Australian Government

Department of Defence

# DEFENDING AUSTRALIA IN THE ASIA PACIFIC CENTURY: **FORCE 2030**

DEFENCE WHITE PAPER **2009**

www.defence.gov.au

© Commonwealth of Australia 2009

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced by any process without prior written permission from the Department of Defence.

Announcement statement–may be announced to the public

Secondary release–may be released to the public

All Defence information, whether classified or not, is protected from unauthorised disclosure under the *Crimes Act 1914*. Defence information may only be released in accordance with the *Defence Security Manual* and/or Defence Instruction (General) OPS 13-4–*Release of Classified Information to Other Countries*, as appropriate.

ISBN: 978-0-642-29702-0

**ERRATA**

The following changes have been made to the text in this edition

Page 16

Paragraph 1.7 has been amended to read:

1.7 Since 2000, we have seen the terrorist attacks on the United States in September 2001, followed by terrorist attacks across many parts of the world, including London, Madrid, Bali, Jakarta, and Mumbai. Australians were tragically killed and injured in many of these attacks. We have seen the commitment of Australian forces to Afghanistan, Iraq and the wider Middle East region, as well as closer to home in East Timor, Aceh (in response to the Indian Ocean Tsunami), Papua New Guinea (for its humanitarian assistance needs), Solomon Islands and Tonga.

Page 48

Paragraph 6.19 has been amended to read:

6.19 In terms of military strategy, it means the ability to conduct independent military operations in the defence of Australia by way of controlling the air and sea approaches to Australia, and denying an adversary the ability to operate, without disruption, in our immediate neighbourhood, to the extent required to ensure the security of our territory and people. This approach is spelled out in greater detail in Chapter 7.

# CONTENTS

MINISTER'S PREFACE 9

EXECUTIVE SUMMARY 11

Chapter One:
THE GOVERNMENT'S APPROACH TO DEFENCE PLANNING 15

The Purpose of the Defence White Paper 15
The Long-Term Nature of Defence Planning 15
Why Do We Need a White Paper Now? 15
Future Organisational Challenges 16
A Comprehensive Approach to Defence Planning 17
The Preparation of the White Paper 17
Defence and the Australian Community 18
Transparency in Defence Planning 19

Chapter Two:
DEFENCE AND NATIONAL SECURITY 20

Defence and the Government's Broader Approach to National Security 20
Force in the International System in the Twenty-First Century 20
The Use of Military Power 21
The Future Role of Armed Forces 21
- The Future of Major War 21
- The Future of Intra-State Conflict 22
- Threats from Non-State Global Actors 23
- Domestic Security and Emergency Response 24
- Humanitarian Assistance and Disaster Relief 24

Chapter Three:
MANAGING STRATEGIC RISK IN DEFENCE PLANNING 26

The Limits of Military Power: Balancing Strategic Weight with Resources 26
Managing Strategic Risk 26
- Defence Planning and Strategic Risk Management 27
- Strategic Warning 27
- Fundamental Changes in Our Strategic Outlook 28
- Strategic Hedging in Defence Planning 28
- Regular White Papers and Improved Defence Strategic Planning 29

Chapter Four:
AUSTRALIA'S STRATEGIC OUTLOOK 30

The Global Strategic Environment 30
The Global Economic Crisis 31
US Strategic Primacy 32
The Strategic Environment in the Asia-Pacific Region 33
The Strategic Implications of the Rise of China 34
Southeast Asia 34
Indonesia 35
The South Pacific and East Timor 35
The Middle East and Africa 36
South Asia 36
Afghanistan 37
Islamist Terrorism 37
Future Military Capabilities in the Asia-Pacific Region 38
Proliferation of Weapons of Mass Destruction 39
New Security Concerns: Climate Change and Resource Security 39

Chapter Five:
AUSTRALIA'S STRATEGIC INTERESTS 41

What are "Strategic Interests"? 41
A Secure Australia 41
A Secure Immediate Neighbourhood 42
Strategic Stability in the Asia-Pacific Region 42
A Stable, Rules-Based Global Security Order 43
Australia's Strategic Interests in Afghanistan 44
Why Does Geography Matter to Strategy? 45

Chapter Six:
AUSTRALIA'S DEFENCE POLICY 46

Australia's Strategic Posture 46
Defence Policy Choices 46
Australia's Defence Policy 48
The Likelihood of an Attack on Australia? 49
Force Structure Implications 49
The Australia-US Alliance and our Defence 50
Working in Coalitions with Others 50
The ADF's Primary Operational Environment 51

Chapter Seven:

PRINCIPAL TASKS FOR THE ADF 53

Deterring and Defeating Attacks on Australia 53
Australia's Military Strategy 53
Supporting Domestic Security and Emergency Response Efforts 54
Contributing to Stability and Security in the South Pacific and East Timor 54
Contributing to Military Contingencies in the Asia-Pacific Region 55
Contributing to Military Contingencies in Support of Global Security 56
High Intensity Land Warfare in the Middle East 56
ADF Operations in Afghanistan 57

Chapter Eight:

THE FUTURE DEVELOPMENT OF THE ADF 58

The White Paper Force Structure Review 58
Making Force Structure Choices 58
Defending Australia 58
Forces Required for Other Tasks 59
What Types of Forces Do We Need? 60
Maritime Forces 60
Land Forces 60
Air Power 61
Strategic Strike 61
Information Superiority 61
Force Projection 61
Joint Enablers 62
Support to Domestic Security and Emergency Response 62
Emerging Capability Priorities 62
Determining the Weight and Reach of our Forces 62
Future Directions for the ADF 63
Enhancing our Maritime Forces 64
Enhancing and Remediating the Rest of the ADF 64
Major Power Adversaries? 64
Force Structuring for Wider Strategic Interests? 65
Maintaining a Strategic Capability Advantage 66
Force Attributes and Capability Development Principles 66
Precise Force Application 67
Networked Capability 67
Operational Flexibility 67
Fully Developed Capability 67

Capability Advantage 67
Survivable and Robust Capability 67
Interoperable Capability 68
Cost-Effective Capability 68
Building the Future Joint Force 68
Superior Leadership and Professional Mastery 68
An Improved Force Structure Development Process 69

Chapter Nine:
CAPABILITY PRIORITIES FOR FORCE 2030 70

Maritime Forces 70
Submarines 70
Surface Combatants 71
Naval Combat Aviation 72
Anti-Submarine Warfare 72
Offshore Combatant Vessels 72
Amphibious Capability 73
Sea Logistic Support and Replenishment Support Capability 74
Land Forces 74
The Structure of the Army 74
The Adaptive Army: Next Steps 74
Land Force Survivability, Mobility and Communications 75
Battlefield Lift Capability 76
Fire Support 77
Land Operations in Complex Environments 77
Special Forces 78
Air Power 78
Air Combat Capability 78
The Broader Air Combat System 79
Maritime Surveillance and Response 80
Air Lift Capability 80
Strategic Strike 81
Information Superiority 81
Intelligence, Surveillance and Reconnaissance 81
Situational Awareness 82
Cyber Warfare 83
Electronic Warfare 83
Command, Control, Communications and Battlespace Management 84
Building the Networked Force 84

Emerging Capability Priorities 84
Space Situational Awareness and Mission Assurance 85
Missile Defence 85
Counter-Weapons of Mass Destruction Capabilities 86
Future Capability Options 86

Chapter Ten:
HOW PREPARED DOES THE ADF NEED TO BE? 87

Preparedness 87
Force Levels and Preparedness Goals 88
Improving Preparedness 89
The Use of Reserves 90
The Use of Contractors on Operations 91
Mobilisation 92

Chapter Eleven:
ALLIANCES AND INTERNATIONAL DEFENCE RELATIONSHIPS 93

Importance of Alliances and International Defence Relationships 93
The US Alliance 93
Joint Facilities 94
The Wider Asia-Pacific Region 95
Southeast Asia 96
New Zealand 97
South Pacific and East Timor 98
South Asia 99
The Middle East and Africa 99
The United Kingdom 99
Europe and NATO 100
Multilateral Security 100

Chapter Twelve:
DEFENCE INTELLIGENCE 102

Long-Term Strategic Warning 102
Crisis Warning and Support to Operations 103
Intelligence Support to Capability Development 103
Defence's National Intelligence Role 103
Defence Intelligence Review 104
Defence Intelligence Capability 104
Accountability and Oversight 106

Chapter Thirteen:
DEFENCE MANAGEMENT AND REFORM 107

The Need for Reform 107
The Strategic Reform Program 108
Improved Accountability 108
A New Budget Management Model 109
Improved Planning 109
Better Managing Defence Costs 110
Enhanced Productivity 110
Implementing the Strategic Reform Program 111

Chapter Fourteen:
PEOPLE IN DEFENCE 113

A Key Strategic Priority - Our People 113
Defence's Strategic Approach to Building our Workforce 115
Remuneration 115
Supporting Defence Families 115
ADF Housing and Accommodation 116
Health and Rehabilitation 116
Diversity 116
Better Management - An Integrated Workforce 117
Retention 117
Recruitment 118
Internal Workplace Reform 118

Chapter Fifteen:
SUPPORTING THE ADF 119

Information and Communications Capability 119
The Defence Estate 121
Infrastructure Enhancements to Support Capability 122
Defence Support Services 123
Joint Logistics 123

Chapter Sixteen:
PROCUREMENT, SUSTAINMENT AND INDUSTRY SUPPORT 125

Procurement Reform 125
Smart Maintenance 126
International Defence Materiel Relationships 126
Industry Capacity 127
Defence Industry Policy 127

Chapter Seventeen:
DEFENCE SCIENCE AND TECHNOLOGY 131

Australia's Strategic Capability Advantage: The Science and Technology Dimension 131
The White Paper Review of Defence Science and Technology 132
The Defence Science and Technology Organisation 132
DSTO Support to ADF Operations 133
DSTO Support to the Current Force 133
Supporting Effective Capability Decision Making 133
Long Range Defence Research Activities 134
Building the DSTO of the Future 134
Enhanced Governance Arrangements for the DSTO 134
Improved DSTO Funding and Business Processes 135
A Reinforced DSTO Workforce 135
Delivering Defence Support to Non-Defence National Security 135
Enhancing External Engagement 135

Chapter Eighteen:
FUNDING DEFENCE IN THE FUTURE 137

# MINISTER'S PREFACE

There is no greater responsibility for a national government than the defence of the nation, its people and their interests. Successfully meeting that obligation requires sound long-term planning, guided by regular and thoughtful assessments of the country's strategic outlook and potential threats to our sovereign interests.

The last Defence White Paper was developed a decade ago yet the world has changed significantly over that period of time. The decade brought the terrorists attacks of September 11, 2001 in the United States and subsequent events in London, Madrid, Bali, Jakarta and more recently, Mumbai.

Over the same period wars raged in Iraq and Afghanistan and fragility in Pacific Island countries grew more apparent. The nuclear ambitions of North Korea and Iran focused our minds, as did the prospect of weapons of mass destruction falling into the hands of non-state actors. Cyber warfare has emerged as a serious threat to critical infrastructure, piracy has re-emerged as a threat to maritime security and space is being used by more nations for strategic purposes. But the biggest changes to our outlook over the period have been the rise of China, the emergence of India and the beginning of the end of the so-called unipolar moment; the almost two-decade-long period in which the pre-eminence of our principal ally, the United States, was without question.

The 2009 White Paper was developed in the midst of a global recession. The Government has demonstrated the premium it puts on our national security by not allowing the financial impact of the global recession on its Budget to affect its commitment to our Defence needs. This White Paper produces a substantial additional investment in the capability of our Navy, Army and Air Force. Force 2030 is a balanced force, capable of meeting every contingency the Australian Defence Force may be required to meet in the coming two decades.

I thank all those who contributed to the project. It's an outcome that protects the security of all Australians.

**Joel Fitzgibbon**
Minister for Defence

# EXECUTIVE SUMMARY

Defence planning is, by its very nature, a complex and long-term business. Defence planning is one area of public policy where decisions taken in one decade have the potential to affect, for good or ill, Australia's sovereignty and freedom of action for decades to come. The Government must make careful judgements about Australia's long-term defence needs. Such judgements are even more important in times of fiscal or strategic uncertainty.

The global economic crisis is the most fundamental economic challenge facing this Government. At times such as these, the Government must be fiscally responsible. It would be reckless to commit substantial new resources to Defence while uncertainty surrounding the crisis remains.

This new Defence White Paper explains how the Government plans to strengthen the foundations of Australia's defence. It sets out the Government's plans for Defence for the next few years, and how it will achieve those plans. Most importantly, it provides an indication of the level of resources that the Government is planning to invest in Defence over coming years and what the Government, on behalf of the Australian people, expects in return from Defence.

