourcefulness. This has been demonstrated in two world wars and countless other deployments. In recent years, ADF personnel have made an essential contribution to stability in the nearer region and around the globe.

7.3 The key requirement for meeting the wide and essentially unpredictable range of contingencies that could arise is a substantial pool of highly competent professionals - especially at the mid-levels of the Defence Force. More specifically, the potential of the enhancements outlined in Chapter Eight will be realised only if they are partnered with effective personnel policies. Recruiting, developing and retaining high quality people for our Navy, Army and Air Force is essential to turning weapons, equipment and systems into world class capabilities.

7.4 One of the most important things the Government can do to recruit and retain high quality people is to provide clear strategic direction for the development of
the Defence Force and the resources to fund the planned enhancements. This White Paper makes clear the Government’s intention to maintain the ADF as a first-class military force, able to fight and win.

7.5 In return, the Government demands that resources, including people, are managed efficiently to ensure that our uniformed personnel, especially in operational and supporting units, are properly trained, equipped and looked after.

7.6 The recent high tempo of operations, coupled with the continuing drive for efficiency through outsourcing, restructuring and reductions, has placed considerable pressures on many ADF personnel. These pressures have been particularly evident in operational and operational-support units. But the high operational tempo and the drive for efficiency have been necessary to protect our strategic interests and enhance our capability at a time of financial stringency.

7.7 The fact that the high operational tempo has been achieved within a tight defence budget is a tribute to the commitment and dedication of Defence personnel, but the Government also recognises that this level of achievement is unsustainable within current resources. Recruiting and retaining sufficient numbers of people with the right qualities and levels of experience will be one of the most significant challenges in building the ADF of the twenty-first century.

The Dimensions of the Challenge

7.8 The enhanced force structure outlined in this White Paper requires the current strength of the ADF of 51,500 to be increased to about 54,000 full-time personnel by 2010. The composition of that force will need to adapt to meet evolving needs.

7.9 Recruiting the right sort of people for our Defence Force will not be easy. In the last financial year, the number of people recruited into the ADF fell short of the target figure by 25 per cent - more than 1,300 people. Figures for the current financial year do not indicate a marked turn around.

7.10 Retaining the right people is also difficult and, when separation rates from the three Services are higher than normal, the recruiting problem is greatly exacerbated.
7.11 Clearly, the Navy, Army and Air Force should not be trying to retain all their people - a flow of new talent and fresh ideas is necessary. But annual separation rates from the three services are presently running at between 11 per cent and 13 per cent, up from 9 per cent in the early 1990s. The problem is compounded by the fact that many of those leaving are doing so at the very time in their career when they have the most to contribute.

7.12 If the separation and recruitment rates of the last two years were to continue, over the coming decade, the strength of the ADF in 2010 would be about 12,000 below the target figure of 54,000. The Government will take firm action to ensure that does not happen.

7.13 To provide the people we need, bureaucratic inefficiencies need to be eliminated and the ADF must change its culture and approach to ensure its people feel valued. More specifically, Defence must:

- demonstrate high quality leadership;
- retain more skilled and experienced people;
- recruit effectively; and
- offer high-quality education and training programs.

**Leadership**

7.14 To ensure success in military operations and foster a first-class work environment, Defence must have effective leaders at all levels. Good leaders focus their efforts on supporting their people, and on building up commitment, skills and teamwork to achieve results.

7.15 The day to day behaviour of senior leaders, both civilian and military, can either support or undermine attempts to make Defence a more rewarding place to work. The ADF has consistently demonstrated the quality of its leadership in military operations, particularly at the tactical level. However, new leadership challenges have emerged. These include a mixed military, civilian and commercial workforce and a greater emphasis on ensuring Defence resources are used efficiently, as well as effectively.

7.16 Defence is implementing a range of senior leadership development initiatives. In coming years, these initiatives will be embedded in personnel policies, and education and training systems. The aim is to ensure that an effective 'leadership culture' is in place, not a 'bureaucratic culture'. Improving leadership will remain one of Defence’s highest priorities.

**Retention**

7.17 To be a ‘knowledge organisation’ Defence must retain skilled and experienced people. Ensuring that people do not leave the ADF when they are of most value is a priority concern for the Government.
7.18 Defence will use retention to shape its future workforce. This requires a sophisticated approach that identifies the experience profile needed and then actively manages to achieve that profile. Mechanisms are needed to encourage turnover in those parts of the Services where it is necessary and to retain the numbers and skill-sets we need in other areas. The Government’s policies will address:

- the unique characteristics of Service life;
- job satisfaction;
- remuneration, superannuation and compensation;
- health and safety; and
- career and lifestyle issues.

**Unique Characteristics of Service Life**

7.19 The Government recognises the unique requirements of service life and that being part of the ADF is more than just another job. People who serve in the Navy, Army and Air Force are not civilians in uniform. The Government recognises that the members of the Profession of Arms are different; they are required for example to place themselves at risk. This is the starting point for the Government’s development of a long-term personnel strategy.

**Job Satisfaction**

7.20 The Government is committed to providing the resources, training and equipment necessary to ensure that the ADF is a first-class military force - the essential foundation for a high degree of job satisfaction within the ADF. The initiatives outlined in this White Paper will ensure Defence is focused on achieving its goals and that its people are provided with the ways and means of achieving these goals. Leaders at all levels will be judged not only on the readiness and capability of those they command and their management of resources, but also on the morale of the people they lead.

**Remuneration, Superannuation and Compensation**

7.21 There is a need to tailor remuneration packages to meet the specific needs of the different categories of personnel in the Defence Force. These include both young,
operationally-oriented personnel who seek a short-term career in the ADF and more experienced members who have the skills and knowledge to train and lead the force. The Government also recognises the need to adopt a long-term care approach that embraces superannuation, compensation and transitioning to veterans’ entitlements.

7.22 The Government has initiated a review of ADF remuneration arrangements to look at methods of providing a more effective, efficient and flexible framework. The focus of the review is to provide options that improve the attractiveness of the total remuneration package within overall Defence budget constraints, while taking into account the specific circumstances faced by ADF personnel.

7.23 Options for more effective remuneration arrangements could include:

- a restructured ADF pay system that recognises different skills and market values, and provides better transparency and greater choice;
- packages based on skills as well as rank, and taking more account of wider labour-market forces;
- the establishment of more specialist trade structures within Defence;
- putting in place employment conditions that recognise different career and work expectations of ADF people across their careers; and
- the possibility of providing more flexible superannuation benefits for ADF personnel through specifically designed arrangements.

**Health and Safety**

7.24 A key element of retention must be an increased focus on the health, safety and well-being of ADF personnel. This will also maximise their contribution, and hence ADF capability. The cost of work-related injury and disease, both in human and financial terms, is substantial and increasing; military compensation costs have more than doubled over the last five years. As we strive to maintain a high state of readiness, introduce complex new technologies and

---

**Retention issues need to be addressed before tackling other capability issues.**

**Report of the Defence Consultation Team**

Many serving members are frustrated by inadequate training opportunities and conditions of service, leading to low morale and poor retention rates. There is significant concern about ADF personnel leaving at the point in their career at which they have the knowledge and experience the organisation needs.

**Report of the Community Consultation Team: Key findings**
rely more on contractors and industry. Defence needs to redouble its efforts to meet its duty of care.

**Career and Lifestyle**

7.25 Various factors cause experienced ADF members to leave the ADF. These include frequent postings to different areas, which make it difficult for the member to accommodate family and personal considerations such as spouse or partner employment, continuity of education for children, disabilities and home ownership. Furthermore, the impact of the commercial support program on some trade and professional structures has restricted opportunities for career development, respite postings and locational stability.

7.26 In order to counter the impact of these influences on retention the Government will:

- ensure that the impact on families, in terms of spouse or partner employment opportunities, education and special needs, will be an important consideration in posting decisions and when locating all new capabilities and establishments;
- ensure that, wherever practical, establishments are collocated to increase the options for back-to-back postings;
- build closer relations with industry, particularly in engineering and technical trades areas, to develop shared career structures;
- make it easier for individuals who have left to pursue career opportunities within industry to return to Defence, either on a full or part-time basis; and
- encourage home-ownership for ADF personnel.

**Recruitment**

7.27 Improved retention will ease the recruitment task significantly. But changing demographics will still present many challenges.

7.28 Over the next decade, the rate of growth in the Australian labour force is likely to slow and its age profile increase. There is also likely to be a general decrease in the participation rate for men and an increase in the participation rate for women, a move from full-time to part-time employment, more women having their first child at a later age and then re-entering the workforce, and young people spending longer periods in education. All of these...
trends will make it harder to attract people to serve in the ADF.

7.29 Australia’s healthy economy also presents challenges for ADF recruitment. The labour market is competitive, unemployment is falling and more young people are undertaking higher education. These conditions make it very much an employees’ market with an unprecedented level of choice.

7.30 In light of these factors, it is clear that Defence must broaden its appeal as a career for young Australians. If the ADF is to become the employer of choice for more people, its culture and approach will need to change - and be seen to change.

7.31 Market research undertaken by Defence in 1998 found that only four per cent of those aged between 18 and 35 would ‘definitely consider’ a career in the Defence Force and a further seven per cent would ‘consider’ such a career. However, preliminary findings from Defence’s most recent research suggest those figures are increasing. This is very significant. An increase of even one per cent to the 1998 figures would add about 51,000 potential recruits to the pool - or about the number of full-time personnel currently in the Defence Force.

7.32 The Defence Force recruiting process is also being redesigned. A pilot scheme is under way in Victoria and Tasmania to evaluate a commercial service-provider. If the pilot scheme is successful and the new system then implemented across Australia, the number of recruitment offices would increase from 16 to 90.

7.33 Better use of technology, including call centres, will enhance access for those making inquiries. It will also
deliver information more rapidly and allow faster, more efficient processing of applications.

7.34 Defence will reinforce these initiatives by continuing to maintain a strong ADF involvement in the recruiting function.

**Education and Training**

7.35 The fourth element of Defence’s personnel strategy is modern, effective and efficient education and training. Education and training is a critical investment in future capability.

7.36 A better education and training program will help Defence to attract and retain high quality people and new training will be needed as capabilities are enhanced.

7.37 In recent years, Defence’s delivery of education and training has changed significantly. Central to these changes has been a continuing shift towards a more integrated approach covering the common needs of both military and civilian personnel, including through the rationalisation of existing institutions and courses. The result has been greater effectiveness and efficiency.