Ultimately, armed forces exist to provide Governments with the option to use force. Maintaining a credible defence capability is a crucial contributor to our security, as it can serve to deter potential adversaries from using force against us or our allies, partners and neighbours. It is the Government's policy that the main role of the Australian Defence Force (ADF) should continue to be an ability to engage in conventional combat against other armed forces.

The ADF must also be prepared to play its part in dealing with intra-state conflict, an enduring feature, and assessed to be the most common form of conflict in the period to 2030. Australia's armed forces must also be able to contend with non-state global actors. Defence's vital role in supporting domestic security and emergency response efforts will continue, and Defence will support these areas of Commonwealth responsibility.

From the outset, we need to have a clear view of how much strategic risk Australia is prepared to bear, and hence how much military power we should seek to develop. The more Australia aspires to have greater strategic influence beyond our immediate neighbourhood - that is to say the ability to exert policy influence that is underpinned by military power - the greater the level of spending on defence we need to be prepared to undertake. If we want to back up strategic influence with military power, we have to be prepared to invest the resources required, and to be confident that the security benefits outweigh those costs.

As in other areas of public policy, the more balanced our portfolio of capabilities, the more we will be able to hedge and re-balance as required. The key issue is to have a solid foundation upon which to build, adapt and take advantage of opportunities. We need to review periodically and rigorously whether the mix and scale of our capabilities are appropriate to the emerging challenges in our strategic outlook. The Government intends to prepare a new Defence White Paper at intervals no greater than five years. This quinquennial White

Paper development process will be the centrepiece of the Government's new strategic risk-based approach to defence planning.

Defence policy must be based on clear objectives. Not all strategic risks necessarily require our full attention, while those that are the most remote might require our fullest attention because of their potential consequences. We have to be very clear about what matters most, so that we can provision against the right risks and do not waste resources.

Australia's most basic strategic interest remains the defence of Australia against direct armed attack. This includes armed attacks by other states and by non-state actors with the capacity to employ strategic capabilities, including weapons of mass destruction (WMD). This most basic strategic interest abides irrespective of the perceived intentions of others, and is a function of our geography and levels of current and future capability in the region around us. Before we attend to anything else, we must secure this strategic interest.

Our next most important strategic interest is the security, stability and cohesion of our immediate neighbourhood, which we share with Indonesia, Papua New Guinea, East Timor, New Zealand and the South Pacific island states. While we have a wide range of diplomatic, economic, cultural and other links with those countries, from a strategic point of view, what matters most is that they are not a source of threat to Australia, and that no major military power, that could challenge our control of the air and sea approaches to Australia, has access to bases in our neighbourhood from which to project force against us.

Beyond our immediate neighbourhood, Australia has an enduring strategic interest in the stability of the wider Asia-Pacific region, which stretches from North Asia to the Eastern Indian Ocean. In particular, we have a deep stake in the security of Southeast Asia. Strategically, our neighbours in Southeast Asia sit astride our northern approaches, through which hostile forces would have to operate in order to sustainably project force against Australia. A stable and cohesive Southeast Asia will mitigate any such threat and is in our strategic interests. More broadly, we have a deep stake in the maintenance of an Asia-Pacific regional security environment that is conducive to the peaceful resolution of problems between regional countries and can absorb the rise in strategic and military power of emerging major players.

Beyond our region, Australia cannot be secure in an insecure world. We have a strategic interest in preserving an international order that restrains aggression by states against each other, and can effectively manage other risks and threats, such as the proliferation of WMD, terrorism, state fragility and failure, intra-state conflict, and the security impacts of climate change and resource scarcity.

The Government has decided that Australia's defence policy should continue to be founded on the principle of self-reliance in the direct defence of Australia and in relation to our unique strategic interests, but with a capacity to do more when required, consistent with those strategic interests that we might share with others, and within the limits of our resources. This posture entails the maintenance of alliances and international defence relationships that enhance our own security and allows us to work with others when we need to pool our resources. In terms of military power, this defence policy means that we must have the capacity to:

- **act independently** where we have unique strategic interests at stake, and in relation to which we would not wish to be reliant on the combat forces of any foreign power;
- **lead military coalitions** where we have shared strategic interests at stake with others, and in relation to which we would be willing to accept a leadership role, in part to compensate for the limited capacity or engagement of others; and
- **make tailored contributions** to military coalitions where we share wider strategic interests with others and are willing to accept a share of the burden in securing those interests.

The principal task for the ADF is to **deter and defeat armed attacks on Australia** by conducting independent military operations without relying on the combat or combat support forces of other countries. This means that the ADF has to be able to control our air and sea approaches against credible adversaries in the defence of Australia, to the extent required to safeguard our territory, critical sea lanes, population and infrastructure.

After ensuring the defence of Australia from direct attack, the second priority task for the ADF is to **contribute to stability and security in the South Pacific and East Timor**. This involves conducting military operations, in coalition with others as required, including in relation to protecting our nationals, providing disaster relief and humanitarian assistance and, on occasion, by way of stabilisation interventions.

The next most important priority task for the ADF is to **contribute to military contingencies in the Asia-Pacific region**, including in relation to assisting our Southeast Asian partners to meet external challenges, and to meeting our alliance obligations to the United States as determined by the Australian Government at the time. The strategic transformation of the region will mean that Australia should be prepared to make contributions - including potentially substantial ones - to such military contingencies in support of our strategic interests.

Finally, the ADF has to be prepared to **contribute to military contingencies in the rest of the world**, in support of efforts by the international community to uphold global security and a rules-based international order, where our interests align and where we have the capacity to do so.

As a result of these priorities, the ADF of 2030 will need to be a more potent force in certain areas, particularly undersea warfare and anti-submarine warfare (ASW), surface maritime warfare (including air defence at sea), air superiority, strategic strike, special forces, Intelligence Surveillance and Reconnaissance (ISR), and cyber warfare. It is the Government's judgement that these are the crucial areas which require particular attention to secure our unique strategic interests.

The major new direction that has emerged through consideration of current and future requirements is a significant focus on enhancing our maritime capabilities. By the mid-2030s, we will have a more potent and heavier maritime force. The Government intends to replace and expand the current fleet of six Collins class with a more capable class of submarine, replace the current Anzac class frigate with a more capable Future Frigate optimised for ASW; and enhance our capability for offshore maritime warfare, border protection and mine countermeasures.

While focusing on building our maritime capabilities, the Government has also been able to make provision for the enhancement of other key elements of the ADF, including our air combat capability (by proceeding with the acquisition of fifth-generation multirole combat fighters); strike capability (through the acquisition of long-range, land-attack strike missiles); the Army's fleet of heavy protected vehicles and other land force capabilities; the capabilities of our special forces; and in the emerging area of cyber warfare.

In addition, the Government has made provision for remediation of the current and projected force, by addressing crucial deficiencies and gaps that might limit the size and duration of deployments, or create unacceptable risks in some more demanding scenarios in which the weight, reach and relative combat power of major capabilities would make a crucial difference.

Finally, the Government has also made provision for remediating Defence's critical 'backbone', such as facilities and infrastructure, information and communications technology (ICT) systems, and warehousing and distribution system. To give effect to this remediation and reform, the Government has endorsed a Strategic Reform Program comprising a comprehensive set of reforms that will fundamentally overhaul the entire Defence enterprise, producing efficiencies and creating savings of about $20 billion. The Strategic Reform Program will deliver Australia a genuinely strategic national advantage: savings will be reinvested in capability and Defence's call on national resources will be constrained.

The Strategic Reform Program will drive efficiencies without compromising effectiveness. It draws on detailed analysis of almost every aspect of the Defence enterprise. Through the Strategic Reform Program, the Government will improve the development, procurement, maintenance and management of: military capability; ICT; the Defence estate; science and technology support; and general goods and services. Enterprise support services will be centralised, standardised and simplified. And through the introduction of an integrated workforce management system, Defence will make better use of the taxpayers' dollar by better matching the skills and competencies of its people to the jobs that need to be done.

# CHAPTER ONE:
# THE GOVERNMENT'S APPROACH TO DEFENCE PLANNING

## The Purpose of the Defence White Paper

1.1 This new Defence White Paper explains how the Government plans to strengthen the foundations of Australia's defence so that we are ready to meet the challenges of an uncertain strategic future. It sets out the Government's future plans for Defence, and how it will achieve those plans.

1.2 In particular, this new Defence White Paper lays out the Government's future plans for the development of Force 2030, including the major capability investments that will need to be made in the coming years. Most importantly, it explains the level of resources that the Government is planning to invest in Defence over coming years and what the Government, on behalf of the Australian people, expects in return from Defence.

## The Long-Term Nature of Defence Planning

1.3 Defence planning is, by its very nature, a complex and long-term business. This is driven by the nature of military technology, the very long lead times involved in developing defence systems, which often take many years to acquire, the significant sums of public money involved, and not least, the complicated challenge of managing strategic risk in the face of future global and regional uncertainty.

1.4 Moreover, defence planning is one area of public policy where decisions taken in one decade have the potential to affect, for good or ill, Australia's sovereignty and freedom of action for decades to come. And, should we require defence capabilities in a crisis or conflict, they cannot be acquired overnight.

1.5 For these reasons, we have to make careful judgements about Australia's long-term defence needs. We have to clearly spell out what tasks we need Defence to be able to do, and what, and how much, is required by Defence in order to carry out these tasks. Such judgements, and the very clear guidance to Defence that results, are even more important in times of fiscal or strategic uncertainty. The global economic crisis is the most fundamental economic challenge facing this Government at the current time.

## Why Do We Need a White Paper Now?

1.6 Much has happened since 2000, when the last Defence White Paper was published, and more than enough to justify a new White Paper. For Australia to be well placed to meet the new strategic challenges of the 21st century, a new White Paper is essential.

1.7 Since 2000, we have seen the terrorist attacks on the United States in September 2001, followed by terrorist attacks across many parts of the world, including London, Madrid, Bali, Jakarta, and Mumbai. Australians were tragically killed and injured in many of these attacks. We have seen the commitment of Australian forces to Afghanistan, Iraq and the wider Middle East region, as well as closer to home in East Timor, Aceh (in response to the Indian Ocean Tsunami), Papua New Guinea (for its humanitarian assistance needs), Solomon Islands and Tonga.

1.8 Changes in the distribution of global power have become obvious in the past decade. China's rise in economic, political and military terms has become more evident. Pronounced military modernisation in the Asia-Pacific region is having significant implications for our strategic outlook.

1.9 State fragility, including in the South Pacific and East Timor, has demanded Australia's attention. We have had to further adapt our armed forces to operate in environments where partnerships between the ADF, civilian agencies and non-government organisations have become especially important. In the past decade we have also become increasingly more conscious of the potential security impacts of changing climate patterns, resource and energy scarcity, and persistent patterns of poverty and poor governance in many parts of the world.

1.10 We have also seen the more evident emergence over the past decade of new areas of risk, such as cyber warfare, space warfare and the remote possibility that weapons of mass destruction (WMD) might be borne directly to Australia by long-range ballistic missiles launched short of a nuclear war - more of a risk during the Cold War - or by terrorist groups that might seek access to such destructive weapons.

1.11 An additional layer of complexity was added during the preparation of this White Paper by the global financial crisis that began to be felt in earnest in the latter part of 2008. The Government has, quite properly, been concerned primarily with the economic and financial implications of this crisis. The impact of the crisis on long-term security trends has also been assessed and, as appropriate, factored into defence planning. This is further discussed in Chapter 4.

## Future Organisational Challenges

1.12 In addition to these external challenges, Defence faces a series of organisational and resource challenges that demand long-term reform and remediation. We need to ensure that Defence's people and systems are up to the challenges we are likely to face over coming years. Recruiting and retaining the skilled people needed by Defence will require long-term and deliberate strategies in the labour market of tomorrow. Effective management of Defence's supporting systems, such as logistics, facilities, and ICT, without which there is no effective defence capability, will be critical.

1.13 The pressure of the higher operational tempo that Defence has experienced since 2000 has put stress on Defence's capabilities, from wear and tear on equipment to the sustained higher activity levels faced by Defence's people. Too often the tempo of current operations has taken precedence over

proper planning for our personnel and capability needs in the future. We need strategies to ensure that our capabilities - and especially our people - can sustain that which we ask of them.

1.14 Some decisions on significant aspects of Australia's defence capability must be taken over the next few years, especially in relation to the next generation of our air combat and submarine forces, each of which are multi-billion dollar decisions requiring very long lead-times for project development, acquisition and entry into service.

1.15 We need to address these challenges as effectively and efficiently as possible. Highly effective budget and resource management in Defence can create a strategic national advantage, freeing up resources for investment in the capabilities we need, and reducing the pressure for increased defence spending.

## A Comprehensive Approach to Defence Planning

1.16 The Government decided from the outset to take a comprehensive approach to the development of a Defence White Paper. Determining our strategic policy goals, and deriving from these goals broad capability priorities, are necessary but not sufficient elements of a comprehensive approach to defence planning.