7.38 Defence education and training has also been aligned more closely with the National Training Framework. This will continue. Defence people are able to gain nationally recognised qualifications under the Framework. This is an important recruitment incentive and will also help to retain people. In addition, it will allow the development of more effective partnerships with industry in the key areas of capability development, engineering management, maintenance and modification.

7.39 The integration of education and training can be taken further to include logistics, intelligence and information, and communication technologies. The creation of the Defence Materiel Organisation provides an excellent opportunity for the rationalisation of logistics education and training. Improvements to military post-graduate education and educational services at the Australian Defence Force Academy will also follow a high-level review, due to be completed in mid-2001.
7.40 Innovation will also play a key role in improving Defence education and training. More use will be made of flexible learning techniques, featuring enhanced information systems. Simulators will play a greater role in providing cost-effective and realistic training.

7.41 These initiatives will complement the ADF’s existing operational training regimes. In training their people for operations, the Services are also embracing leading-edge practices and systems that give our forces a crucial edge.

**Reserves**

7.42 In addition to the issues addressed in the preceding part of this Chapter, there are a number of issues that relate specifically to the Reserves.

7.43 A more effective Reserve component is needed to meet the changing demands posed by Australia’s strategic environment. Today, Reserves comprise about 42 per cent of the total ADF. Over the next decade, Reserves will become a more important element of the ADF’s capability. Given the likelihood of frequent and concurrent operations, the Reserves will be the most efficient way of providing sustainment and surge capacity. Moreover, they can provide skills not available within the permanent forces or held only in small numbers.

7.44 Traditionally, the Reserves have been viewed as a mobilisation base for the ADF in time of major conflict. But recent military operations have highlighted the importance of the Reserves in meeting the requirements of contemporary military operations.

To illustrate this point, in the past two years the ADF has utilised more Reservists on full-time service than since the end of World War II. Reserves have contributed to short-notice operations in their initial phases, helped to sustain those operations, and provided surge capacity to support peak periods of operational training and demand.

7.45 As a result, the strategic role for the Reserves has now changed from mobilisation to meet remote threats to that of supporting and sustaining the types of contemporary military operations in which the ADF may be increasingly engaged.

7.46 A number of supporting policy initiatives are under way or being developed. These include:

- new legislative provisions governing the use and employment of the Reserves;
measures to strengthen the linkages with the community;
• improved training; and
• better recruitment and retention strategies for the Reserves.

7.47 The decisions the Government has taken this year to enhance the contribution of the Reserves to ADF capability are of fundamental importance and will profoundly change the Reserves. They provide greater options for the employment of the Reserves, while demonstrating to the Reservists themselves, and the community from which they are drawn, that measures are being put in place to support them in their service.

Legislative Changes
7.48 Of the Government’s initiatives to enhance the Reserves, changes to the legislation governing the use and employment of Reserves will have the greatest impact. The Government has proposed amendments to legislation to extend the options available for the use of the Reserves. The changes will enable the Government to call out the Reserves as a whole or in part for a wide range of operations, including combat, defence emergency, peace-enforcement, peacekeeping, civil and humanitarian aid, and disaster relief. The Government is very conscious of its responsibility to use these increased powers only when necessary.

7.49 Importantly, the changes will provide the framework to introduce new categories of Reserve service, to allow for some units and individual Reservists to be held at higher levels of readiness.

7.50 Other legislative amendments will also incorporate appropriate measures to protect the jobs of Reservists, and support their families and employers. Employer support for the Reserve is crucial. The legislative amendments will allow the payment of financial incentives to assist employers and self-employed Reservists defray the costs of supporting and releasing employee-Reservists for extended periods of training and operational deployment. These initiatives are estimated to cost around $20 million per year.
Strengthening the Linkages with the Community

7.51 The Reserves enjoy a special and unique relationship with the local and regional communities from where they are recruited and supported, and in which they serve. Reservists are a bridge between the ADF and the civilian community. They bring welcome diversity to the ADF and can help influence and shape the military culture in terms of the prevailing community demographics, values and attitudes.

7.52 Given the greater contribution being asked of Reservists and, in turn, the communities from which they are drawn, the Government has recognised the need to engage an even broader range of stakeholder groups. A major public awareness and communication strategy will inform and educate the community and employers about the Government’s Reserves enhancement program, while promoting the Reserves and the value of the Reserves’ contribution to Australia’s defence capability.

7.53 The Defence Reserves Support Council (DRSC) has also been augmented. It has been given a wide-ranging charter to liaise with stakeholder groups on matters affecting Reserves’ availability and to act as an interface between the community and both the Government and the ADF.

Improved Training

7.54 An improved Reserve capability will require adequate resources and equipment to be allocated to ensure that Reservists are trained and equipped to meet operational requirements.

7.55 While the training will be driven by military requirements, many of the competencies gained will be directly transferable to the civilian workplace at no direct cost to employers. To better demonstrate the value of military and skills training to Reservists and employers alike, the existing Defence program, which is seeking to have its training accredited within the national training framework, has been accelerated.

7.56 Reservists will have nationally recognised evidence of their attainments and employers will have online access to a database of competencies gained through their employee-Reservists’ participation in military service.
To realise those benefits, reciprocal commitments will be required from Reservists and their employers. Reservists, particularly those required to maintain high levels of individual readiness, will be asked to commit significantly more time to training to achieve higher levels of military competencies, and to maintain them over time.

This increased commitment will impact on the Reservists, their families and communities, and their employers. Defence will develop a range of measures to manage those impacts, including:

- changes to conditions of service;
- innovative ways of delivering training, such as breaking down training into modules and phases; and
- continuing consultation with the Reserves’ stakeholder community to facilitate Reservists’ leave for training.

As a major employer of Reservists, the Government will show the way by having leave policies and employment practices that support the release of Reservists for peacetime training and deployment.

Better Recruitment and Retention

The Government will continue to address the issues of Reserve recruitment and retention by redirecting the focus back to the communities from which Reservists are drawn. Community support is important to the overall process of recruitment and local Reserve units will play a greater role in attracting and fostering recruits. This, in concert with the national Reserves recruitment program, should result in improved recruiting results. The financial incentive package for employers will also directly support recruiting.

The legislative changes will also allow the ADF to adopt more flexible recruiting and management strategies. These will enhance retention of military experience by offering incentives to full-time members to continue serving in the Reserves, rather than leave the ADF completely. Permanent force members will be able to transfer to the Reserves, and Reservists to lower levels of readiness. This will help to retain trained people in the ADF.

Cadets

The Australian Services Cadet Scheme (ASCS) comprises the Naval Reserve Cadets, Australian Army Cadet Corps and the Air Training Corps. 25,000 cadets in 417 units are established in communities throughout Australia, providing youth development programs within a military context in schools and in wider community settings. This
provides a tangible link for the ADF to the Australian community at large.

7.63 An association between our young people and the Australian Defence Force has long been valued and strongly supported by the Australian community. The Government’s vision for the ASCS is for it to provide opportunities for all young Australians to obtain comprehensive personal challenges and growth, enhanced self-esteem and self-discipline, and adventurous enjoyment in a military setting.

7.64 Also, the Government is committed to expanding the participation of young Australians in the Cadet Scheme and to providing the resources needed to achieve that. This includes a commitment to widening the range of institutions offering participation in the cadets and to ensuring that units are properly resourced. The Government will increase annual funding for the Cadet Scheme to $30 million by 2002 and provide ongoing funding as necessary to ensure these objectives are met.

7.65 The Government will ensure cadets have a more cohesive framework and support base within the ADF. This will allow the ASCS to build further upon its success as a key youth development organisation and as a source of future recruits for the ADF. For many cadets, participation in such a scheme is the first, voluntary step towards recruitment into the Defence Force either on a full-time or part-time basis. The 1999 ADF census showed that 22% of full time ADF personnel and 25% of Reservists were once cadets. As well, former cadets remain in the services for comparatively longer periods and a high proportion reach senior rank.

7.66 In addition, a first class Cadet Scheme presents our regional and rural communities with the opportunity to build links with the Defence Force, which would not be available in any other way. Cadets engender community involvement, and support for the ADF. This is reinforced by cadets directly participating in ceremonies of national significance like ANZAC Day. Moreover, participation in cadets gives opportunities for young people to develop their skills in a youth training environment. Defence will pursue the formal accreditation of the cadet activity programs within the national training framework to build on the tangible outcomes of cadet participation.

7.67 The Government acknowledges the valuable work that many people have devoted to the ASCS to date, at state and local levels. Several state governments have also established
cadet-style programs in recent years. Defence will continue to work collaboratively with these emerging programs by establishing ASCS units within the state frameworks and by sharing its extensive experience in fostering cadet and youth activities.

7.68 Through the enhancements planned over the next three years the Government is confident that cadets will have a proper place in the Australian community and all Australians who participate as cadets will have a rewarding experience.
Section Four | Capability
8 – The Defence Capability Plan

A New Approach To Capability Planning

8.1 To ensure that Australia will have the forces needed to achieve the tasks outlined in Chapter Six, the Government has formulated a detailed, costed plan for Australia’s military capabilities over the next 10 years, with broad guidance on major issues over the following 10 years. In doing this we have developed a new approach to defence capability planning. Our aim is to provide the Defence Force with clear, long-term goals for the development of our armed forces, and the funding needed to achieve those goals. We have called this the Defence Capability Plan.

8.2 The Defence Capability Plan will not remain immutable over the next decade. It will be reviewed annually to take account of changing strategic circumstances, new technologies and changed priorities. Individual projects will need to be considered and approved by government before proceeding. Nevertheless, the Capability Plan will provide a clear basis for decisions now and into the future.

8.3 The key to this new approach is the Government’s decision to provide, for the first time, Defence funding commitments covering the whole of the coming decade matched to a planned set of capability enhancements. This will allow development of robust plans for the future shape of our Defence Force, with a clear understanding of what will be affordable. It also allows the Government to set firm financial constraints for Defence, and benchmarks against which the organisation’s performance will be measured. This will be done on an annual basis through the introduction of a new yearly Defence Financial and Management Plan, which is described in Chapter Eleven.
8.4 The Defence Capability Plan has been developed on the basis of through-life costing estimates of the different types of capability in the ADF, covering not only the initial capital investment required but also personnel, operating, support and upgrade costs over a 20 year period.

8.5 With these long-term costing estimates, the Government has been able to make informed judgments about the relative cost-effectiveness of different types of capability in achieving Australia’s strategic objectives. On the basis of those judgments we have set out capability development paths for each of our key areas of capability over the next 20 years, and specific, costed development plans for each major type of capability for the coming decade.

8.6 The Defence Capability Plan is an important element of the Government’s program of continuous improvement in Defence management. It will allow the Government to evaluate better the performance of Defence in the delivery of capability against the Plan. It will also provide a firm basis to develop and monitor further efficiency reforms in the delivery of capability.

8.7 This approach will also allow the Government to look more systematically at our Defence industry needs and opportunities, and find ways to manage procurement and support in ways which are more to the benefit of both Defence and industry.

8.8 This Chapter sets out the Government’s Defence Capability Plan under five broad capability groupings.

**Land Forces**

8.9 The land force capability grouping includes all elements of the Army, and those elements of Navy and Air Force whose principle task is to deploy them.

**Capability Goal**

8.10 The Government’s aim is to provide land forces that can respond
swiftly and effectively to any credible armed lodgment on Australian territory and provide forces for more likely types of operations in our immediate neighbourhood. We have therefore decided that it is no longer a priority to provide the basis for the rapid expansion of the Army to a size required for major continental-scale operations. Rather, we place emphasis on providing a professional, well-trained, well-equipped force that is available for operations at short notice, and one that can be sustained over extended periods. This type of force will have the flexibility to deal with operations other than conventional war, and contribute to coalitions.

8.11 In view of the issues raised in earlier chapters of this White Paper, the development of our land forces needs to reflect a new balance between the demands of operations on Australian territory and the demands of deployments offshore, especially in our immediate neighbourhood. While still giving priority to the defence of Australia in our overall strategic and force planning, the development of our land forces will take fuller account of the demands of possible short-notice operations in our immediate neighbourhood. For much of the last two decades, land force planning has been dominated by a focus on preparations to meet lower level contingencies on Australian territory. That focus will now be broadened to meet a wider range of possible contingencies, both on Australian territory and beyond.

8.12 We have, however, decided against the development of heavy armoured forces suitable for contributions to coalition forces in high intensity conflicts. These forces would be expensive, and are most unlikely to be needed in defence of Australia or in our immediate region. But in accordance with the principles we have set out, our land forces will have the combat weight they need to achieve their missions without undue risk.

8.13 The Government has considered the implementation of these broad goals under four headings: Ready Frontline Forces; Sustainment and Rotation; Combat Weight; and Deployment, Support and Command, Control, Communication and Intelligence (C3I).
Ready Frontline Forces

8.14 The Government plans to structure the Army to ensure that we will be able to sustain a brigade deployed on operations for extended periods, and at the same time maintain at least a battalion group available for deployment elsewhere. To achieve this, the Government plans to retain on a permanent basis the increased numbers of land force units that have been brought to high readiness over the last two years. This is an expansion in the number of infantry battalions at high readiness from four to six. Recent enhancements to the Air Force Combat Support Groups for deployed operations will also be maintained.

8.15 Under this plan six battalion groups, each of around 1,000 personnel, will be held at no more than 90 days notice to move, and most at 30 days or less. They include a parachute battalion, two light infantry air-mobile battalions, a motorised battalion, a mechanised battalion, and a commando battalion. In addition, we will maintain the current SAS Regiment of around 700 personnel at high readiness.

8.16 These forces will be organised in three brigades and the Special Operations Group as at present. The brigades, each of around 3,000 personnel, will include, in addition to the infantry battalions, a range of specialised combat units such as armour, artillery, aviation, combat engineers, and logistics and support units.

8.17 The Third Brigade, based in Townsville, will continue to provide light, air-mobile forces available for immediate deployment. The First Brigade, based in Darwin, will provide light mechanised and light armoured forces to provide added combat power and weight for more demanding contingencies. The Seventh Brigade, based in Brisbane, will provide a motorised formation comprised of both full-time and Reserve units. It provides depth to the other two brigades by providing a range of highly mobile forces. Task forces for particular contingencies would be assembled from these ready forces to meet the specific needs of each operation.

8.18 The Special Operations Group, comprising the SAS Regiment, a high readiness commando battalion and a Reserve or part-time commando battalion, supports a range of Special Forces roles. In addition to providing long-range reconnaissance capabilities,
these units are capable of conducting strike and water-borne operations. The SAS Regiment will continue to provide a counter-terrorist capability.

8.19 The Army will also continue to provide three Regional Force Surveillance Units. These units, based in north Western Australia, the Northern Territory and far north Queensland, conduct ongoing reconnaissance and surveillance operations in support of the national surveillance effort.

**Sustainment and Rotation**

8.20 The Government has paid special attention to the capacity of our land forces to sustain operations once deployed. This has been a significant weakness of our land forces in the past. The Government believes that service personnel should not be required to serve on operations for longer than six to 12 months at a time, and that they should be given a substantial period of recuperation before being deployed again. As we have seen in East Timor, that places real demands on our personnel structures.

8.21 One of our three higher-readiness brigades, the Seventh Brigade, in addition to providing capabilities for immediate deployment where necessary, will provide rotation forces and replacements for deployed forces.

8.22 In order to better train and prepare our forces for combat, the Government plans to invest in a Combat Training Centre to be based in Townsville. This facility will ensure that our combat units can be trained and tested to the highest levels as quickly as possible. On current planning, this centre would begin operating around 2006.

8.23 The key to our sustainment capability in future will come from our Reserve forces. In line with the new emphasis on a small, high-readiness army ready for deployment, the role of our Reserve forces will undergo a major transition. In the past, Reserve forces
have been intended primarily to provide a partially-trained basis to expand the Army for major land operations in some future crisis.

8.24 The Government believes that these roles do not meet Australia’s strategic needs, and that they do not take proper advantage of the skills available in the Reserves. Therefore, as explained in Chapter Seven it is planned to reorient them. Henceforth their clear priority will be to provide fully-trained personnel to our ready frontline forces deployed on operations. This will greatly enhance our capacity to sustain forces on operations for extended periods.

8.25 This will also change the nature of Reserve service. In the past, Reservists had very little prospect of being required to deploy on active service, though some volunteered to do so. But if the pattern of operations for our forces remains as busy in future as it has been over the past decade, many Reservists are likely to be called on. Reserve service will therefore be a more serious commitment than it has been in the past, but also a more rewarding one.

8.26 Some important changes, also outlined in Chapter Seven, will need to be made to legislation affecting Reserve service and to the organisation, training and administration of Reserves to realise fully their new role.

**Combat Weight**

8.27 The Government believes that our land forces should have sufficient firepower, protection and mobility to provide clear advantage in any likely operations in defence of Australia or in our immediate region. It therefore aims to introduce a program of rapid enhancement of a range of combat capabilities for our land forces. The key elements of this program are as follows.

- Two squadrons (around 20-24 aircraft) of Armed Reconnaissance Helicopters planned to enter service from 2004-05. These will constitute a major new capability for Army, providing deployable, flexible, high-precision, and highly mobile firepower and reconnaissance.
- An additional squadron (about 12 aircraft) of troop-lift helicopters to
provide extra mobility for forces on operations. In particular, these helicopters will enhance our capability to operate off our newly acquired troopships, HMAS Manoora and Kanimbla. These helicopters are planned to enter service around 2007.

- Major upgrade of 350 of our M113 Armoured Personnel Carrier fleet, with the upgraded vehicles planned to enter service from around 2005.
- A new shoulder-fired guided weapon for key elements of the force to attack armoured vehicles, bunkers and buildings. This weapon is planned to enter service around 2005.
- Improved body armour, weapons, night vision equipment and communications systems for all soldiers in deployable land forces. New equipment should begin to enter service from around 2003.
- New air defence missile systems to supplement the existing RBS-70 and replace the existing Rapier systems, giving comprehensive ground-based air defence coverage to deployed forces. These systems are planned to enter service from around 2005 and 2009 respectively.
- Twenty new 120mm mortar systems mounted in light armoured vehicles to improve mobile firepower planned to enter service in 2006.
- A new thermal surveillance system and tactical uninhabited aerial vehicle (UAV) to provide surveillance for deployed forces, planned to enter service from around 2003 and 2007 respectively.

8.28 In addition, sustained investment will be made in maintaining or enhancing current land force capabilities such as our 105mm and 155mm field artillery.

8.29 Taken together with major investments made in recent years, including the acquisition of additional light armoured vehicles and Bushranger infantry mobility vehicles, these decisions constitute the most significant enhancements to Army’s combat power in many years.

**Deployment, Support and C3I**

8.30 The Government has paid attention to the lessons of the INTERFET operation, and has given high priority to improving the ADF’s capacity to deploy forces on operations and support them while deployed.

8.31 Australia’s amphibious lift capability is being substantially increased by the introduction into service of amphibious support ships, HMAS Manoora and Kanimbla, after the
lease of the catamaran HMAS *Jervis Bay* expires. The Government has decided to plan on replacement of the Landing Ship HMAS *Tobruk* when it reaches the end of its service life in 2010, and to program the replacement of *Manoora* and *Kanimbla* in 2015. The result is that Australia’s recently expanded amphibious lift capability will be retained at its present level of three major ships. In addition, we plan to replace the fleet of 15 medium landing craft and six heavy landing craft, and study options to retain access to the unique capabilities of catamarans such as *Jervis Bay*.

8.32 Our airlift capabilities will be enhanced by the acquisition of new aircraft to replace the Caribou from 2010, and by the refurbishment of our 12 C130H aircraft by about 2008. We plan to undertake a major program to provide better electronic warfare self-protection of our transport aircraft and helicopters from missiles by around 2004.

8.33 We plan to increase the capacity to supply deployed forces by a series of investments in logistics units and systems. The Logistics Support Force will be enhanced by increasing the preparedness of individual units - this will provide improved support to deployed forces and an enhanced ability to rotate forces. We plan to enhance our specialist transport and petroleum supply units, and invest in new water and fuel supply systems, including new desalination systems.

These enhancements are planned to enter service by 2005. Logistics capacity will also be enhanced by a number of important programs including a major replacement program for Army’s fleet of trucks, scheduled to start by 2008.

8.34 Medical services to deployed forces are planned to be improved by investment in enhanced deployable medical facilities, planned to enter service in 2006. Improved bridging capabilities will be provided for Army’s engineers, entering service in 2005.

8.35 We plan to undertake a major program of investment in improved intelligence support, communications and command systems specifically for deployed forces over the next few years.