1.17 Today, more than ever, defence planning needs to be done in a 'whole of enterprise' way, with clear links between strategy, priorities and resources. The Government decided to develop a single integrated plan for the entire Defence enterprise, based on a clear strategic framework and a realistic budget.

## The Preparation of the White Paper

1.18 At each key stage of the White Paper's development, the National Security Committee of Cabinet met to discuss the central issues and provide specific strategic guidance and direction.

1.19 First, the Government examined the foundations of our defence policy and our strategic outlook. This included consideration of a comprehensive suite of intelligence assessments, and an assessment of the threats and risks that matter most for defence planning purposes. It also examined Australia's strategic interests, as well as the role played by our alliances and international defence relationships in enhancing our security.

1.20 Based on that examination, the Government reviewed the appropriate roles of our armed forces, Australia's strategic posture, and the capabilities we have today and are likely to need in the future. To this end, the Government considered the results of a comprehensive force structure review, which evaluated the ability of the force structure to achieve the strategic tasks required of it and presented options to address any force structure imbalances. The outcomes of the review are outlined in this White Paper.

1.21 The Government also examined the critical support functions required by our armed forces, through a comprehensive analysis of the Defence enterprise, including an independent audit of the Defence

Budget undertaken by Mr George Pappas. Based on this analysis, the Government has established a blueprint for further reform within Defence, to ensure that productivity is increased and further efficiencies are found in the critical support functions, and the maximum possible level of resources are directed to the development of capability.

## Defence and the Australian Community

1.22 The Government sought the views of the Australian community on our defence needs through the White Paper Community Consultation Program, led by Mr Stephen Loosley. This was an extensive effort to engage Australians from all walks of life, as well as defence specialists, academics, business and industry representatives and State and Territory governments. The Report of Findings of the Community Consultation Program was released by Government on 15 April 2009.

1.23 The Community Consultation Panel conducted 30 public meetings and 35 private meetings, and received 450 written submissions. These revealed a diversity of opinions about the future direction of Australia's defence policy. The Community Consultation Program found that the Australian community continues to support the concept that the ADF's primary function is to defend Australia and its interests. There is a broad consensus that the present strategic environment is relatively benign in terms of a major military threat to Australia. Given changing geostrategic circumstances, however, caution is also evident. Many in the community expect governments to maintain an effective military posture while ever the possibility of threat of attack, however remote, remains. Most Australians continue to support the alliance with the United States.

1.24 A significant number of people in the community agree that the ADF should have a force structure that will provide a credible deterrent and a capacity to protect Australia and our interests. Many expect that the ADF would be increasingly called upon to undertake regional stabilisation, humanitarian and disaster relief operations. This leads many to argue that Defence should be considered in a whole-of-government security context that includes aid programs and diplomacy, and contributions by non-government organisations.

1.25 The Community Consultation Panel was encouraged by the strength of the community's regard for the ADF and its personnel. Concern that the Australian Defence Force (ADF) is being stretched to unsustainable levels by a high operational tempo pervaded meetings and written submissions, and many contributors believe that generating and sustaining personnel capability would continue to demand focus and investment. The Community Consultation Panel also noted the special relationship that many communities have with Defence. There is overwhelming support for Defence's presence in regional communities and a desire to see investment in those communities and in a healthy defence industry base more generally.

## Transparency in Defence Planning

1.26 The Government is confident that this extensive process of review and consultation has resulted in a White Paper that gives all those with an interest in Australia's defence - the Australian community at large, members of the Defence organisation (both ADF and civilian), business and industry, and Australia's allies, partners and neighbours - a comprehensive account of our approach to Defence.

1.27 This accounting is important from a number of perspectives. Taxpayers and their elected representatives should have a clear idea of where their defence dollars are going and how the Government plans to manage strategic risks in the years ahead. Businesses with an interest in defence activities are entitled to sufficient information to guide their own investment and business planning decisions.

1.28 Other nations need to have a clear sense of why and how we develop our armed forces. Transparency in strategic affairs is crucial in building confidence in the international community. White Papers are valuable because they can increase the transparency of defence policymaking in ways that can help to build trust between nations. Australia needs to show by deed that it is serious about such transparency.

1.29 Finally, but no less importantly, members of the ADF and other parts of the Defence organisation should have a clear sense of what is expected of them. White Papers provide Defence's people with Government's policy directions, strategic priorities and expectations, offering a clear sense of the mission to which all Defence employees contribute.

1.30 The White Paper is written with all of these important audiences in mind. While being alert to the necessary levels of confidentiality required in relation to some aspects of defence planning, it seeks to set out the picture in as much detail as possible.

# CHAPTER TWO:
# DEFENCE AND NATIONAL SECURITY

## Defence and the Government's Broader Approach to National Security

2.1 National security is concerned with ensuring Australia's freedom from attack or the threat of attack, maintaining our territorial integrity and promoting our political sovereignty, preserving our hard-won freedoms, and sustaining our fundamental capacity to advance economic prosperity for all Australians. Defence is one element of our broader approach to national security, underpinning our capacity to act in the world by providing options when Government contemplates the use of force.

2.2 This Chapter is principally concerned with how Defence contributes to our broader national security, and in particular how the Government views the use of force in the context of our national security framework.

## Force in the International System in the Twenty-First Century

2.3 The first and best defence of the nation lies in the maintenance of a positive international environment in which states interact to mutual advantage and sources of potential conflict are dealt with before they evolve to the point where military responses are required.

2.4 Ultimately, however, the potential use of force by states is why, at the most basic level, armed forces exist. One of the most fundamental questions that the Government addressed in considering the White Paper was the issue of the use of force in the international system.

2.5 Under the Charter of the United Nations, states are required to 'refrain, in their international relations, from the threat or use of force against the territorial integrity or political independence of any state'. However, the use of force is permitted in certain circumstances - for example, where authorised by the United Nations Security Council or in self-defence. The manner in which force is employed in those circumstances is itself subject to constraints under international law.

2.6 Australia has a proud record of contributing to the development of a post-World War II international order that seeks to restrain aggression in the international system. States should always conform to their international obligations when making decisions about the use of force, in order to establish the legal basis for that use as well as the nature and method of force used. Failure to do so could inevitably lead to a loss of legitimacy by the state, or coalition of states, using force.

2.7 As a matter of policy, the Government seeks to avoid, wherever possible, having to employ force or threaten its use. We must be especially careful to recognise that not all responses to security challenges should be military ones involving the use of force. There will be many occasions when other means provide better responses.

## The Use of Military Power

2.8 For all of that, the Government recognises the need to maintain and, on occasion, use military power as a means to back up and give effect to Australia's policy aims. Maintaining a credible defence capability is a crucial contributor to our security, as it can serve to deter potential adversaries from using force against us or our allies, partners and neighbours.

2.9 Should Australia have to use force, we would have regard for our foreign relations and international standing, including our active membership of the United Nations and our support for a rules-based global security order.

2.10 Should force have to be used or threatened, it should always be employed with precision, in a manner consistent with our international obligations, with clear goals in mind, and with a clear appreciation of the long-term consequences of its use. Assessing the consequences of the use of force, and planning to secure the peace and the post-conflict environment, are vital elements of effective statecraft - and often more important than the planning and conduct of military operations.

## The Future Role of Armed Forces

2.11 The Government considered very carefully the question of the future role of our armed forces, what they should be structured to do, and how to balance their different potential roles - roles that place differing demands on Defence's people, systems and capabilities.

2.12 Traditionally, inter-state wars, involving conflict between armed forces purpose-built for engaging in conventional combat, have been the main focus of defence planning. In recent years, intra-state conflict among different political or ethnic groups has come more to the fore in places such as Afghanistan and elsewhere, where conventional military forces have had to work alongside civilian agencies and non-government organisations. Moreover, threats from some non-state global actors, such as al-Qaeda, have meant that armed forces have had to be employed against new types of adversaries.

2.13 How to balance these different demands on the ADF is the subject of the following sections of this Chapter.

### *The Future of Major War*

2.14 The Government specifically considered the issue of major war and whether, after the tragedies of the twentieth century, major war has had its day. This is a crucial question for defence planning, as the answer has the potential to reshape the way in which we consider the structure and role of our armed forces.

2.15 War among highly advanced militaries is the most complex, and dangerous, strategic challenge faced by nations. Preparing for it requires the investment of very significant materiel, technological and human resources. If we take the view that the risk of war in the traditional sense, especially among the major powers, is remote to the point of being unthinkable, we would be able to radically change the way

we think about our armed forces. We would be able to free up at least some of the significant resources required to maintain sophisticated armed forces and use those resources for other purposes.

2.16 We need to make a judgement about this very carefully, because being able to fight high intensity wars, and to what degree and extent, is the most difficult judgement to make in defence planning terms. This is because being able to fight and win on your terms in high intensity wars depends ultimately on having the right force structure and military capabilities.

2.17 After careful examination, it is the Government's view that it would be premature to judge that war among states, including the major powers, has been eliminated as a feature of the international system. While growing economic and other interdependencies between states will act as a brake on the resort to force between them, and high-intensity wars among the major powers are not likely over the period to 2030, such wars cannot be ruled out.

2.18 Shows of force by rising powers are likely to become more common as their military capabilities expand. Growing economic interdependence will not preclude inter-state conflicts or tensions short of war, especially over resources or political differences. Moreover, there is a risk that the constraints on major war imposed by the international system might break down unexpectedly and relatively quickly, were it to be the case that major power interests were fundamentally at stake in a crisis, and if one or more were to miscalculate the reaction of others at such a time.

2.19 For these reasons, it is the Government's policy that the main role of the ADF should continue to be an ability to engage in conventional combat against other armed forces. This is not to say that the ADF cannot or will not be used for other purposes, as the following sections make clear.

### *The Future of Intra-State Conflict*

2.20 The Government considered the issue of intra-state conflict and what it means for our armed forces. It has judged this type of conflict will be an enduring feature, and the most common form, in the period to 2030 and that the ADF needs to be prepared to play its part in dealing with such contingencies.

2.21 ADF deployments into situations of armed conflict short of conventional war may be required. These could be in the form of humanitarian, stabilisation, counter-insurgency, peacekeeping and reconstruction interventions, such as we have undertaken over recent years in Cambodia, Namibia, Bougainville in Papua New Guinea, Somalia, Rwanda, East Timor, Solomon Islands, southern Iraq and Afghanistan.

2.22 In such circumstances, the ADF has a particular focus on establishing a secure environment in conflict zones. These could involve separating warring ethnic or other groups or deterring or defeating insurgents or terrorists fighting a legitimate government and intimidating local populations.

2.23 Our current combat operations in Afghanistan are an example of such a deployment. Like other counter-insurgency operations, Afghanistan is proving to be a protracted, intensive process. Success will be crucially dependent on ensuring that the local population is protected and separated from the insurgents, economic and social reconstruction occurs, indigenous security capacity is strengthened, insurgent networks are disrupted and the prospects for a long-term political solution are enhanced.

2.24 The military forces required for conventional combat against other military forces are not always well suited for conflicts within societies, where combatants may not be easily distinguishable and where military and civilian agencies need to work side-by-side to secure and rebuild broken communities.

2.25 The ADF will tend to be superior in combat power to most opponents encountered in such conflicts, because of its strengths in areas such as intelligence, surveillance, precision targeting, manoeuvre and firepower. But the ability of irregular opponents such as insurgents and terrorists to exploit new technologies means that, in relatively low-risk and effective ways, those groups can prevent security being established in strife-torn environments and make the delivery of essential services and long-term reconstruction difficult if not impossible.

2.26 As we can see in Afghanistan, security objectives in intra-state conflict situations are increasingly interdependent with broader political, humanitarian, economic and development goals. These operations require a 'whole-of-government' response on the part of military and civilian agencies, extending beyond individual agency operations, and integrating security and other objectives into comprehensive political-military strategies. The ADF's capacity to deploy rapidly and establish a basic level of security at the outset of a crisis situation will often be an essential element of any comprehensive approach - but it will, in nearly all cases, not be a sufficient response in itself.

2.27 In this context, it will be crucial to ensure that the ADF can work effectively alongside civilian agencies that specialise in law enforcement, development assistance, humanitarian relief, health, correctional services, municipal services (such as water and infrastructure), education, and political and administrative governance. Operations in such environments will tend to be personnel-intensive, and require a significant physical presence on the ground to provide visible reassurance to the population being protected and supported.

2.28 The Government is committed to building Australia's capacity in these areas to ensure that we are well placed to deal with the challenges posed by intra-state conflict. The Asia Pacific Civil-Military Centre of Excellence will inform Australia's response to these challenges through research, education and doctrine development drawn from the accumulated experience of the ADF and other parts of the Australian Government, the United Nations, other nations and non-governmental organisations.