**Costs**

8.36 Under the Defence Capability Plan, the Government anticipates that spending on the maintenance of current land force capabilities will average around $5.9 billion per year over the decade. The estimated capital expenditure needed for the capability enhancements outlined here will total around $3.9 billion over the decade. Additional personnel and operating costs amount to around $1.1 billion over the decade.

**Air Combat**

8.37 Air combat is the most important single capability for the defence of Australia, because control of the air
over our territory and maritime approaches is critical to all other types of operation in the defence of Australia.

8.38 Australia’s air-combat capability is based on our fleet of 71 F/A-18 aircraft with their sensor systems and missiles, supported by other systems including air-to-air refuelling (AAR), and an integrated command and communications system, including surveillance and battlespace management systems in the Air Defence Ground Environment. It relies heavily on intelligence and surveillance systems that are covered in the Information Capability grouping.

**Capability Goal**

8.39 The Government believes that Australia must have the ability to protect itself from air attack, and control our air approaches to ensure that we can operate effectively against any hostile forces approaching Australia. The Government’s aim is to maintain the air-combat capability at a level at least comparable qualitatively to any in the region, and with a sufficient margin of superiority to provide an acceptable likelihood of success in combat. These forces should be large enough to provide a high level of confidence that we could defeat any credible air attack on Australia or in our approaches, and capable enough to provide options to deploy an air-combat capability to support a regional coalition. They will also have the capacity to provide air-defence and support for deployed ground and maritime forces in our immediate region.

**Major Challenges**

8.40 The ADF faces three major challenges in meeting this capability goal over the next decade.

8.41 First, as described in Chapter Three, the air-combat capabilities of a number of defence forces throughout the region have grown steadily in recent years, and are expected to continue to do so. The effect of all these changes is that, increasingly over the coming decade, the capabilities of our F/A-18 aircraft will be outclassed by a number of regional airforces. That means that our aircraft could be detected and attacked before they could respond. We therefore need to address this set of emerging deficiencies in our basic air-combat capabilities.

8.42 Second, our AAR aircraft - four Boeing 707 aircraft - are close to the end of their effective life. Over the next few years they will need to be substantially refurbished or replaced if we are to retain an AAR capability. AAR is important to our air-combat force because it extends the range and endurance of our fighters. This is critical for covering our extended air approaches, including offshore
territories such as the Christmas and Cocos (Keeling) Islands, and for providing air support to surface ship deployments including amphibious task forces and land forces deployed in our immediate neighbourhood. We therefore need to address the future of our AAR capability.

8.43 Third, we need to address the future of our air-combat capability after the F/A-18 aircraft reach the end of their service life between 2012 and 2015. It is important to start to address this issue now.

**Key Decisions**

8.44 The Government’s current plans involve four major steps to address these challenges.

8.45 First, we plan to continue the upgrade program for the F/A-18 aircraft. Significant phases are already under way, including the installation of a new and significantly improved radar, and the acquisition of new advanced air-to-air missiles. Additional phases have now been scheduled to provide the fighter force with a range of upgrades. This programme of upgrades is planned to be completed by 2007 and includes:

- advanced tactical data links to allow our aircraft to exchange combat information instantly with other units, allowing better cooperative tactics;
- a new helmet-mounted missile cueing system to get the best out of our new short-range air-to-air missiles;
- structural improvements to extend the life of the airframe and reduce its detectability by enemy radars; and
- some initial improvements to electronic warfare self-protection.

8.46 Second, we will proceed now to acquire four Airborne Early Warning and Control (AEW&C) aircraft, with the possibility of acquiring a further three aircraft later in the decade. The AEW&C will make a major contribution to many aspects of air combat capability, significantly multiplying the combat power of the upgraded F/A-18 fleet. They will improve command and control, improve capacity for air defence of
8.47 Third, we have scheduled a major project to replace and upgrade our AAR capability. This project will acquire up to five new-generation AAR aircraft, which would have the capacity to refuel not only our F/A-18 aircraft but also our F-111 and AEW&C aircraft over a wide area of operations. These aircraft will also provide a substantial air cargo capability, and are planned to enter service around 2006.

8.48 Fourth, the Government will examine options for acquiring new combat aircraft to follow the F/A-18, and potentially also the F-111. Provision has been made in the Defence Capability Plan for a project to acquire up to 100 new combat aircraft to replace both the F/A-18 and F-111 fleets. Acquisition is planned to start in 2006-07, with the first aircraft entering service in 2012. The Government has specifically made financial provision to allow acquisition of high-performance aircraft to provide the basis for the maintenance of Australia’s critical air-combat edge well into the twenty-first century. Much work remains to be done over the next few years to define and refine our requirements, and to establish the optimum balance between capability and numbers. That time will also allow better evaluation of a number of competing aircraft types.

8.49 In addition to these major projects, the Government plans to continue significant investments in other key elements of air-combat capability. This includes the Air Defence Ground Environment, which integrates key air defence assets including ground-based radar and command systems, and AEW&C aircraft and provides a comprehensive picture of activity in the area of operations to commanders. The Government plans also to continue to invest in training systems, which will ensure that our personnel retain the critical edge in skills.

**Costs**

8.50 Under the Defence Capability Plan, the Government anticipates spending an average of $1.3 billion per year on maintenance of current air combat capability over the decade. The estimated capital expenditure needed for the capability enhancements outlined above totals around $5.3 billion over the decade, and additional personnel and operating costs amount to about $300 million over the decade.

**Maritime Forces**

8.51 Australia’s forces for maritime operations give us the ability to deny
an opponent the use of our maritime approaches, and allow us the freedom to operate at sea ourselves. In our maritime strategic environment, the ability to operate freely in our surrounding oceans, and to deny them to others, is critical to the defence of Australia, and to our capacity to contribute effectively to the security of our immediate neighbourhood. Capable maritime forces also provide important options for contributing to regional coalitions in support of our wider strategic interests and objectives.

8.52 Australia’s maritime forces consist of our surface fleet - including major combatants, helicopters and support ships; submarines; maritime patrol aircraft; mine hunters; and patrol boats. They also draw on the capabilities of our F/A-18 and F-111 aircraft - which have a potent anti-shipping strike capacity - and on the intelligence and surveillance capabilities falling under the Information Capabilities grouping. They will also draw in the future on our AEW&C aircraft for surveillance.

**Capability Goal**

8.53 The Government’s primary goal for our maritime forces is to maintain an assured capability to detect and attack any major surface ships, and to impose substantial constraints on hostile submarine operations, in our extended maritime approaches. It also intends to maintain the ability to support Australian forces deployed offshore, to contribute to maritime security in our wider region, to protect Australian ports from sea mines, and to support civil law enforcement and coastal surveillance operations.

8.54 The Government’s aim is therefore to maintain, in addition to a highly capable air-based maritime-strike capability in the F/A-18 and F-111 fleets, a capable surface fleet able to operate in a wide range of circumstances throughout our maritime approaches and beyond. Our ships should be able to operate effectively with those of the United States, and to contribute to regional coalition operations. Our submarines should be able to operate effectively in high capability
operational environments in the Asia Pacific region. Our maritime patrol aircraft should have the capacity to operate throughout our region, with high-quality sensors and weapons for attacks on surface ships and submarines. Our patrol boats should be able to make a cost-effective and sustained contribution to civil coastal enforcement and surveillance operations.

**Major Issues**

**Surface Fleet**

8.55 By the end of next year, when the last of the guided missile destroyers (DDGs) is decommissioned, Australia’s surface fleet will consist of two classes of major warship. The first of those is the six guided missile frigates (FFGs) that entered service between 1980 and 1993. The second class is the ANZAC ships, two of which have now been delivered, with another six scheduled to enter service by 2006. Three key questions about the future shape of the fleet have been considered in developing the DefenceCapability Plan.

8.56 The first is the adequacy of ships’ defences against the more capable anti-ship missiles that are proliferating in our region. Without adequate defences, our ships would be limited in their ability to operate against capable regional navies and within range of hostile air forces. A project now under way will provide such defences for the FFGs, but the ANZACs do not have adequate defences and have other significant deficiencies in their combat capabilities.

8.57 The second is the requirement for a long-range air-defence capacity in the fleet. Without such capability, our ships would be more vulnerable to air attack, less capable of defending forces deployed offshore and less capable of contributing effectively to coalition naval operations.

8.58 Third, we have considered the future provision of support ships, which can increase our maritime capability by keeping ships at sea longer and at greater ranges from port. One of our support ships — HMAS *Westralia* — pays off in 2009 and the other in 2015. Our 10 year plan therefore needs to address the replacement of these ships.

8.59 In relation to these issues, the Government’s planning is as follows. First, the ANZAC ships are planned to be upgraded to provide a reasonable level of anti-ship missile defences and other enhancements of their combat capabilities, including the fitting of Harpoon anti-ship missiles. This project is scheduled to
start in 2001 with upgraded ships in service by 2007.

8.60 Second, the FFGs are planned to be replaced when they are decommissioned from 2013 by a new class of at least three air-defence capable ships. It is expected that these ships will be significantly larger and more capable than the FFGs. The project is scheduled to commence in 2005-06. The Government’s strong preference is to build these ships in Australia, which will provide significant work for Australia’s shipbuilding industry.

8.61 Third, the Government plans to replace HMAS Westralia, which is a converted commercial tanker, with a purpose-built support ship when it pays off in 2009. We also plan to replace our second support ship, HMAS Success, with another ship of the same class when it pays off in 2015. The Government’s strong preference is to build these ships in Australia. The project to replace HMAS Westralia is planned to start around 2004-05.

8.62 Our Seahawk and Super Seasprite helicopters provide an important and integral part of the surface fleet surveillance, anti-submarine and anti-surface warfare capabilities. The Government plans a major mid-life upgrade of the Seahawk commencing around 2003.

Submarines

8.63 The Government plans to bring all six Collins class submarines to a high level of capability by major improvements to both the platform and combat systems. Modifications already under way to some boats have resulted in major improvements in the acoustic performance of the boats and in the reliability of a number of the ship systems. Interim modifications to the combat system have improved performance. All boats will now be modified for better acoustic performance and reliability and a new combat system will be fitted, with work starting next year. The first boat with the new combat system is planned to be available in 2005-06. A
program of ongoing upgrades will also be established.

8.64 In addition, a project is also scheduled to replace our current heavyweight torpedo with a new and more capable weapon beginning in 2002-03. The first new torpedoes are planned to enter service around 2006.

Maritime Patrol Aircraft
8.65 Australia’s fleet of 19 P-3C Orion maritime patrol aircraft are undergoing a major upgrade which will provide an excellent capability over coming years. Two additional enhancements have been planned: the fitting of new electro-optical sensors to improve capacity to detect ships under difficult circumstances, starting around 2004-05, and the acquisition of a new lightweight torpedo to improve the P-3C’s critical submarine-killing capabilities, starting around 2002. A remaining shortfall is self-protection for the aircraft from missiles if they were to be deployed in medium or high threat environments.

8.66 The P-3Cs will reach the end of their current planned life in around 2015. Unless new technology emerges which offers more cost-effective ways to perform the P-3C’s roles, the Government would intend to retain the maritime patrol aircraft capability past that date. The Defence Capability Plan therefore provides for a major refurbishment or replacement of the P-3C fleet starting around 2007.

Patrol Boats
8.67 The 15 Fremantle class Patrol Boats are close to the end of their service life. These boats make a critical contribution to coastal surveillance and enforcement, and are accorded a high priority by the Government. On current planning a project will start next year to provide a new class of patrol boat to replace the Fremantles as they are decommissioned. The new boats will preferably be built in Australia and are expected to enter service from 2004-05.

Costs
8.68 Under the Defence Capability Plan the Government anticipates spending an average of $3.5 billion per year on maintenance of current maritime capability over the decade. The expected capital expenditure needed for the capability enhancements outlined above totals around $1.8 billion over the decade, and additional personnel and operating costs amount to about $300 million.

Strike
8.69 The strike capability grouping covers the forces that enable Australia to attack hostile forces in the territory of an adversary, in forward operating bases, and in transit to Australia. The Government believes that this
capability is an important element of Australia’s military posture because it provides us with the flexibility to destroy hostile forces before they are launched towards Australia and when they may be most vulnerable. Strike capability allows Australia more scope to determine the pace and location of hostilities, and would impose major defensive costs on an adversary contemplating hostile action against us. Strike forces can provide excellent support to Australian forces deployed abroad, and may also offer a valuable option for contributing to regional coalitions.

8.70 Strike operations could be conducted by F/A-18s and potentially also by P-3C aircraft, ships and submarines, if they were provided with appropriate weapons. Special forces can also perform strike operations. But Australia’s strike capability consists primarily of our fleet of F-111 long-range bombers. They are the focus of this section.

**Capability Goal**

8.71 The Government’s aim in the development of our strike capability is to ensure that we have the capability to contribute to the defence of Australia by attacking military targets within a wide radius of Australia, against credible levels of air defences, at an acceptably low level of risk to aircraft and crew. We do not intend to seek a strike capability large enough to conduct sustained attack on an adversary’s wider civil infrastructure; our capability would be focussed on an ability to attack those militarily significant targets that might be used to mount or support an attack on Australia. We do, however, want to have the capacity to mount sustained strike campaigns against a significant number of such targets. We also want the capacity to strike targets with sufficient accuracy to minimise risk of collateral damage.

8.72 The Government expects that the strike capabilities developed for the defence of Australia would provide options to contribute to regional coalitions against more capable adversaries at acceptable levels of risk to crew and aircraft.

**Major Issues**

8.73 The Defence Capability Plan has considered three key issues in relation to the future of our F-111 strike capability.

8.74 First, the capacity of the F-111s to overcome improving air defences has been enhanced recently by improvements to their electronic warfare self-protection (EWSP) systems, and by the acquisition of stand-off weapons which allow aircraft to launch attacks from outside the range of some air defence systems. But over the coming decade further improvements will be required in both areas. The
Government has therefore decided to undertake further EWSP upgrades and acquire additional types of stand-off weapons with longer range, and with different guidance and targeting systems to provide more alternative attack options and better capability against hardened and area targets. These projects are planned to start around 2004. The first enhancements from this program are expected to enter service around 2008-09.

8.75 Second, the Government’s decisions to acquire AEW&C aircraft and enhance our AAR capability, outlined in the paragraphs above on Air Combat, will also substantially contribute to our strike capability. For the first time we will be able to refuel our F-111s in the air, which will increase their range, payload and tactical options. The expansion of our AAR capability will also enhance the capacity of the F/A-18 to undertake strike missions at longer range, with greater weapons loads. AEW&C aircraft will help the strike force penetrate air defences and avoid hostile forces. Inflight refuelling for our AEW&C aircraft will increase their capacity to support strike missions.

8.76 Third, the Government has considered the future of our strike capability after the F-111 leaves service, expected to be between 2015 and 2020. It is unlikely that there will be any comparable specialised strike aircraft suited to our needs available at that time. A range of alternatives may be available by then, including the much greater use of long-range missiles fired from large transport aircraft, naval platforms, or even unmanned combat aerial vehicles.

Alternatively, the best option may be specialised strike variants of air-combat aircraft. This would allow the replacement of the F-111 by the same type of aircraft as we buy to follow the F/A-18, which would result in large savings in operating costs. The Government does not believe it is appropriate to attempt to resolve the future of our strike capability any time soon. However for planning purposes it has made provision for the acquisition of up to 25 aircraft of the same type as the follow-on for the F/A-18, in addition to up to 75 new
aircraft programmed for the air-combat role.

**Costs**

8.77 Under the Defence Capability Plan, the Government anticipates that over the decade it will spend an average of $500 million per year on maintenance of current strike capability. The expected capital expenditure needed for the capability enhancements totals around $800 million over the decade, with no additional personnel and operating costs.

**Information Capability**

8.78 Effective use of information is at the heart of Australia’s defence capability. In part this is a reflection of a worldwide trend, as information technology is transforming the ways in which armed forces operate at every level. All forms of capability are being transformed by the innovative use of information technology. But this trend is more significant to Australia than to many other countries. Our strategic circumstances mean that innovative applications of different aspects of information technology offer Australia unique advantages.

8.79 Major advances in surveillance technology will allow us to detect hostile forces far from our shores with a speed and certainty that would have been unthinkable even a few years ago. Faster secure communications and data links between tactical units - for example aircraft and ships - will allow them to cooperate in combat with unprecedented speed and ease. This will multiply their effectiveness significantly, allowing us to do more with our relatively small forces. And better management, logistics and command systems will improve our ability to apply our forces better to maximum effect.

8.80 Moreover, the application and exploitation of information technology is an area in which Australia has a significant national advantage. Our workforce - including both ADF personnel and industry - are highly educated and skilled in the use of information technology. We have access to excellent software and integration skills. So this is an aspect of military capability in which we can and should aim to make a difference. Together with our traditional emphasis on high levels of training and expertise in our people, this advantage will constitute the 'knowledge edge', which will be the foundation of our military capability over the coming decades.

8.81 For this reason, the Defence Capability Plan has focused on information capabilities as a separate capability grouping, to ensure that these developments receive the focus and priority they deserve.
8.82 This grouping covers intelligence and surveillance capabilities, communications, information warfare, command and headquarters systems, and logistics and business applications. Many other aspects of information capability are embedded in the platforms and systems covered by the other groupings.

**Capability Goal**

8.83 The Government’s aims for Information Capabilities are to position the ADF to harness advances in information technology in ways that ensure that the ADF has timely, accurate and secure information to exploit fully individual and unit combat capabilities, and allow their employment in more flexible ways. Our specific objectives include:

- maintaining first-rate intelligence capabilities;
- developing a comprehensive surveillance system providing continuous coverage of our extended air and sea approaches;
- developing an integrated command system covering operations at all levels and in all environments;
- providing communication capabilities that can support Australian operations throughout our territory and our immediate region, with increased capacity to support a range of new information systems;
- maximising the efficiency and effectiveness of our logistics systems and management processes by cost-effective investment in information technology applications; and
- ensuring these systems are managed effectively, secure against information warfare attack and able to achieve a high level of interoperability with our allies and partners.

**Major Issues**

**Intelligence**

8.84 Good intelligence will remain critical to Australia’s strategic posture in a complex and fluid environment. We need to have the capacity to monitor comprehensively several crises at the same time and provide effective operational support to deployed forces. New technologies offer new opportunities for collection, analysis and distribution of intelligence. If effectively exploited, these can help provide a war-winning edge to forces in the field, as well as
give decision-makers at the strategic level a better understanding of the complex crises they need to manage. But new technologies also erode our intelligence capabilities by making it easier for intelligence targets to protect information. The Defence Capability Plan therefore incorporates substantial and sustained investment in enhanced intelligence capabilities, including:

- enhanced signals intelligence and imagery collection capabilities;
- enhanced geospatial information systems;
- improved intelligence processing and dissemination systems; and
- deeper levels of cooperation with the United States in some key systems.

**Surveillance**

8.85 Technology developments are expanding significantly the potential for sustained, 24-hour surveillance of our northern approaches, particularly by the Jindalee Operational Radar Network (JORN) and other systems. The Government plans to exploit these developments by undertaking a sustained program of enhancement to the JORN over the horizon radar system once it enters service in 2002. We also plan to improve our ability to fuse data from JORN and other sensor systems to provide an integrated national surveillance picture.

**Communications**

8.86 Sustained investment in communications capability will be necessary to support the application of information technology innovations, especially for deployed forces. Key enhancements planned include the fixed network within Australia, long-range communications to deployed forces, networked communications systems throughout an area of operations, tactical communications for combat units, and improved communications network management systems. Specific projects will include higher capacity satellite communications based on a commercial provider, enhanced broadband communications with ships at sea, and improved battlespace communications for air and land force elements.

**Command, Logistics and Business Systems**

8.87 Investment in systems to improve the efficiency and effectiveness of command and management functions in the ADF is a high priority. Improved command arrangements and systems are essential to our ability to deploy and operate effectively in complex environments at short notice. Better logistics and business systems will increase combat power in the field and save money. The key investments planned over the coming decade are the establishment of a single collocated Theatre Headquarters, and the development of two deployable headquarters to provide on the spot command for two deployed forces simultaneously; a single integrated command support system linking all
ADF elements; and an integrated personnel, logistics and financial system based on e-business principles.

Costs

8.88 Under the Defence Capability Plan the Government anticipates that over the decade it will spend an average of $1.3 billion per year on maintenance of information capabilities. The expected capital expenditure needed for the capability enhancements totals around $1.9 billion over the decade, and additional personnel and operating costs amount to about $600 million.