### *Threats from Non-State Global Actors*

2.29 Beyond being equipped to deal with conventional war and intra-state conflict, increasingly our armed forces have to be able to contend with non-state global actors. Groups like al-Qaeda and its associates will continue to employ terror across the globe. These groups are not necessarily the same as those to be found in intra-state conflict, although they might form partnerships, such as that between al-Qaeda and the Taliban in Afghanistan. Non-state global actors would gain greater strategic significance than they currently possess were they to attain WMD.

2.30 The main effort against such groups will continue to be undertaken by our law enforcement and intelligence agencies. From a defence planning perspective, ADF capabilities will have a supporting role in countering non-state opponents by assisting in their disruption and defeat where necessary. This might, for instance, take the form of operations against terrorist camps and havens, such as the ADF undertook in Afghanistan soon after the attacks on the United States in September 2001. We might need to be prepared to intercept, disrupt, and possibly destroy WMD in circumstances where civilian agencies do not have the means or reach to take appropriate action. Defence needs to be able to support such efforts and, where necessary, lead them.

2.31 The capabilities of the ADF provide the basis for sophisticated counter-terrorism operations against such non-state groups, especially where there might be a need for highly specialised intelligence, surveillance and reconnaissance (ISR) capabilities, or precision targeting and strike.

### *Domestic Security and Emergency Response*

2.32 Of course, our national security involves many concerns other than those involving the use of armed force. The security of our community, our nation's economy and the integrity of our environment can all be threatened by illegal activities (such as people smuggling, illegal fishing and the drug trade), by pandemic disease outbreaks and by quarantine breaches. Natural disasters such as cyclones, earthquakes, floods and bushfires can also threaten the security and safety of the Australian people.

2.33 The ADF and other agencies of Defence have significant capabilities that can be used to support domestic security, border protection, counter-terrorism, emergency response and disaster recovery. Defence support to these contingencies is available under either the 'Defence Assistance to the Civil Community' mechanism, or as 'Defence Force Aid to the Civilian Authority', as provided under Part IIIAAA of the *Defence Act, 1903*. Defence's vital role in supporting domestic security and emergency response efforts will continue, and Defence will continue to support these areas of Commonwealth responsibility. In addition, Defence will continue to provide a substantial component of the nation's air traffic management system, manage several joint-user and Defence-owned airports used by the civilian aviation sector, and provide Australia's hydrographical and maritime charting service.

### *Humanitarian Assistance and Disaster Relief*

2.34 Australia is a rich and prosperous nation. We are well placed to assist other nations in times of distress, particularly those within our immediate region. In recent years, Australia has been able to deploy defence capabilities to aid regional humanitarian assistance and disaster relief efforts. The ADF provided critical disaster recovery assistance following events such as the Boxing Day tsunami of 2004, the 2005 earthquake in Pakistan, and the floods caused by cyclone Guba in Papua New Guinea in 2007.

2.35 The Government's policy is that Defence will continue to provide a range of specialised capabilities on a scale and of a kind available from no other Australian agency. These capabilities can also be deployed in support of regional humanitarian assistance and disaster relief.

# CHAPTER THREE:
# MANAGING STRATEGIC RISK IN DEFENCE PLANNING

## The Limits of Military Power: Balancing Strategic Weight with Resources

3.1 Defence planning cannot take place in a resource-free environment. No sensible approach to defence planning simply starts with a blank sheet in budgetary terms and assumes that unlimited funds will be found to fund every capability aspiration. We need to establish very carefully, at the outset, the level of resources we can reasonably afford to devote to defence purposes. We also have to be realistic about our strategic weight and reach, our capacity to influence international affairs militarily beyond our immediate neighbourhood, and the limits of our resources, particularly in relation to the size of our population and the scale of our economy and industrial base.

3.2 The Government's ability to fund the nation's defence over the medium to long-term will be determined by the relative priority given to defence compared with other competing demands on the Commonwealth budget. Over time, it will also be constrained by a range of factors that impact on the affordability of defence spending, such as changing economic and demographic conditions, the ageing of the population, and rising health and pension costs.

3.3 Of course we should not spend less on defence than prudence would dictate, taking into account our strategic outlook and our willingness to accept only a certain degree of risk to our security.

3.4 How to balance competing national priorities is central to the Government's decisions about the future defence needs of the nation.

## Managing Strategic Risk

3.5 From the outset, we need to have a clear view of how much strategic risk Australia is prepared to bear, and hence how much military power we should seek to develop. The more Australia aspires to have greater strategic influence beyond our immediate neighbourhood - that is to say the ability to exert policy influence that is underpinned by military power - the greater the level of spending on defence we need to be prepared to undertake. If we want to back up strategic influence with military power, we have to be prepared to invest the resources required - and be confident that the security benefits outweigh those costs.

3.6 Alternatively, decreasing the level of investment in Defence means accepting the risk that our strategic circumstances might, in the future, deteriorate more quickly than we could develop the forces we might need to deal with such a situation.

3.7 The key problem in defence planning is how to take account of strategic risk. Today, Australia is one of the most physically secure countries in the world. But that does not mean we are destined forever to be secure from external threat. We have to consider the possibility of potentially adverse changes in our strategic outlook, especially in the Asia-Pacific region. The probabilities of such changes occurring are low, but not so low as to be beyond contemplation.

3.8 Such changes need not come in a rush. Over time, there may be developments that, individually, do not fundamentally alter the balance of risks we face, but cumulatively change our strategic outlook for the worse. For example, major powers with different interests from ours might steadily increase their access to facilities and operating opportunities in our approaches, though at present this is a remote prospect. Another example might be the steady acquisition by our neighbours of commercially available technologies that might materially erode our traditional strategic capability advantages. In such circumstances, we would need to assess very carefully the impacts on the ADF's ability to operate in our immediate region, and possibly adjust our plans as a consequence.

3.9 Major strategic surprises are always possible, and strategic shocks should be expected at some stage over the foreseeable future. In the early 1980s, no-one was seriously predicting the end of the Cold War or the disintegration of the Soviet Union a decade later. It would be unwise to act on the basis that there is no credible risk of the international environment changing in ways that would increase the threat of armed attack on Australia or otherwise threaten our strategic interests in significant ways.

### *Defence Planning and Strategic Risk Management*

3.10 A key element in defence planning is to establish clear parameters within which to judge risks and threats in our strategic outlook. Above all, we must decide which of these risks or threats are likely to require non-discretionary attention by Australia, and which can be managed in more selective and discretionary ways.

3.11 Without such a framework we are likely to respond only to the perceived risks and threats of today, leaving unattended more enduring risks. This could drive flawed force structure decisions that would have impacts over several decades. When making force structure and capability decisions it is especially important to focus not only on risks that, today, appear to be more likely than others.

3.12 In defence planning, as in other areas of public policy, we cannot eliminate all possibilities and risks, as resources are always going to be constrained and strategic surprises are almost certain.

### *Strategic Warning*

3.13 Strategic warning is a crucial element of defence planning. We must remain alert to developments in the world around us. Through high-quality intelligence assessment and policy development work, we are likely to get strategic warning of major changes in our strategic outlook - but not necessarily in time to build the capabilities that we might need to deal with those changes.

3.14 Australia has an enduring strategic interest in ensuring that any attempt by nearby states to develop the capacity for sustained military operations against us would be detected with as much warning time as possible. This would preferably be at least a decade, given the amount of lead-time involved in building defence capabilities.

3.15 We can be confident of getting this amount of strategic warning time, in part because of our current level of military capability relative to our region. The threshold of military modernisation required, on the part of all but the major powers, to develop a capacity to significantly affect our strategic interests would make any such attempt detectable.

3.16 We also need to pay attention to military modernisation in specific capability areas. While not necessarily generating significant improvements in the capacity of others to sustain complex operations against us, such improvements could nonetheless significantly increase the demands on the ADF in other situations. As others in the region build their military capabilities, we cannot be confident that we would have long warning of changes to their ability to significantly challenge the ADF in specific capability areas. The increased prevalence of high-speed anti-ship cruise missiles and advanced torpedoes are two examples of this phenomenon. Such changes in military capability are going on all the time and we need to anticipate them and plan accordingly in our force development process.

### *Fundamental Changes in Our Strategic Outlook*

3.17 We also need to consider the circumstances of a more dramatic and, in defence planning terms, sudden deterioration in our strategic outlook. While currently unlikely, a transformation of major power relations in the Asia-Pacific region would have a profound effect on our strategic circumstances. Of particular concern would be any diminution in the willingness or capacity of the United States to act as a stabilising force.

3.18 In circumstances where a global transformation in economic power and commensurate redistribution of strategic power continued to the point where its cumulative effect required us to alter our assumptions about the weight and reach of US strategic primacy, the planning assumptions underpinning this White Paper would require fundamental reassessment.

3.19 Whatever the cause of any significant deterioration in our strategic circumstances, it would likely require a more powerful force than the one presently contemplated. The ADF required to undertake the tasks outlined in this White Paper would represent a sound basis for building such a force, particularly in relation to our strike, maritime, air combat and special forces capabilities. The Government is confident that, as a result of the decisions taken in this White Paper, it has provided a significant strategic hedge against future uncertainty.

### *Strategic Hedging in Defence Planning*

3.20 We cannot have perfect knowledge of the future, and the range of uncertainties is disconcertingly wide. As new information becomes available and we reassess our strategic outlook, we need to be prepared

to adjust the balance of our portfolio of capabilities and the way in which we hedge against different types of risk.

3.21 For example, it might become increasingly apparent over time that we have to acquire more capability in relation to the heightened risk of inter-state war. In this instance, we might acquire more advanced submarines than we are currently planning to, or more air combat fighters. Alternatively, experience might indicate a requirement for more capacity in relation to stabilisation tasks in our immediate neighbourhood, where potentially more complex operations might increasingly become a feature of our operational environment.

3.22 It might become evident that the risk of cyberattack is even greater than we had first thought, and so we might decide to build on a foundation in this area by further enhancing our cybersecurity capabilities. Other risks such as the development of ballistic missiles by rogue states or the acquisition of WMD by terrorists might become more pronounced, and would need to be countered. It might also become apparent that newer, smarter ways of achieving our strategic objectives are becoming available - for instance, as a result of our research and development work - such that we are able to free up resources for other purposes, or do more with the resources we have.

3.23 As in other areas of public policy, the more balanced our portfolio of capabilities, the more we will be able to hedge and re-balance as required. The key judgements the Government has drawn from these consideration is firstly that we need to have a solid foundation upon which to build, adapt and take advantage of opportunities. Secondly, that we need to review periodically and rigorously whether the mix and scale of our capabilities are appropriate to the emerging challenges in our strategic outlook.

### *Regular White Papers and Improved Defence Strategic Planning*

3.24 In order to periodically adjust the lens through which we view the challenges in our strategic outlook, the Government intends to prepare a new Defence White Paper at intervals no greater than five years. This quinquennial White Paper development process will be the centrepiece of the Government's new strategic risk-based approach to defence planning.

3.25 To ensure the development of future Defence White Papers is as comprehensive as possible, the Government intends to conduct, in the year prior to any White Paper, a formal strategic risk assessment, comprehensive force structure review, and an independent audit of the Defence enterprise to ensure the affordability of Defence plans, and the efficiency and effectiveness of resource usage by Defence. These processes will review the continued efficacy of Defence management, support and enabling functions and the affordability of Defence's future program of work. The capacity to develop regular White Papers will also be strengthened by an improved internal strategic planning process within Defence, something discussed more fully later in this White Paper.

# CHAPTER FOUR:
# AUSTRALIA'S STRATEGIC OUTLOOK

4.1 This Chapter sets out in the plainest possible terms Australia's strategic outlook and, in particular, the defence planning conclusions that have been drawn from assessments of that outlook. It is based on a comprehensive suite of White Paper intelligence assessments and a strategic risk assessment of the threats that matter most for defence planning purposes.

## The Global Strategic Environment

4.2 Since World War II, Australia's strategic outlook and defence planning have been shaped most fundamentally by the global distribution of power, and in particular the strategic primacy of the United States. The United States has played a stabilising role across the world and especially so in the Asia-Pacific region. This has not, of course, meant that Australia has been able to avoid attending to its own basic defence needs, something successive Australian governments have recognised since the 1970s.

4.3 Australia's strategic outlook over the coming decades will continue to be shaped by the changing global distribution of economic, political and military power, and by the future role and weight of the United States. We are not likely to see the emergence of an alternative political and economic system to rival the network of liberal, market-based democracies that emerged after World War II, as the communist system attempted to do last century during the Cold War. Globalisation will ensure that economic interdependence links states and regions together more closely.

4.4 We will, however, see changed strategic power relativities and an increasingly 'multipolar' global order, driven by changing patterns of underlying economic power and political influence. Our long-term planning will have to recognise that the range of even moderately likely strategic futures is wide.

4.5 Further complicating this picture, the convergence of trends such as global demographic change and population movements, environmental and resource pressures (whether caused by climate change or other dynamics), global public health risks and even transnational crime will increase the risk of conflict over resources, political instability in fragile states and potentially destabilising mass migration flows. Intra-state conflict, such as civil war and conflict involving non-state actors, is likely to be the most common form of conflict over the period considered by this White Paper.

4.6 Regional conflicts, such as in the Middle East and Africa, will likely continue to be a risk in the international system. Clashes between and within states in these regions are likely to arise for diverse reasons, such as the breakdown of fragile states; disputes over territory; access to resources, water

and energy; population movements, environmental crises or food shortages; conflicts between ethnic or religious communities; or efforts to promote ideological or nationalist goals.

4.7 Changing climate patterns, combined with booming population growth, will sharpen competition for scarce food, water and energy resources in many parts of the world, particularly in Africa and the Middle East, and are likely to exacerbate existing population and infrastructure problems in developing countries in those regions, straining their capacity to adapt and cope. Large-scale strategic consequences of climate change are, however, not likely to be felt before 2030.

### *The Global Economic Crisis*

4.8 The world is currently facing the most serious global economic and financial crisis in decades. The crisis is still unfolding, as are its strategic impacts. The strategic effects of the crisis will depend on its duration, depth and the differences in its impacts across nations and regions. The longer the crisis persists, the greater the strategic consequences could be. Many nations are facing recession or at least a dramatic slowdown in growth. Within some nations, this has already led to low levels of instability and protest. Globally, because the degree of potential economic damage will differ from nation to nation, it is possible that we could see significant shifts in relative economic power between nations over time.

4.9 Developed countries will suffer the largest reductions in growth. Those developing nations that have struggled, even in good times, to integrate into the global economy or that are heavily dependent on exports to advanced economies or remittances will be very seriously affected. Fragile and vulnerable nations, particularly in our region, maintain few significant reserves with which to buttress their economies from the crisis. Such nations may struggle to meet the demands of their citizens, and may be easier targets for foreign influence in ways that might be unfavourable to long-term strategic stability.

4.10 The global economic crisis also presents the potential for extremists in Southeast and South Asia, and elsewhere, to seek to capitalise on resentment fuelled by economic woes as governments struggle with diminished revenues and are forced to cut budgets, including in critical areas such as health programs, food and fuel subsidies, or even counter-terrorism activities.

4.11 For nations better able to weather the crisis, budgetary constraints are likely to be felt in some armament programs, within our region and globally, impacting on the longer-term trends in military modernisation that have typified the recent past. The crisis could also, with its associated uncertainty and volatility, reinforce existing insecurities. Some nations could thus respond to a more uncertain strategic environment by increasing their military budgets. Within our region, these different approaches can change the relative strategic weight of nations as some nations fall further behind, while others continue ongoing, or commence new, modernisation programs.

4.12 The global economic crisis is likely to accelerate some established trends such as the shift of economic weight to the Asia-Pacific region. Differences in timing and strength of recovery between regions

and states could alter some economic trajectories, while continued budgetary pressure will have consequent impacts on power relativities. In the Asia-Pacific region, the likely effect of the crisis on military modernisation will be to delay planned capability acquisitions and improvements and curtail exercising and operational budgets. In Northeast Asia, China is likely to be able to continue to afford its foreshadowed core military modernisation. Over the long term, this could affect the strategic reach and global postures of the major powers. There are many potential strategic scenarios that could emerge. Any future that might see a potential contraction of US strategic presence in the Asia-Pacific region, with a requirement for allies and friends to do more in their own regions, would adversely affect Australian interests, regional stability and global security. Even so, the United States has large interests in remaining strategically engaged in the Asia-Pacific region.

4.13 Looking beyond the immediate challenges of this crisis, by 2030, any changes in economic power will affect the distribution of strategic power. Stability in any multipolar global order will most likely result from economic interdependence and pragmatic political cooperation among the major powers. While the potential for those powers to cooperate to manage their relationships and global stability is high, it is by no means certain. Tensions could arise. If nothing else, the potential always remains for nations to miscalculate the interests and reactions of other nations.

### *US Strategic Primacy*

4.14 The United States will remain the most powerful and influential strategic actor over the period to 2030 - politically, economically and militarily. Its strategic primacy will assist in the maintenance of a stable global strategic environment. China, India, Russia, Japan and the European Union will exercise global influence in differing degrees and acquire varying levels of military strength to promote their interests.

4.15 While the United States will maintain the capability to project force globally from its own territory, it will likely continue to judge that its forward deployed forces, including in the Western Pacific and the Middle East, provide reassurance to allies and partners, as well as providing operational flexibility in crises.

4.16 Balancing the capabilities required for unconventional operations such as counter-insurgency and stabilisation, while retaining strong high-technology conventional forces, will be a major challenge for US defence planners, and the United States will continue to seek further deepening of its strategic relationships with capable potential coalition partners, such as Australia. Within the timeframe of this White Paper, the United States will continue to rely on its nuclear deterrence capability to underpin US strategic power, deter attack or coercion by other nuclear powers, and sustain allied confidence in US security commitments by way of extended deterrence.

4.17 Will the United States continue to play over the very long term the strategic role that it has undertaken since the end of World War II? It remains the case that no other power will have the military, economic or strategic capacity to challenge US global primacy over the period covered by this White Paper. But

the United States might find itself preoccupied and stretched in some parts of the world such that its ability to shift attention and project power into other regions, when it needs to, is constrained. This is likely to cause the United States to seek active assistance from regional allies and partners, including Australia, in crises, or more generally in the maintenance of stable regional security arrangements.

## The Strategic Environment in the Asia-Pacific Region

4.18 Economic growth in the Asia-Pacific region should help to build a sense of shared purpose and strategic interests, which in turn will assist stability and security in our wider region. While the region has enjoyed strong economic conditions since the 1997 Asian financial crisis, the global economic crisis has resulted in new challenges that will affect medium-term economic prospects, as discussed earlier.

4.19 Developments in our wider region are critical to our security. There are likely to be tensions between the major powers of the region, where the interests of the United States, China, Japan, India and Russia intersect. As other powers rise, and the primacy of the United States is increasingly tested, power relations will inevitably change. When this happens there will be the possibility of miscalculation. There is a small but still concerning possibility of growing confrontation between some of these powers.

4.20 The wider Asia-Pacific region will see the continued evolution of mechanisms aimed at building confidence among the major powers, providing tools for managing crises or misunderstandings, developing cooperative approaches to issues of regional concern, and strengthening strategic dialogue and transparency. The evolution of the security environment in Northeast Asia will turn particularly on how the strategic dynamics between the United States, China and Japan are managed over this period.

4.21 Japan is, and will remain, a significant military power. Within its alliance with the US, Japan is likely to expand slowly its strategic engagement, including by way of contributions to UN operations and multinational coalitions. Japan's alliance with the United States has been a key stabilising feature of the postwar regional security environment and will continue to play a vitally important role. Were Japan unable to rely on that alliance, its strategic outlook would be dramatically different, and it would be compelled to re-examine its strategic posture and capabilities.

4.22 A major conflict on the Korean peninsula remains a possibility, but other scenarios are more likely. Even though the North Korean regime has proven resilient, its collapse cannot be ruled out. That event would require deft management by the Korean people, but also by the major powers of the region. Any integration across the 38th parallel would be a considerable economic burden on any reunited Korean nation and other countries in the region. All states would have a common interest in assisting the Korean people to successfully manage any reunification of the peninsula.

### *The Strategic Implications of the Rise of China*

4.23 Barring major setbacks, China by 2030 will become a major driver of economic activity both in the region and globally, and will have strategic influence beyond East Asia. By some measures, China has the potential to overtake the United States as the world's largest economy around 2020. However, economic strength is also a function of trade, aid and financial flows, and by those market-exchange based measures, the US economy is likely to remain paramount.

4.24 The crucial relationship in the region, but also globally, will be that between the United States and China. The management of the relationship between Washington and Beijing will be of paramount importance for strategic stability in the Asia-Pacific region. Taiwan will remain a source of potential strategic miscalculation, and all parties will need to work hard to ensure that developments in relation to Taiwan over the years ahead are peaceful ones. The Government reaffirms Australia's longstanding 'One China' policy.

4.25 China has a significant opportunity in the decades ahead to take its place as a leading stakeholder in the development and stability of the global economic and political system. In coming years, China will develop an even deeper stake in the global economic system, and other major powers will have deep stakes in China's economic success. China's political leadership is likely to continue to appreciate the need for it to make a strong contribution to strengthening the regional security environment and the global rules-based order.

4.26 China will also be the strongest Asian military power, by a considerable margin. Its military modernisation will be increasingly characterised by the development of power projection capabilities. A major power of China's stature can be expected to develop a globally significant military capability befitting its size. But the pace, scope and structure of China's military modernisation have the potential to give its neighbours cause for concern if not carefully explained, and if China does not reach out to others to build confidence regarding its military plans.

4.27 China has begun to do this in recent years, but needs to do more. If it does not, there is likely to be a question in the minds of regional states about the long-term strategic purpose of its force development plans, particularly as the modernisation appears potentially to be beyond the scope of what would be required for a conflict over Taiwan.

## Southeast Asia

4.28 A secure and stable Southeast Asia is in Australia's strategic interests as neither a source of broad security threat, nor as a conduit for the projection of military power against us by others. Southeast Asia should remain largely stable, and reform-minded enough to sustain reasonable rates of development. The global financial and economic downturn is likely to impinge on political stability in regional countries to varying degrees.

4.29 Power relativities in Southeast Asia will shift, but less than in Northeast Asia. Southeast Asia will benefit from its proximity to China and India, but will also feel their competitive pressure. China will make

its presence felt through soft as well as economic power, including aid, multilateral diplomacy and extensive bilateral cultural and educational links. But China will have even more interest in convincing regional countries that its rise will not diminish their sovereignty.

4.30 Economic progress and social development will continue to be priorities for the countries of Southeast Asia. They will continue, in differing degrees, to be beset by security problems such as terrorism, insurgency and communal violence, but regional governments as a general rule appear to be able to contain these problems. Burma remains a serious challenge for the region with the potential for instability to spill across its borders.

4.31 Counter-terrorism responses in Southeast Asia will most probably continue to limit the expansion of local Islamist extremist networks; although vigilance will be required for many years yet before the threat can be declared to have diminished to negligible levels. The risk of terrorist attacks in Southeast Asia with a potential to affect Australian interests, or threaten Australians, will remain of concern for the foreseeable future.

### *Indonesia*

4.32 Indonesia has made remarkable gains in the past decade. It has managed a successful transition to multiparty democracy, embarked on the long journey of economic reform, and proven to be a strong partner in the fight against terrorism. It is likely that these positive trends will continue, and that Indonesia will continue to evolve as a stable democratic state with improved social cohesion. As the largest country in Southeast Asia, it will continue to play a crucial role in the Association of Southeast Asian Nations (ASEAN), while also seeking other avenues to play a constructive role more broadly in global affairs.

4.33 Although considerably less likely, a weak, fragmented Indonesia beset by intractable communal problems, poverty and failing state institutions, would potentially be a source of threat to our own security and to Indonesia's other neighbours. An authoritarian or overly nationalistic regime in Jakarta would also create strategic risks for its neighbours. Indonesia's democratic development therefore continues to be very welcome. The evolution of democracy gives Indonesia a sound foundation for long-term stability and prosperity, and positive relationships with its neighbours. This is in keeping with Australia's strategic interests.

## The South Pacific and East Timor

4.34 Australia is linked to the South Pacific and East Timor by shared geography and history. For both humanitarian and strategic reasons, Australia has an enduring interest in helping to build stability and prosperity in this region. Australian interests are inevitably engaged if countries in the region become vulnerable to the adverse influence of strategic competition.

4.35 Unfortunately, many South Pacific island states and East Timor will continue to be beset to some degree by economic stagnation and political and social instability. Weak governance, crime and social

challenges will continue to jeopardise economic development and community resilience, against a background of climate change (to which many of these states are vulnerable) and more frequent natural disasters. On occasion, these factors will cause security problems of the kind to which Australia may need to respond directly with appropriate forms of humanitarian and security assistance, including by way of ADF deployments.

4.36 Papua New Guinea's long-term prospects are enhanced by its significant resources and relatively large population and land area. But it faces huge challenges, including very high unemployment, criminality and rates of HIV/AIDS. Many of Papua New Guinea's basic social and economic indicators are declining from an already low base. Major efforts are required to build and maintain basic infrastructure, improve law and order, and improve education and health standards.