Capability Enhancements
Summary of Costs 2001-02 to 2010-11

<table>
<thead>
<tr>
<th>Capability Grouping</th>
<th>Capital Expenditure</th>
<th>Personnel and Operating Costs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Forces</td>
<td>$3.9 billion</td>
<td>$1.1 billion</td>
<td>$5.0 billion</td>
</tr>
<tr>
<td>Air Combat</td>
<td>$5.3 billion</td>
<td>$0.3 billion</td>
<td>$5.6 billion</td>
</tr>
<tr>
<td>Maritime Forces</td>
<td>$1.8 billion</td>
<td>$0.3 billion</td>
<td>$2.1 billion</td>
</tr>
<tr>
<td>Strike</td>
<td>$0.8 billion</td>
<td>$0 billion</td>
<td>$0.8 billion</td>
</tr>
<tr>
<td>Information Capability</td>
<td>$1.9 billion</td>
<td>$0.6 billion</td>
<td>$2.5 billion</td>
</tr>
<tr>
<td>Total</td>
<td>$13.7 billion</td>
<td>$2.3 billion</td>
<td>$16 billion</td>
</tr>
</tbody>
</table>
9.1 Australian industry is a vital component of Defence capability, both through its direct contribution to the development and acquisition of new capabilities and through its role in the national support base. So a strong industry base benefits Defence. We must take a strategic approach to our defence industry base, and not regard its capabilities as simply a by-product of procurement decisions. The Government recognises that it has an important role to play in outlining clear long-term directions for the development of the ADF to provide a more predictable and sustainable basis on which industry can plan.

**The Role of Industry in our Defence**

9.2 Traditionally, the ADF has relied on industry for the provision of military equipment, even though some of this was provided by government-owned factories and dockyards in Australia. With the privatisation of government defence industries and the continuing outsourcing of defence support functions, the dependence on industry, and more generally the private sector, has grown dramatically. Support for combat capabilities, such as maintenance and repair of aircraft, increasingly resides in industry.

9.3 This trend of increasing reliance on industry will continue. Australia’s future defence capability will require access to advanced technology - for both equipment and training. The development, provision and support of that technology is largely the domain of industry, although the Defence Science and Technology Organisation (DSTO) can also play a
significant role alongside industry, particularly in the early stages of technology development.

9.4 For all of these reasons, the Government’s defence industry policy proceeds from the recognition that industry, both manufacturing and service, will continue to be an integral part of Australia’s defence capability.

The Importance of Australian Defence Industry

What We Need...

9.5 The Government’s overall objective for Australian defence industry was set out in the 1998 publication entitled Defence And Industry - Strategic Policy Statement. In summary, we want a sustainable and competitive defence industry base, able to support a technologically-advanced ADF. This calls for efficient, innovative and durable industries - and a close partnership between Defence and those industries.

9.6 Australia needs a specifically targeted set of capacities in our national industry and support base. With our national defence expenditure accounting for only one per cent of world military expenditure, it is unrealistic to aspire to complete industrial self-sufficiency. Nor is complete self-sufficiency necessary, given our ability to access and acquire many important technologies from overseas.

9.7 Rather than self-sufficiency, Australia needs support in-country for repair, maintenance, modification and provisioning - especially in wartime when the ADF would need urgent and assured supply. However, for provision of some high-cost items, such as guided weapons, it will be more effective to stockpile key supplies than to replicate foreign production facilities with high start up costs and low production rates. Australian defence industry, possibly working in association with DSTO and other research and development agencies, also needs to have a capacity to develop new solutions for the ADF’s capabilities needs. This is particularly the case in those niche areas where we have needs unique to our environment - and when it is cost-effective for us to seek innovative solutions.

9.8 Within that framework, the areas that attract the highest priority for support from Australian defence industry are:
  · combat and systems software and support;
  · data management and signal processing, including for information gathering and surveillance;
...And How to Achieve It

9.9 To meet those needs, the Government’s approach will be a strategic one that seeks to capitalise on areas where Australia’s industry base demonstrates particular strengths. In those areas, our defence industry policy will recognise and foster Australian industry’s innovative use of advanced technologies. This includes building better linkages between industry and DSTO to capitalise on Australia’s strengths in information capabilities, as it is particularly important that industry has the ability to provide high quality support in such areas as command and control systems, electronic warfare capabilities, surveillance and sensors.

9.10 There are a number of areas where the capacity for high technology software support has been successfully introduced into Australian industry via defence projects, such as those relating to upgrades and integration of systems on aircraft and command support systems. This provides Australia with the opportunity to generate a capability edge through the innovative use of that technology.

9.11 Significant parts of the Defence Capability Plan call for technologically innovative solutions. The Government will seek to capitalise on the potential of Australian industry to offer such solutions by continuing to initiate and pursue high-technology projects. We will, however, give much greater emphasis to managing risk effectively in those projects. Moreover, important parts of our technology development effort will remain based on existing, proven technology designs, as were the ANZAC and Minehunter Coastal ships.

9.12 The Government will also seek to make greater use of off-the-shelf purchases, especially where the additional capability from Australian-specific modifications does not justify the increased cost and risk. However, total reliance on off-the-shelf purchases is neither achievable nor desirable. It would risk our forces having inferior technology in key areas
such as combat systems, and place the ADF at a serious disadvantage if local industry were unable to repair or modify critical equipment in wartime.

9.13 Defence industry will not flourish within the Australian defence market alone, with its finite and uneven level of demand. Rather, sales to Defence should be the basis for capturing broader markets, here and overseas. In short, Australian defence industry needs to be competitive on an international basis. Defence will assist through export facilitation - consistent with Australia’s international obligations and foreign policy and strategic interests - and will increasingly look at the potential for international collaboration when considering its own procurements.

9.14 Ultimately, however, the ability to develop a prosperous and effective Australian defence industry rests with industry itself. The Government will shape the environment in which industry makes its decisions, but will not intervene and shape the market through subsidies and preconceived solutions. We will not limit ourselves to purchases from Australian industry, nor pay an unduly high premium for them.

Our Current Industrial Scene

9.15 Industry undertakes a wide range of tasks for the ADF. It:
- repairs and maintains much of the ADF’s equipment;
- fuels its aircraft, ships and vehicles;
- provides munitions;
- feeds, clothes, houses and accommodates its people;
- transports those people and their stores;
- fits and tests new weapons and sensors to ADF platforms;
- builds and adapts new weapons to suit our unique needs; and
- helps to train the men and women serving in the Army, Navy and Air Force.

9.16 To undertake these tasks, Australia’s defence contractors have a wide range of high level skills and capabilities - from heavy engineering to modern electronics and software engineering and provision of basic services.

9.17 A combination of government policy and market pressures has brought significant improvement in the capability of Australian defence industry. In many areas, it is now highly cost-
competitive. Major projects, when well managed can introduce new technologies and skills in Australian industry.

9.18 Australian industry generally now has the capacity to maintain all of the ADF’s equipment, but sometimes with a high level of dependence on overseas supply of spare parts, specialised munitions and advice on technology.

9.19 Australia’s defence industry has limitations in design and manufacturing capabilities. Many companies in most defence sectors remain dependent on Australian Defence orders, with information technology being a notable exception. Defence exports are small and diversification into civil markets has been patchy, with most success being in the aerospace sector.

9.20 The ability to develop new technology is strong in some specialist areas - such as underwater systems - but lacks a broad base. Much of the research and development base in Australia resides in smaller companies.

9.21 Industry consolidation has occurred, but not yet on the scales of North America and Europe. Many of the Australian mergers and acquisitions in the defence sector have consisted of larger companies absorbing smaller ones, rather than a consolidation among the larger companies themselves.

**Strengthening Our Defence Industry Capability**

9.22 The Government is committed to strengthening the defence industry base - without encouraging inefficiency or dependence. Asset out in the *Defence and Industry - Strategic Policy Statement* the Government is pursuing six specific objectives. They are to:

- integrate industry into capability development;
- enhance industry’s contribution to the nation's capability edge;
- reform procurement;
- establish new ways to involve Australian industry in defence business;
- increase Australian exports and materiel cooperation; and
- commit to cultural change and improved communication.

9.23 In 1998, as part of the defence industry policy statement, the Government announced 49 initiatives. Nearly all of these
initiatives are now in place, but we need to build on these steps. The focus will be on providing better guidance to industry, developing better business practices within Defence, and building better relationships between Defence and industry.

**Better Guidance**

9.24 A sustainable Australian defence industry needs a predictable basis on which to plan. Importantly, the program of capability enhancements outlined in Chapter Eight provides that solid basis for long-term planning by Australian industry.

9.25 Through the Defence Capability Plan, the Government has set out development paths in each of the key capability areas over the next 20 years. This will improve Defence’s ability to assess more systematically and better manage the industry capacity associated with each major Defence capability area.

9.26 The Government wants appropriate, strong Australian industry involvement in pursuing the program of enhancements outlined in this White Paper. There are significant opportunities for many industry sectors in the program. They will engage the existing strengths of Australian industry and have the potential to introduce new skills and capacities. These include essential systems engineering and integration skills in the modernisation of aircraft, ships and vehicles; the construction of new ships; the development of AEW&C aircraft systems; and a range of communications, command and control, and information systems.

9.27 The AEW&C project will use and develop key industry skills and new capabilities in systems integration and advanced electronics. These new skills will be critical to effective support of the new aircraft over their life, and will contribute to the continuing development of skills needed for other Defence capabilities. These include the longer term commitment to acquisition of advanced combat and strike aircraft and systems to replace F/A-18 and F-111 aircraft. In addition, the AEW&C project offers particular opportunities to access overseas markets and augment skills and technology through international collaboration.
9.28 Australian shipbuilders now have guidance on the Government’s naval shipbuilding program for a decade and beyond. In particular, the Government has foreshadowed a major surface combatant program to follow the ANZAC project, which is nearing completion.

9.29 Until that new construction program gets under way, the upgrade of the ANZAC frigates, planned to start in 2001 and finish in 2007, will help naval shipbuilders retain their physical infrastructure and some of their existing workforce skills. The construction of new patrol boats and two new support vessels provides opportunities for industry, although utilising different skills and infrastructure from that required for large combatant vessels.

9.30 The Government is also committed to developing and sustaining the engineering and design capabilities needed to support the land forces. In particular, Australian industry will have a high level of participation in the upgrade of the M113 armoured vehicles, which will complement the program already announced for additional light armoured vehicles.

9.31 The information technology and electronics sectors will also benefit from the Government’s program. Australian industry has built up a substantial skill base in the high priority areas of surveillance and reconnaissance, imagery, intelligence systems, communications, command and control, information management, and information security systems. High priority capabilities now being developed within industry include data fusion and electronic warfare systems. The Government is keen to maintain this skill-base through involving industry in the range of new command, control communications, intelligence capabilities and similar systems identified in the Defence Capability Plan.