4.37 East Timor is likely to remain, for some time, challenged by significant hurdles to progress in political, security and social reform, as well as difficulties in ensuring food security, adequate infrastructure and employment. Enduring cultural and political divisions will create the conditions for potential periodic outbreaks of violence. Solomon Islands will continue to face significant political, social, economic and security challenges. Fiji, which has the resources and population base to be the most self-sufficient of the island states, is plagued by a military that illegally interferes in the democratic process. This has had serious consequences for living standards, economic prospects and the rule of law.

## The Middle East and Africa

4.38 The Middle East will remain violent over the period to 2030. Iran's strategic ambitions, and nuclear aspirations, will, if unchecked, be a source of instability in the region and beyond. A number of these states will enhance their defence capabilities and, in some cases, seek greater levels of security assurance from the United States. If regional Middle East peace efforts are unsuccessful, continued tensions between Israel and the Palestinians, and with its neighbours including Lebanon, will cause further turbulence in the Middle East, and may lead to conflict.

4.39 In Africa, there are reasonable prospects for better economic growth, governance and reduced frequency of conflict. Africa is also growing in relative importance as a source of the world's energy supplies. At the same time, economic development is likely to be uneven and insecurity and instability are likely to continue in some countries, exacerbated by environmental pressures. This will lead to calls for international assistance in addressing intra- or inter-state conflicts, either directly or through support for African peace-making and peacekeeping. The growth of Islamist extremist groups in North Africa and the Horn of Africa poses a risk to security regionally and beyond.

## South Asia

4.40 India's expanding economy and greater external engagement will give it a stronger voice and stake in strategic affairs. It is becoming more important economically and strategically. By some measures, India is expected to overtake Japan as the third largest global economy in around five years. Like China, it

will be focused on fostering development while seeking recognition as a major power with increasingly global interests. It will also seek defence capabilities commensurate with its strategic weight and widening interests, including through the modernisation of its armed forces and the maintenance of a credible nuclear arsenal.

4.41 Pakistan will remain a pivotally important state. Its prospects will continue to be of concern, given its possession of nuclear weapons, its centrality to success in Afghanistan and the havens for Islamist terrorist networks located in Pakistan and, however remote at present, the risk of a radical Islamist capture of the state.

4.42 The prospect of miscalculation between India and Pakistan leading to conflict and, in the worst case, massive escalation, remains of significant concern.

4.43 The Indian Ocean will have greater strategic significance in the period to 2030. It will become an increasingly important global trading thoroughfare, particularly for energy supplies between Asia and the Middle East. There are a number of significant inter-state and intra-state conflicts along its periphery that have the potential to draw in other powers. Over time, and in response to these factors as well as transnational security issues such as piracy, the Indian Ocean is likely to host a larger military (particularly naval) presence. A number of major naval powers are likely to increasingly compete for strategic advantage in this crucial maritime region. Over the period to 2030, the Indian Ocean will join the Pacific Ocean in terms of its centrality to our maritime strategy and defence planning.

### *Afghanistan*

4.44 Afghanistan will require significant international support over the next decade or more. It will remain a challenged state and a potential source of ongoing instability in the region. This weakness will have broader implications because of Afghanistan's potential as a base for global Islamist terrorism and its role in the narcotics trade.

4.45 Success in Afghanistan will require the implementation of a genuinely integrated political-military strategy to address security, economic reconstruction and development, and political governance issues, coupled with the conduct of effective counter-insurgency operations and the building of capable indigenous security forces. This will require sustained and coordinated engagement on the part of the coalition of nations, which includes Australia, assisting Afghanistan.

4.46 Any solution to the problems faced by Afghanistan will need to address the issue of insurgent safe-havens located in Pakistan, and there will need to be found a comprehensive solution to the problems of cross-border movement between Afghanistan and Pakistan by al-Qaeda terrorists and Taliban insurgents.

## Islamist Terrorism

4.47 Islamist terrorism will likely remain a destabilising component of the global security environment for at least a generation. For the foreseeable future, the most concentrated presence of terrorist groups

and activity will likely be in the Middle East, North and East Africa, and South and Central Asia, where weak states and the continued resonance of those groups' ideologies will provide them with a relatively permissive operating environment and a supply of recruits.

4.48 Islamist terrorism will continue to pose a direct threat to Australia and Australian interests. Due to the sustained efforts of governments and their counter-terrorism activities, the danger in Southeast Asia will probably diminish but by no means disappear. There is no margin for complacency in our efforts to combat this threat.

4.49 Despite its potential to cause mass casualties and catastrophic attacks on infrastructure, Islamist terrorism will continue to have inherent limitations as a strategic threat. Terrorists will keep aspiring to develop or acquire chemical, biological, radiological and even nuclear weapons. A WMD attack by a non-state actor in the coming decades cannot be ruled out.

4.50 A factor to be considered in Australian defence planning terms is the likely response by our allies and partners to mass casualty attacks in the United States or Europe, which could see robust coalition operations against the geographical source of the attack. In such a case, Australia would have to consider contributing military forces, as occurred in the aftermath of the attacks on the United States in September 2001.

## Future Military Capabilities in the Asia-Pacific Region

4.51 As the Asia-Pacific region becomes more prosperous, we will see a corresponding increase in the region's military capability, but developments will be uneven across the region. The economic growth of recent years across the region has contributed to increases in defence budgets for many regional armed forces. As nations grow and become more affluent, they also upgrade their military forces.

4.52 The modernisation of military forces in Asia in the recent past has been characterised by significant capital acquisition programs, which are introducing more sophisticated capabilities into the region, such as advanced air combat aircraft and submarines. The ability of some regional military forces to employ such systems will be enhanced by their acquisition of advanced communications, command, computing, ISR and electronic warfare (EW) systems. Over time, more regional militaries will be able to network a range of weapon systems and develop the operational proficiency to be able to do so in militarily effective ways.

4.53 However, and particularly in the light of the global economic crisis, most regional nations will be constrained in their military development programs by fiscal and technological factors. Many regional militaries will continue to be hampered by uneven supporting skills, logistics, infrastructure and sustainment. Most are only slowly developing the military, industrial and management skills necessary to convert new systems into effective capability, especially that required for the projection of military power.

4.54 Nonetheless, we need to be alert to the fact that regional economic growth, the changing global and regional distribution of power (and changing strategic perceptions and military priorities), the

development over time of industrial and management capacity, and readier access to technology, will complicate our long-term strategic planning challenge.

4.55 Of itself, this should not be cause for immediate concern to Australia. The more capable our regional partners, the less they will feel compelled to rely upon the strategic assistance of major powers, some of whose interests may be inimical to ours. Also, more capable partners make for more effective coalitions when we come together and work towards common objectives.

4.56 However, we need to remain alert to developments in military capability in the region so that we get as much warning as possible of the emergence of strategic risks, as well as developments that might pose a significant challenge to ADF activities in particular areas.

## Proliferation of Weapons of Mass Destruction

4.57 The number of states with WMD over the next 20 to 30 years is likely to increase, with the possible addition of Iran to the group of states with nuclear weapons, if efforts to dissuade it from moving down that path are not successful. The number of states with a 'break out' capability to rapidly produce WMD will also probably increase with the proliferation of dual-use infrastructure.

4.58 WMD proliferation networks will continue to operate in the face of counter-proliferation and export control regimes, and the pace of WMD proliferation is unlikely to moderate. Military power will continue to play an important role in the disruption of WMD proliferation activity, for example through maritime interdiction, consistent with the international obligations of states. But it will remain the case that the best defence against WMD proliferation will continue to be found in security assurances, including US extended deterrence, and in the efforts of law enforcement agencies, customs and export control regimes, and counter-proliferation activities.

4.59 It is the Government's judgement that stable nuclear deterrence will continue to be a feature of the international system for the foreseeable future, and in this context extended deterrence will continue to be viable. The challenge will be to deter rogue states of concern, some of which may develop a level of capability in terms of long-range ballistic missiles, coupled potentially with WMD warheads. Iran and North Korea, and possibly others in the future, will continue to pursue long-range ballistic missile programs that could pose a direct, though remote, risk to our own security.

## New Security Concerns: Climate Change and Resource Security

4.60 The Government also considered new security risks that might arise from the potential impact of climate change and resource security issues, involving future tensions over the supply of energy, food and water. These issues are likely to exacerbate already significant population, infrastructure and governance problems in developing countries, straining their capacity to adapt.

4.61 Uncertainty about the effects of climate change and the period of time over which potential impacts may develop makes it difficult to assess its strategic consequences. Large-scale strategic consequences

of climate change are not likely to be felt before 2030. The security effects of climate change are likely to be most pronounced where states have limited capacity to respond to environmental strains. The greater frequency of such events, together with the systemic impacts of sea-level rise, changed rainfall patterns and drought, will place greater pressure on water and food security, including on local fisheries.

4.62 Many countries in our immediate neighbourhood will be especially vulnerable to these effects. Countries in the Pacific may find themselves threatened by severe climatic events such as more intense cyclonic and extreme weather events. Some South Pacific nations will be placed under significant stress as a consequence of the impacts of climate change. They may require external assistance to manage the consequences of climate change, and to respond to natural or man-made humanitarian crises or disasters.

4.63 The main effort against such developments will of course need to be undertaken through coordinated international climate change mitigation and economic assistance strategies, and concerted international action to assure energy supply and distribution, which will need to be at the forefront of Australia's policy responses.

4.64 Should these and other strategies fail to mitigate the strains resulting from climate change, or resource security issues, and they exacerbate existing precursors for conflict, the Government would possibly have to use the ADF as an instrument to deal with any threats inimical to our interests.

4.65 It may be that the new potential sources of conflict related to our planet's changing climate, or resource scarcity, give rise to very old forms of confrontation and war, such as clashes between states over resources. From a defence planning point of view, the key issue concerns the nature of such conflicts and the implications for defence capabilities, rather than their cause. More frequent and severe natural disasters and extreme weather events will also increase demands on the ADF and other government agencies to provide humanitarian assistance and disaster relief assistance in the future.

# CHAPTER FIVE:
# AUSTRALIA'S STRATEGIC INTERESTS

## What are "Strategic Interests"?

5.1 Defence policy must be based on clear objectives. Not all strategic risks necessarily require our full attention, while those that are the most remote might require our fullest attention because of their potential consequences. We have to be very clear about what matters most, so that we can provision against the right risks and do not waste resources.

5.2 The Government examined the issue of how best to frame clear objectives for defence planning and decided to base them on our abiding strategic interests - those that endure irrespective of specific passing threats that may complicate our outlook from time to time. Strategic interests are those national security interests that concern the structure and features of the international order that ensure our security from armed attack - and in relation to which Australia might contemplate the use of force. Strategic interests are a narrower set of interests than our national security interests, but basing our defence planning on our strategic interests helps us to secure our national security interests.

5.3 This Chapter explains the Government's decisions about Australia's strategic interests, and the defence policy settings that flow from these strategic interests.

## A Secure Australia

5.4 Our most basic strategic interest remains the defence of Australia against direct armed attack. This includes armed attacks by other states and by non-state actors with the capacity to employ strategic capabilities, including WMD. This most basic strategic interest abides irrespective of the perceived intentions of others, and is a function of our geography and levels of current and future capability in the region around us. Before we attend to anything else, we must secure this strategic interest.

5.5 This means that we have a fundamental interest in controlling the air and sea approaches to our continent, if necessary by defeating hostile forces in their bases or staging areas, or attacking them in transit. We also need to be able to prevent non-state actors from attacking us, particularly with strategic capabilities, using military power if we need to. Efforts against non-state actors are best led by civilian agencies, often working with international partners, but Defence can play a role in preventing or responding to such attacks.

5.6 Our strategic outlook would be altered profoundly if we were faced with the prospect of major powers with potentially inimical interests operating on a sustained basis in our air and sea approaches, or if they were otherwise able to project force against us in relatively uninhibited ways. In terms of securing

our most basic strategic interest, such developments and potentialities would be our most challenging problems from a defence planning point of view, and the ones that warrant closest scrutiny in terms of future risk-based strategic and force development planning.

## A Secure Immediate Neighbourhood

5.7 Our next most important strategic interest is the security, stability and cohesion of our immediate neighbourhood, which we share with Indonesia, Papua New Guinea, East Timor, New Zealand and the South Pacific island states. While we have a wide range of diplomatic, economic, cultural and other links with those countries, from a strategic point of view what matters most is that they are not a source of threat to Australia, and that no major military power that could challenge our control of the air and sea approaches to Australia has access to bases in our neighbourhood from which to project force against us.

5.8 Australia has an enduring strategic interest in preventing or mitigating any attempt by nearby states to develop the capacity to undertake sustained military operations within our approaches. That means that it would be important for any such developments to be detected with as much warning time as possible. Our military superiority in the immediate neighbourhood would increase the threshold of military modernisation required by nearby states to be able to develop such a capacity.

5.9 We would also be concerned about challenges to the stability and cohesion of our neighbours, not least because that could make them vulnerable to external influences that might be inimical to Australia's interests. Australia should continue to play a leading role in supporting internal stability and effective governance within the countries of our immediate neighbourhood, which makes sense from both a humanitarian and a strategic perspective.

5.10 Of particular salience in this regard is the continued stability of Indonesia, one of the most important features of our strategic outlook. It is in Australia's vital strategic interests to see a stable and cohesive Indonesia. The Government's policy remains one of strong commitment to Indonesia's territorial integrity. A weak and fragmented Indonesia would be a strategic liability for our security and would almost certainly require a heightened defence posture on Australia's part. The Government was conscious of this when considering the future development of the ADF.

5.11 We share many of these strategic interests with New Zealand, and maintaining a strong bilateral defence and broader security relationship with that country is itself in our strategic interests in terms of ensuring a secure immediate neighbourhood.

## Strategic Stability in the Asia-Pacific Region

5.12 Beyond our immediate neighbourhood, Australia has an enduring strategic interest in the stability of the wider Asia-Pacific region, which stretches from North Asia to the Eastern Indian Ocean. In particular, we have a deep stake in the security of Southeast Asia. Strategically, our neighbours in Southeast Asia sit astride our northern approaches, through which any hostile forces would have to operate in

order to sustainably project force against Australia. These approaches could also be used to threaten or constrain Australia's trade with the world and the supply of critical resources, such as fuels. So we would be concerned by external aggression against the nations or the critical sea lanes of the region, or the threat of strategic intrusion into the region by potentially hostile powers able to project military power against Australia. A stable and cohesive Southeast Asia will mitigate any such threat and is in our strategic interests.

5.13 More broadly, we have a deep stake in the maintenance of an Asia-Pacific regional security environment that is conducive to the peaceful resolution of problems between regional countries and can absorb the rise in strategic and military power of emerging major players.

5.14 To this end, we would be concerned about the emergence of a security environment dominated by any regional power, or powers, not committed to the same shared goals. It would be in our strategic interests in the decades ahead that no power in the Asia-Pacific region would be able to coerce or intimidate others in the region through the employment of force, or through the implied threat of force, without being deterred, checked or, if necessary, defeated by the political, economic or military responses of others in the region.

5.15 The Government's approach to enhancing strategic stability in the Asia-Pacific region is to work to strengthen the regional security architecture so that it embraces the United States, Japan, China, India, Indonesia and other regional states within a community that is able to engage in the full spectrum of dialogue, cooperation and action on economic and political matters, as well as future challenges related to security. The Government has proposed the development of an Asia Pacific Community by 2020 as a means of strengthening political, economic and security cooperation in the region in the long-term. Success in that endeavour will bring many benefits, not least by easing our defence planning challenges.

5.16 A crucial element of this approach is the continued engagement and presence in the Asia-Pacific region of the United States. The Government's judgement is that strategic stability in the region is best underpinned by the continued presence of the United States through its network of alliances and security partnerships, including with Japan, the Republic of Korea, India and Australia, and by significant levels of US military capability continuing to be located in the Western Pacific.

## A Stable, Rules-Based Global Security Order

5.17 Beyond our region, Australia cannot be secure in an insecure world. We have a strategic interest in preserving an international order that restrains aggression by states against each other, and can effectively manage other risks and threats, such as the proliferation of WMD, terrorism, state fragility and failure, intra-state conflict, and the security impacts of climate change and resource scarcity.

5.18 The United Nations and the UN Charter are central to the rules-based global security order. This means that where we are able, and within the limits of our military power, we should continue to support the

efforts of the United Nations and the international community in dealing with such problems, including through ADF deployments on occasion.

5.19 For a rules-based global security order to work, occasionally it is necessary to act to restore order. Within the UN context, the 'responsibility to protect' principle, which is currently at an important stage of development, holds that states are responsible for the protection of their own citizens from mass atrocities, and that the international community should encourage and assist states to exercise that authority. Australia supports the principle, and recognises that, on occasion, it may be necessary for other states to intervene, under the auspices of a UN Security Council resolution, if a state cannot or will not protect its population.

5.20 We also have an interest in supporting effective non-proliferation regimes, especially to counter the spread of WMD. We will continue to actively support a range of measures in this regard, including multilateral treaties, diplomatic engagement, controls over access to sensitive technologies, sanctions against states with programs of proliferation concern, intelligence cooperation, and, where required, the interdiction of illicit shipments of proliferation-sensitive technology, including by military means.

5.21 The global leadership role played by the United States since the end of World War II has provided the strategic underpinning for the postwar global order. Where the interests of Australia and the United States align, we should also continue to support the United States in maintaining global security, including through ADF deployments, such as those in the first Gulf War (1990-91) and in Afghanistan after the attacks of September 2001. This of course does not mean unconditional support for all the policies of the United States, but does imply a recognition that Australia needs to play its part in assisting the United States to deal with global security challenges. This is explained more fully in the next Chapter.

### *Australia's Strategic Interests in Afghanistan*

5.22 When it is in Australia's clear strategic interests to do so, the Government will deploy the ADF beyond our region in support of achieving our policy ends. Our commitment to operations in Afghanistan bears this out. At the time of publication of this White Paper, that deployment is our major combat commitment. We have a crucial strategic stake in the future of the conflict against global Islamist terrorism, and real strategic interests to consider.

5.23 We cannot insulate ourselves from the consequences that would flow if Afghanistan were again to be abandoned to a brutal Taliban regime providing haven and support to terrorist groups such as al-Qaeda. The terrorist attacks in Bali and on the Australian Embassy in Jakarta were perpetrated by individuals with direct links to the terror training grounds of Afghanistan.

5.24 We therefore have a direct interest in denying terrorists unfettered access to training camps and operating bases in Afghanistan. By working with our partners in Afghanistan we also demonstrate that we are committed to doing our fair share to tackle global security challenges.

## Why Does Geography Matter to Strategy?

5.25 These strategic interests are presented in geographical terms, as a hierarchy that reflects both relative priorities for action from a defence planning perspective, and our realistic capacity for influence through the employment of military power. They are interlocking - a stable rules-based global security order increases the likelihood of strategic stability in the Asia-Pacific region, which in turn makes more likely the maintenance of a secure immediate neighbourhood and ultimately a secure Australia.

5.26 This geographical approach to our strategic interests recognises that in military terms we have to be prepared to both act decisively close to home, while being ready where necessary to contribute further away from our shores. Close to home, it would be more likely that we would be able to do something decisive about contingencies that require military responses, and that no-one else would have as deep an interest in acting. Further away, such as in Afghanistan, it would be likely that our capacity to act decisively through military means on our own would be more limited, and others would in any event almost certainly be involved with as great, if not greater, stakes.

5.27 Of course, Australia might be greatly affected by developments far away, and even serious developments close to home might not always have a significant impact on Australian national life. Taking a geographical approach to our strategic interests is not to ignore any of this - it is simply to recognise that, all other things being equal, our capacity for influence and our imperative for action are going to be a function of proximity.

# CHAPTER SIX:
# AUSTRALIA'S DEFENCE POLICY

## Australia's Strategic Posture

6.1 A nation's 'strategic posture' is the expression of how it seeks to secure its strategic interests, including by reducing the risk of conflict in the first place, and how it would potentially use force in relation to its strategic interests.

6.2 In terms of strategic posture, an Australian government might take the view that armed neutrality was the best approach in terms of securing its territory and people. That posture would require us to disengage from alliances, such as that which we have with the United States, and probably to increase defence expenditure significantly.

6.3 A government might alternatively take the view that it should rely predominately on the multilateral security system, with the United Nations at its pinnacle, to safeguard its territory and people, and its strategic interests.

6.4 It could take another view altogether that its strategic interests would best be secured by focusing primarily on military operations with like-minded partners against common threats, across the globe - on the implicit assumption that these partners would render assistance if our security was threatened.

6.5 It could take yet another view - the one espoused by this Government - that the most effective strategic posture continues to be a policy of self-reliance in the direct defence of Australia, as well as an ability to do more when required, consistent with our strategic interests and within the limits of our resources.

## Defence Policy Choices

6.6 As these choices are so fundamental, the Government has decided to explain in this White Paper why it has adopted the defence policy stance outlined in this Chapter, and why it has rejected other approaches.

6.7 The debate about Australian defence policy is often framed as being a choice between a 'continental' or 'defence of Australia' approach, and a 'global' or 'expeditionary' approach. In the Government's view, this is a false distinction that does not aid sensible defence planning. We need to combine elements of both within a policy framework which is underpinned by our strategic interests.

6.8 Why are we not able to rely solely on a 'global' or 'expeditionary' approach to secure the full range of our strategic interests? The international community has many common interests, not least in relation to the security of its member states from attack and, as explained in Chapter 5, Australia has an abiding strategic interest in the maintenance of a stable, rules-based global security order.

6.9 Notwithstanding substantial efforts since 1919 with the emergence of the League of Nations in the aftermath of the tragedy of World War I, and again since 1945 with the birth of the United Nations out of the cataclysm of World War II, human affairs are not yet - and might never be - at the point where nations can afford to cede to a world body the direct responsibility for the defence of their territory and people, or for securing their strategic interests.

6.10 What about working with other like-minded countries to maintain global security? Coalitions are becoming increasingly important means of dealing with many security challenges, including insurgencies, terrorist networks and outbreaks of political and ethnic violence. Such coalitions are vehicles by which different countries can pool their resources according to their comparative military strengths and capacity to contribute. Being willing to contribute - even modestly at times - sends a message to allies and others alike that we are prepared to shoulder common strategic burdens.

6.11 We need to be alert to ways in which we might be able to 'pull our weight' in terms of contributing to global security, and we have a proud record of doing so. We will have a clear interest in contributing to coalitions where such operations are likely to have a positive effect on global security, and where our strategic interests coincide. Our substantial contribution to operations in Afghanistan should be seen in this light.

6.12 The point, however, is that we would not make such contributions at the cost of providing for our own security. A defence policy founded on an implicit bargain that others would come to our aid with combat forces if we were threatened or attacked is simply too uncertain a basis for providing for our security and an irresponsible abrogation of Australia's strategic sovereignty.

6.13 By the same measure, the Government takes the view that basing our defence policy on a narrow 'defence of Australia' approach would also be an irresponsible abdication of our responsibility as a capable middle power that is able to contribute to global and regional security, including by way of military means.

6.14 During the preparation of this White Paper, the Government specifically considered the issue of whether effective maintenance of our alliance with the United States might to some extent depend on Australia's readiness and capacity to join coalitions to fight alongside US forces in distant theatres.

6.15 The Government will always weigh up very carefully any request to send the ADF to fight alongside the armed forces of the United States. We have a proud record of fighting alongside one another in many campaigns. As the United States itself would expect, we would always reserve the right to take a decision based on prevailing circumstances at the time. The Government recognises that Australia can and should play its part in assisting the United States in dealing with global and regional security challenges, and we have a demonstrated capacity and willingness to do so. However, we must never put ourselves in a position where the price of our own security is a requirement to put Australian troops at risk in distant theatres of war where we have no direct interests at stake.

## Australia's Defence Policy

6.16 The Government has decided that Australia's defence policy should continue to be founded on the principle of self-reliance in the direct defence of Australia and in relation to our unique strategic interests, but with a capacity to do more when required, consistent with those strategic interests that we might share with others, and within the limits of our resources. This posture entails the maintenance of alliances and international defence relationships that enhance our own security and allows us to work with others when we need to pool our resources.

6.17 In terms of military power, this defence policy means that we must have the capacity to:

- **act independently** where we have unique strategic interests at stake, and in relation to which we would not wish to be reliant on the combat forces of any foreign power;
- **lead military coalitions** where we have shared strategic interests at stake with others, and in relation to which we would be willing to accept a leadership role, in part to compensate for the limited capacity or engagement of others; and
- **make tailored contributions** to military coalitions where we share wider strategic interests with others and are willing to accept a share of the burden in securing those interests.

6.18 Central to this policy would be a capacity and willingness on Australia's part to employ military power when required to deter and defeat armed attack on Australia without relying on foreign combat or combat support forces.

6.19 In terms of military strategy, it means the ability to conduct independent military operations in the defence of Australia by way of controlling the air and sea approaches to Australia, and denying an adversary the ability to operate, without disruption, in our immediate neighbourhood, to the extent required to ensure the security of our territory and people. This approach is spelled out in greater detail in Chapter 7.

6.20 Decisions on our future defence needs, while guided by this posture of defence self-reliance, will need to recognise that some defence capabilities will, for practical purposes to do with the size of our defence budget and our indigenous industry base, remain beyond our reach in terms of completely independent capabilities. For example, this applies to space-based assets and some sensitive special technologies, for which we will continue to rely on our principal ally, the United States.