9.32 Developing a sustainable industry base also means encouraging research and development opportunities and export activities. As part of our overall industry and technology policy, the Government is finalising an Innovation Action Plan, which will outline measures to foster new ideas, encourage commercialisation of research into new technologies and support such research. Consistent with this approach, future solicitations for major defence projects will encourage
bidders to offer a broader range of research and development and export proposals as part of their Australian Industry Involvement program. We will look for industry proposals that offer gains to Defence and commercial benefit to the company.

**Better Business Practices — Defence Acquisition Reform**

9.33 On coming to office the Government was concerned that the organisation it inherited did not have sufficient flexibility, capacity and the necessary governance arrangements to properly manage complex Defence projects and maintain capability. The Government has introduced a series of changes to address these problems - most recently and importantly through the establishment of a single area of accountability and management headed by the Under Secretary Defence Materiel. This amalgamation of the Defence Acquisition Organisation and Support Command Australia to form a single Defence Materiel Organisation will enable an effective whole-of-life approach to be taken to defence materiel and simplifies Defence’s interaction with industry.

9.34 To be fully effective, the new Defence Materiel Organisation requires organisational and in some cases cultural reorientation away from Canberra towards its operating base in the operational units. As part of this, the Government will improve support of its materiel personnel through a range of initiatives including improved conditions of service in keeping with changed mobility requirements, a stronger focus on selecting for and developing individual competencies, and improved usage of military personnel. Changes will go hand in hand with the clarification of personal responsibilities and accountabilities. Such improvements will facilitate a smarter and more focused use of external professionals and industry. Industry will also be engaged earlier, through simplified processes, which in combination with other measures will lead to reduction in unnecessary industry cost and improved project turn-around times. There will also be more effective use of past performance evaluations for assessing contractors and their proposals. Importantly, the Materiel organisation will adopt commercial best practice as its norm and assess its performance against industry benchmarks.

**Better Relationships**

9.35 Difficulties in past Defence projects have sometimes corresponded with poor relationships between the contractor and Defence. The need for better management of the relationships was identified in the 1998 Strategic Policy Statement, and the Government is undertaking a range of reforms in this area.
9.36 Part of the acquisition reform program in the new Defence Materiel Organisation will involve earlier and more frequent involvement of industry in development of projects, facilitated by better funding of investigatory phases of projects. More informative briefings on a one-to-one basis will be used and cost estimates will be made visible to industry.

9.37 Partnering arrangements will become commonplace for significant Defence procurements. Defence has now set up a unit tasked with promoting and monitoring Defence industry relationships, and will issue an annual report card on its progress with partnering to the Defence and Industry Advisory Council.

9.38 Many of these initiatives are already under way. By mid-2001, Defence will present an implementation report to the Defence and Industry Advisory Council. This report will be made public.
10 – Science and Technology

10.1 An important part of maintaining our capability edge is to harness people and technology. This White Paper is being prepared at a time when technology is changing rapidly and Australia must be in a position to embrace and adapt to these changes. In some areas, improvements in technology are likely to affect military capabilities and operations significantly. For example, the vast and far-reaching changes in information technology combined with innovative design of platforms may lead to ‘mission convergence’ - that is, complex systems that can undertake more than one primary mission.

10.2 On the other hand, we must be careful not to be oversold on technology change. The capabilities that are planned in the context of this White Paper will be with us for a long time, notwithstanding that they may be upgraded several times during their lifetime. As such, those capabilities will be a major and enduring determinant of our future force structure.

10.3 This Chapter describes the key trends in defence-related technologies and how the Government plans to exploit technological opportunities to enhance ADF capability.

Technology Trends and the Revolution in Military Affairs

10.4 The Government has considered the trends in defence technology in developing the Defence Capability Plan set out in this White Paper. We have been concerned to exploit the new opportunities in a...
sensible and structured way. We have attempted to identify those aspects of technological change that are most likely to affect major long-term capabilities and thus where investments will need to be made in coming years.

10.5 The most important development changing the conduct of warfare is the ability to increase vastly the speed and capacity to collect, organise, store, process, tailor and distribute information. This development is driven primarily by information technologies to meet civil and commercial needs.

10.6 The uptake of information technology by the military, pioneered in the United States, is having such a profound effect that it has led to what is generally known as the Revolution in Military Affairs (RMA). The Government recognised the opportunities presented by the RMA and has established an Office of the Revolution in Military Affairs. This office is focussed on exploring opportunities and developing our RMA partnerships with other nations, particularly the United States. The Government also supported a research and development program in RMA-related technologies to ensure that Australia was prepared for the adoption of new technologies as concepts matured. This research program will continue to be led by DSTO in collaboration with universities, other research organisations and industries.

10.7 Characteristics of the RMA include:
- integration of military forces for joint operations;
- individual systems and capabilities networked together to achieve whole-of-force effects;
- technology changes and changes to military operations and doctrine;
- increased tempo of operations; and
- asymmetric threats.

10.8 The RMA also places a high premium on new personnel skills, training approaches and organisational structure.

10.9 RMA technologies impart the ability to know more than one’s adversary in relevant areas. This can result in a decisive military advantage when linked with appropriate weapons and concepts of operation. Indeed, this will most probably be one of the decisive factors.
in warfare over the coming decades. As explained in Chapter Eight, our information capability is particularly significant in Australia’s strategic circumstances. We must ensure that we have the skills and infrastructure to absorb and adapt the technologies involved to our needs. We have programmed major investments in this area, including important cooperative programs with the United States. These cover not only information technology per se, but also incorporate the emerging use of space-based systems. These investments will be supported by enhanced research and development programs in DSTO where Australian research is an important component in our international cooperation.

**Exploiting the Opportunities**

**Precision Effects**

10.10 Information technology in the military domain is not limited to battlespace situational awareness issues. It is also an important contributor to other significant trends in warfare-improved command systems, ‘just in time’ logistics and achieving precision effects at long range.

10.11 In the latter case, improvements in guidance and targeting systems, enabled by information technology and electronics generally, will be complemented by improvements in other areas of weapons technologies that will improve range and reduce collateral damage. As technology advances, weapons will become more adaptable and tailored through increased use of software-control systems. We must ensure that we have the skills to exploit this emerging ability to tailor weapons to our specific needs. At the same time we need to maintain awareness of emerging weapon concepts that have the potential to have a major impact on the future battlespace. Leading edge research and development programs in DSTO, working closely with industry, will be fundamental for building these key capabilities in Australia.

**Platforms and Networks**

10.12 In platform technologies, information technology again has the potential to change the way we fight. Current trends are not only to improve the cooperation between all types of platforms through sensor and
networking developments but also, through automation and remote control, to greatly decrease the number of personnel needed to operate the platform, thus reducing both personnel-related costs and risks. In addition, platform effectiveness is further advanced by developments in stealth technologies and self-protection systems - electronic and physical - which are likely to improve performance markedly against targeting missiles. Unmanned Aerial Vehicles and Unmanned Combat Aerial Vehicles are emerging concepts that offer Australia a great deal of potential for surveillance, reconnaissance, information gathering and eventually the delivery of combat power. To this end, Australia will continue a cooperative project in a major Unmanned Aerial Vehicle program with the United States.

10.13 Increased reliance on networks in military operations requires strong assurance as to their availability and security against potential adversary actions (information operations). DSTO has established a research and development program in this area, which will be enhanced as Defence capabilities are fielded and in response to increasing threats to Defence networks.

10.14 Although information technology and electronics-related issues will be a major driver of the capabilities of future platforms, there are other important technology developments that will greatly influence how we acquire, generate and maintain our fleets. For example, electric propulsion for surface warships has the potential to revolutionise existing concepts for ship design by freeing up hull space, lowering purchase price, and reducing operating and maintenance costs. DSTO has initiated a research program, with overseas cooperation, to understand how these technologies might change ship operations.

10.15 Advanced information and integration technologies provide the ability to upgrade combat capability rapidly. This is particularly the case for our aircraft and ships. Since we operate some platforms that are unique to Australia - such as the Collins class submarines and F-111 aircraft - we need to have available the science and technology skills to support upgrades. DSTO, working closely with industry and overseas partners, has established a centre of expertise in combat systems in support of the Collins. This centre will be expanded to include other maritime and air combat systems with an enhanced role for DSTO in support of system upgrades.

10.16 This ability for rapid upgrades will also drive a continued need to keep the hull or airframe in service for long periods. Australia has built up a reputation as a world leader in extending the service life of aircraft. DSTO in collaboration with industry needs to ensure that these skills are
maintained since some life extensions can be very cost-effective and the expertise is not available elsewhere. In a more general sense, we need to maintain basic skills across a wide range of technologies in order to deliver the in-service support and enhancement of the combat capabilities outlined for development in this White Paper.

**Human Dimensions**

10.17 Wherever technology developments lead us, in the final analysis, people carry out military tasks so it is important that we continue to attach top priority to the human aspects of technology in warfare. Nowhere is this more evident than in the land environment where the individual will continue to be the primary warfighting ‘platform’. Developing technologies in such areas as night vision, navigation and micro-vehicles will enable the soldier to move faster and see further, conduct operations over 24 hours in all terrains and have vastly improved firepower at his or her fingertips. DSTO has established a research program aimed at better understanding and supporting individual and small groups of soldiers which will be developed further as new technologies emerge.

10.18 In addition to the application of science and technology directly to our combat capabilities, the emerging information-based technologies have the potential to change the way we train for operations. Advances in computer-based simulation can provide cost-effective planning and training tools using virtual reality-based simulators.

**Being a Skilled User of Technology**

10.19 Many, if not most, of the emerging trends are underpinned by advances in electronics, with information technologies being the most pervasive. However, these will be complemented by new fields such as biological and nano-technologies, and improvements in materials and structures. All of these technologies will be closely watched over the coming years. The primary challenge is to select and acquire expertise and capability in those technologies that offer the most advantages in gaining and maintaining the knowledge edge.

10.20 Most technologies will emerge from the civil sector and the challenge for military communities will be to identify the potential and then commit the time and resources to adapt them into military tools and capabilities. Australia must have the capability to do this in selected niche areas.

10.21 The ability to identify effectively and incorporate those technologies that sustain the capability of the ADF will be guided by simulation and modelling, through both qualitative and quantitative wargames. Defence
will evaluate its current warfare concepts and seek to capitalise on opportunities and prevent or dominate potential threats to our security.

10.22 A natural outcome of rapidly emerging technology and its increasing uptake by Defence is a need to understand how best to use it in the environments where we might operate. For instance, most missiles are designed to operate in the cool northern hemisphere - far different from our hot humid tropics. We can expect science and technology to be of increasing importance to the ADF as we move to the future.

**DSTO - Its Role**

10.23 To succeed in this dynamic environment Defence, and particularly DSTO, must remain attuned to trends and be agile in responding to them. This means that DSTO must be a highly focussed and expert science and technology organisation that can interpret military needs. It must be able to assess overseas trends, develop new technologies where appropriate, and build strong linkages with industry to ensure that, where appropriate, new technologies are exploited to our advantage.

10.24 Besides this, DSTO will play its part in meeting the Government’s reform agenda for Defence and - consistent with the Government’s forthcoming Innovation Action Plan - for innovation in the wider research and development community and industry. DSTO is putting in place improved and more transparent accountability arrangements that will allow increased visibility and responsiveness of its program of work to government and to its stakeholders.

10.25 As well, DSTO will undertake a fundamental review of its program of work and its structures to ensure that
it is poised to take best advantage of the emerging RMA, information and other high technologies. However, it will need to retain its more traditional but vital science and technology expertise in areas such as aircraft and ship structures.

10.26 DSTO has a role to play in supporting and upgrading, through life, those platforms unique to Australia. It must continue and widen its liaison with industry and universities to provide the national support infrastructure for such platforms and elsewhere where appropriate. Improved linkages with industry will be important in transferring knowledge and fostering innovation, particularly in small to medium enterprises.
Section Five | Funding
11 – Defence Funding

11.1 To fund the program of development for Australia’s armed forces that is set out in the Defence Capability Plan, the Government estimates that defence spending will need to grow by an average of about three per cent per annum in real terms over the next decade. (Real spending is measured by reference to the GDP deflator.) The Government is committed to meeting this funding requirement, and it has directed Defence to plan within that budget. The Government intends that funding for 2001-02 and 2002-03 will increase by $500 million and $1,000 million respectively, to provide substantial initial funding for a number of key initiatives. Extra funding will be additional to the supplementation, ranging from $415 to $444 million per annum, that the Government has already provided to generate the extra forces for Australia’s involvement in INTERFET and UNTAET. In later years, funding increases may fall below three per cent, depending on budgetary and defence requirements in a given year.

11.2 Over the last decade defence funding remained relatively constant in real terms. The proposed level of growth constitutes a substantial increase in defence spending. By the end of the decade, defence spending in cash terms will stand at approximately $16 billion per year in today’s dollars, compared with $12.2 billion this year. In all, defence spending over the decade is expected to increase by a total of $23.5 billion in real terms, compared to total defence spending had the defence budget been held flat in real terms over the decade. While the majority of this additional funding will pay for the enhancements outlined in Chapter Eight, the public supports an increase in defence funding.

Report of the Community Consultation Team: Key finding

We gained a strong sense that...the majority of the public viewed increased investment in our military capabilities as a prudent insurance measure...There was a very strong consensus that this is no time for complacency about Australia’s national defence effort.

Report of the Community Consultation Team
$7.5 billion of this funding has been allocated to maintain existing capabilities.

11.3 A long-term growth rate of three per cent per annum is slightly below the average annual growth rate of Australia’s economy over the last two decades. If our economy grows on average as fast over the next decade as it has over the last two decades, then the Government’s defence funding projections will mean that in 2010 we will be spending about the same proportion of GDP on defence as we are today. That remains 1.9 per cent. We believe this level of funding is justified within our overall national priorities and will ensure that we can achieve the strategic objectives we have identified.

A New Approach to Defence Funding

11.4 The defence spending figures provided in this White Paper are the most specific long-term defence funding projections provided by any Australian government in more than 25 years.

11.5 The Government has taken the important step of providing this guidance for Defence because it recognises the difficulty of planning and budgeting for the development of defence capabilities without a clear understanding of funding levels a decade ahead, and even beyond. For example, our decisions about the future composition of the Navy’s surface fleet need to take account of the costs of building new ships throughout this decade and into the next.

11.6 The Government’s new approach to capability planning and defence funding will provide an improved basis for accountability by Defence to government and the public for the efficient and effective use of defence funds. The Government has introduced a defence planning and budgeting process, built around a new, annual Defence Financial and Management Plan. The first of these will be produced this year as part of the 2001-02 budget cycle.

11.7 In this new process, Defence will move to output-based budgeting arrangements within the constraints of the 10 year overall budget.

11.8 Each year as part of the budget process, Defence will present in the
Defence Financial and Management Plan an annual program which will detail those projects, measures and activities required to implement the Defence Capability Plan in that year. It will also present and explain any revisions of the Defence Capability Plan that may be necessary.

11.9 A key element of that process will be the setting of annual targets for the delivery of capability that Defence will be held accountable for meeting. Government will also consider for approval all major capability development proposals. This includes the details of each new major investment project, and significant changes to force structure and preparedness levels.

11.10 Other improvements in financial and budgetary management in Defence have also been implemented, including the refinement of business structures to separate output management from enabling and owner support streams; the appointment of a Chief Finance Officer to improve organisational and financial accountability and performance information; and the establishment of a Defence Improvement Committee, chaired by the Minister for Defence, to oversee continuous improvements at all levels of Defence in management and accountability.

Why Do We Need to Spend More?

11.11 Four key cost pressures have affected the defence budget in recent years and have resulted in the need to plan on a sustained increase in defence funding. These are personnel costs, operating costs, investment in
new capability and increased readiness costs.

**Personnel Costs**

11.12 Defence per capita personnel costs have risen by an average of 4.9 per cent per annum over the last decade. That is faster than the increase in average personnel costs in the community as a whole. That margin can be attributed to the significant rise in average skill levels in both the ADF and Defence’s civilian workforce, as the size of that workforce has fallen sharply. Over the past fifteen years, the number of permanent uniformed personnel has fallen by 27 per cent from 70,000 to 51,000, and numbers of civilian employees have fallen by 60 per cent from 40,000 to 16,000.

11.13 These decreases reflect substantial efficiency gains through a combination of commercialisation, outsourcing and increasing labour productivity, which have been important factors in limiting defence cost increases. The Government will continue to look for further opportunities to increase labour productivity within Defence, while being mindful of the constraints associated with our required force structure and associated preparedness levels. In recognition of those constraints, the Government has factored into the projected defence funding increases provided for in this White Paper an allowance for 2 per cent per annum growth in Defence’s real per-capita personnel costs. In addition, separate provisions have been made for the additional personnel costs associated with specific capability enhancements.

**Operating Costs**

11.14 Operating cost pressures have increased in recent years. Over the coming decade it is expected that these pressures can be offset by further efficiencies, and by capital investment in new and refurbished systems with lower operating costs. The funding projections are therefore based on an estimate that operating costs will not grow in real terms over the decade, except for the additional operating costs of new enhanced capability, which are specifically provided for.

**Investment in Capability**

11.15 The third key factor driving the need for defence funding increases is the need to undertake substantial investment in new capabilities and to maintain existing capabilities over the next decade. These pressures have been amplified especially by the need to make provision for the replacement of the F/A-18 fleet. Although the F/A-18 will still be in service for another 15 years, significant funding for its replacement will need to be provided from about 2007.

**Increased Readiness**

11.16 Defence funding has been pressured by the need to increase significantly the readiness of many
elements of the ADF over recent years. As we have explained in earlier chapters, the past decade has seen a steadily accelerating increase in the demands on the ADF for the conduct of active and often highly demanding operations. For the past four years the ADF has been continually deployed in significant numbers to operations within our own immediate neighbourhood, as well as to a range of smaller operations further afield. The defence budget is normally supplemented for the specific additional costs of undertaking each operation, as it is difficult to budget in advance for the inherently unpredictable occurrence of such costs. But the increased costs of maintaining forces at higher levels of readiness for such operations is reflected in the defence budget, and imposes significant pressures on it. The Government has concluded that it is important to maintain the current higher levels of readiness over coming years, with associated costs to the defence budget.

Future Reform and Efficiency Savings

11.17 Defence has undertaken major reforms over the past decade, and has produced efficiency savings of the order of $30 million in 1991-92 to more than $1200 million in 2000-01. Further efficiency measures are under way, which are expected to deliver additional savings of at least $200 million per year by 2003-04. These savings have been included in the funding projections in this White Paper.

11.18 The Government’s decision to project sustained increases in defence funding over the coming decade does not indicate that we believe there are no further efficiency savings to be achieved in Defence. On the contrary, there are clearly important areas in which substantial efficiency savings can be made. The Government is committed to pursuing these savings vigorously in areas including property disposal, greater use of contracting-out, improved IT management and reduced personnel
overheads. Any further savings achieved and that the Government decides will be retained in Defence, will be offset from the projected funding guidance for Defence.

11.19 The Government places particular priority on ensuring that savings measures do not adversely affect the fundamentals of the profession of arms, or the ADF’s ability to respond effectively to the unique demands of military operations. Reform measures that are entirely appropriate in the civilian sector, including in civilian areas of Defence, may be less appropriate in the military context. We are very conscious of the unique nature of military service, and of the need to ensure that reform measures do not detract from it. At the same time the Government is strongly committed to continuing improvement and the need to ensure that money spent on defence is managed wisely.

\[ \text{Defence Funding - Total Estimated Cost by Five Broad Capability Groups} \]

- **Capability Groupings**
  - Land Forces
  - Air Combat
  - Maritime Forces
  - Strike
  - Information Capability

1 In constant 2000-01 prices.
Australian War Memorial images

Pages 3 and 23
ART22494 - Private A.E. ('Curley') Irwin
Drawing by Ivor Hele, 1943 - coloured crayons and charcoal on brown paper

Page 5
ART21055 - Compass platform, HMAS Hobart
Drawing by Norton, Frank, 1941 - carbon pencil heightened with white crayon

Page 9
ART21930 - Pilot Sergeant, Port Pirie
Drawing by Ivor Hele, 1942 - pen and ink with wash

Page 16
ART40626 - Diggers embarking on Chinook helicopter
Drawing by Ken McFadyen, 1967-1968 - charcoal

Page 21
ART22739 - Barge landing, Oro Bay, New Guinea
Painting by Roy Hodgkinson, 1942 - black and sanguine crayon with coloured washes