6.21 For this reason, the policy of defence self-reliance does not preclude us from relying on a degree of international support in some critical enabling functions such as intelligence and surveillance, communications, space systems, resupply and logistics.

6.22 Nor does defence self-reliance mean that we should not accept a degree of dependence on the global supply chain to support the ADF, except in certain areas of defence industry capability which, as explained later in this White Paper, we might need to be prepared to support in order to retain those capabilities in Australia.

### *The Likelihood of an Attack on Australia?*

6.23 The policy of defence self-reliance does not represent a judgement about the likelihood of an attack on Australia. The enduring reality of our strategic outlook is that Australia will most likely remain, by virtue of our geostrategic location, a secure country over the period to 2030. We are distant from traditional theatres of conflict between the major powers, and there is an absence of any serious, enduring disputes with our neighbours that could provide a motive for an attack.

6.24 Our maritime approaches give us strategic depth in relation to any conventional military force that might be projected against us. The ADF's capabilities are themselves a deterrent against threats posed by all but a handful of the world's most significant military powers. Our alliances and other international defence relationships, especially with the United States, provide a vital further measure of security.

6.25 Attacks on Australia of an intensity and duration sufficient to seriously threaten our national way of life on an enduring basis would only be possible by forces with access to bases and facilities in our immediate neighbourhood. The likelihood of that occurring is currently very remote. Over the decades ahead, we will retain an abiding strategic interest in ensuring that this remains the case.

6.26 Of the positive factors in our strategic outlook, however, only our strategic geography is abiding. Defence planning must have regard not just to the intentions of others who might be able to affect our strategic interests, but to capability as well. History shows that strategic circumstances can change more rapidly than the time it would take to develop and field the capabilities required to deal with changed circumstances.

6.27 Australia has been a very secure country for many decades, in large measure because the wider Asia-Pacific region has enjoyed an unprecedented era of peace and stability underwritten by US strategic primacy. That order is being transformed as economic changes start to bring about changes in the distribution of strategic power. Risks resulting from escalating strategic competition could emerge quite unpredictably, and is a factor to be considered in our defence planning.

### *Force Structure Implications*

6.28 The strategic posture of self-reliance means having the forces required to address our unique strategic interests and those in relation to which we would normally take a leadership role, while keeping open our choices to make military contributions - quite substantial ones, if necessary - to efforts led by others to secure shared wider strategic interests. It does not entail taking the easy path of having elements of everything in our force structure. That would just mean that we end up spreading our resources too thinly without having the focused weight of capabilities in the areas that would matter most if we were called on to engage in hard fighting to secure our strategic interests.

6.29 The ability to deter or defeat armed attack on Australia will continue to be the primary force structure determinant of the ADF. As is explained later in this White Paper, this means focusing predominantly on forces that can exert air superiority and sea control in our approaches.

6.30 The Government agrees with Defence's assessment that by employing the capabilities outlined in this White Paper, we could also make highly effective contributions to UN or coalition operations, in our region and elsewhere.

6.31 However, there may be some instances in which we would need to consider some additional capacity (for example to ensure that we could lead military coalitions to support stability and security in our immediate neighbourhood) or capability enhancements to the forces that we deploy to more lethal or complex environments, especially to increase their survivability or their ability to operate with other coalition partners. These force development and capability considerations are explained in more detail in Chapter 8 of this White Paper.

### *The Australia-US Alliance and our Defence*

6.32 Our alliances and international defence relationships are important aspects of our security arrangements and are dealt with in Chapter 11 of this White Paper. There is one aspect however of our alliance arrangements which should be explained here. Defence self-reliance means that Australia would only expect the United States to come to our aid in circumstances where we were under threat from a major power whose military capabilities were simply beyond our capacity to resist. Short of that situation, the United States would reasonably expect us to attend to our own direct security needs and, in any event, we should not expect anything less of ourselves.

6.33 What the alliance means for our direct security is that the associated capability, intelligence and technological partnership, at the core of the alliance, is available to support our strategic capability advantage in our immediate neighbourhood and beyond. This is indispensable to our security.

6.34 It also means that, for so long as nuclear weapons exist, we are able to rely on the nuclear forces of the United States to deter nuclear attack on Australia. Australian defence policy under successive governments has acknowledged the value to Australia of the protection afforded by extended nuclear deterrence under the US alliance. That protection provides a stable and reliable sense of assurance and has over the years removed the need for Australia to consider more significant and expensive defence options.

### *Working in Coalitions with Others*

6.35 For reasons spelled out earlier in this Chapter, Australia must also have the capacity to employ military power in collaboration with international allies and partners. We need to be willing to lead military coalitions when that is necessary to secure relevant shared strategic interests, and in other cases to contribute to military coalitions, when it is in our clear interest to do so.

6.36 To that end, it is important that we develop and maintain a network of defence partnerships as an important foundation for being able to work together when required. This includes efforts to increase the interoperability of our forces with those of selected allies and partners, such as the United States, New Zealand, and our partners in the Five Power Defence Arrangements (FPDA), which include

Singapore and Malaysia. These relationships are dealt with in more detail in Chapter 11. Without these efforts being pursued systematically, we would find it difficult, if not impossible, to work together effectively when it really counts.

6.37 Where we are the leading nation in coalition efforts, we will need to be prepared to provide the key military resources, such as logistics support, air and sea lift, and strategic communications, that make it possible for smaller nations to take part in operations, and we will need to factor this into our planning for such operations. Where we are not the leading nation, as a competent military power we would be expected to participate in coalition and multilateral operations with minimal support from the lead nation.

### *The ADF's Primary Operational Environment*

6.38 Our strategic interests and defence posture suggest a primary focus for the ADF on tasks in our geographical vicinity. To guide defence planning, the Government has decided that the ADF's primary operational environment extends from the eastern Indian Ocean to the island states of Polynesia, and from the equator to the Southern Ocean. That area contains all Australian sovereign, offshore and economic territories, such as Cocos (Keeling) Islands, Christmas Island, Heard and McDonald Islands, Macquarie Island, Norfolk Island and also waters adjacent to the Australian Antarctic Territory.

6.39 The sea-air gap to our north is at the strategic centre of our primary operational environment. It affords us an opportunity to detect and respond to potentially hostile military incursions at sufficiently long ranges to enable an effective response before an adversary could reach Australian mainland territory and, in particular, key population centres and major infrastructure.

6.40 While this affords us an ability to employ defence in depth, our strategic geography nonetheless poses major defence planning challenges. Northern Australia, with its long coastline, remote population centres, substantial economic resources, and relatively underdeveloped infrastructure, will always command a significant place in our military contingency planning. Most of Australia's reserves of oil and gas are concentrated offshore in the north-west of Australia and the Timor Sea. Many of our key resource extraction facilities are remote and would be vulnerable to interference, disruption or attack. Some of our offshore territories would also be vulnerable to harassment or attack, and their loss or occupation by an adversary would represent a major strategic setback.

6.41 As part of its core business, Defence will need to continue to revise and update contingency plans for the defence of Australia and its approaches, notwithstanding the imperative of managing ongoing operations. This planning work should comprehend especially difficult military problems, such as establishing sea control and air superiority in our approaches, the defence of our offshore territories and resources, and operations on and around our territory.

6.42 The ADF's primary operational environment is a vast area. We need to have comprehensive situational awareness and an ability to operate within this environment with decisive military effect, if required. We need to maintain a strong capability to project military power from mounting bases and forward

operating bases in northern Australia and, if required, from strategically significant offshore territories, which have enduring defence value. Our expansive strategic geography requires an expeditionary orientation on the part of the ADF at the operational level, underpinned by requisite force projection capabilities.

6.43 The Indian Ocean will have an increasingly strategic role to play within the ADF's primary operational environment. This will include transnational security risks, such as piracy, as well as growing strategic competition within the Indian Ocean, along its periphery , and through the straits leading to and from it. With these factors in mind, and with the centrality of the Indian Ocean's maritime trade routes to the energy security of many Asian states, Defence planners will need to focus increasingly on the operating conditions and demands of this region. More than ever before, short of war, Australian defence planning will have to contemplate operational concepts for operating in the Indian Ocean region, including with regional partners with whom we share similar strategic interests.

6.44 For different reasons, the waters and littoral areas of the South Pacific will remain an important component of the ADF's primary operational environment, including in relation to Australia's assisting with the security and stability of our smaller neighbours located there.

6.45 While we do not judge that there is a credible risk of our national interests in the Southern Ocean and the Australian Antarctic Territory being challenged such that substantial military responses might have to be contemplated over the period of this White Paper, the Government will continue to monitor the strategic implications of international developments in the Antarctic region.

6.46 The concept of a primary operational environment is meant to serve as a guide for Defence, so that appropriate long-term military contingency planning can take place. This area should not be considered to impose a fixed operating boundary. Depending on developments in the Asia-Pacific region over the next two decades, Australia might need to selectively project military power or demonstrate strategic presence beyond our primary operational environment. For example, this might occur in maritime Southeast Asia, should this be necessary to deter or defeat armed attacks on Australia, or protect our strategic interests in the wider Asia-Pacific region, in concert with allies and partners with whom we share similar strategic interests in meeting common security challenges.

# CHAPTER SEVEN:
# PRINCIPAL TASKS FOR THE ADF

7.1 This Chapter takes the framework of strategic interests and defence policy settings explained in the previous two chapters and sets out the principal tasks for the ADF - in other words, what the Government requires the ADF to be able to do. The next three chapters then deal with the types of capabilities the ADF will need for the tasks being asked of it.

## Deterring and Defeating Attacks on Australia

7.2 The principal task for the ADF is to deter and defeat armed attacks on Australia by conducting independent military operations without relying on the combat or combat support forces of other countries. This means that the ADF has to be able to control our air and sea approaches against credible adversaries in the defence of Australia, to the extent required to safeguard our territory, critical sea lanes, population and infrastructure. As explained in Chapter 6, our strategic geography poses many defence planning challenges. A particularly difficult aspect of the ADF's principal task would be protecting our sovereignty in the offshore domain, which includes strategically significant offshore territories and economic resources in the remote north-western part of the ADF's primary operational environment.

### *Australia's Military Strategy*

7.3 Our military strategy is crucially dependent on our ability to conduct joint operations in the approaches to Australia - especially those necessary to achieve and maintain air superiority and sea control in places of our choosing. Our military strategic aim in establishing and maintaining sea and air control is to enable the manoeuvre and employment of joint ADF elements in our primary operational environment, and particularly in the maritime and littoral approaches to the continent.

7.4 Such a strategy does not necessarily entail a purely defensive or reactive approach. In operational terms, if we have to, we will need to be prepared to undertake proactive combat operations against an adversary's military bases and staging areas, and against its forces in transit, as far from Australia as possible. This might involve using our strike capabilities, including combat aircraft, long-range missiles and special forces. We will aim to control the dynamics of the conflict by setting the pace, scale and intensity of operations, by dissuading an adversary from making any attempt to escalate the conflict, and convincing them that such escalation would come at significant cost.

7.5 The ADF will, as necessary, tailor its operations such that we do not fight in a manner that sees a high rate of attrition and mass casualties among our forces. We will seek to avoid battle on unfavourable terms, apply force in a precise manner, in a way that the adversary is not expecting, and seek to overmatch at decisive points in battle.

7.6 While our approach requires principally a maritime strategy, the nature of our strategic geography is such that we will also have to use conventional land forces to control our approaches, to secure offshore territories and facilities, to defeat any incursions onto Australian territory, to protect bases from which our naval and air forces operate, and potentially to deny the adversary access to staging bases.

7.7 To be able to employ these approaches, the ADF must be joint, integrated, highly deployable and equipped with the capabilities and the people to take maximum advantage of technology. For a relatively small force like the ADF, joint operations are the only way to deliver decisive outcomes. This is explained in more detail in Chapter 8 of this White Paper.

### *Supporting Domestic Security and Emergency Response Efforts*

7.8 The ADF will also need to be able to respond to an increasingly complex domestic security environment, in which the lines between traditional concepts of external and domestic security are increasingly blurred. In this context, the ADF has to be able to contribute to the deterrence and defeat of attacks by non-state actors with strategic capabilities, especially should such groups ever acquire WMD, and to support civil authorities in relation to domestic security and emergency response tasks.

7.9 Short of war or other significant military contingencies affecting our direct security, Defence ordinarily plays a supporting role in these circumstances.

## Contributing to Stability and Security in the South Pacific and East Timor

7.10 After ensuring the defence of Australia from direct attack, the second priority task for the ADF is to contribute to stability and security in the South Pacific and East Timor. This involves conducting military operations, in coalition with others as required, including in relation to protecting our nationals, providing disaster relief and humanitarian assistance, and on occasion by way of stabilisation interventions as occurred in East Timor in 1999 and 2006, and in Solomon Islands in 2003.

7.11 Australia will continue to have particular responsibilities to assist our neighbours in dealing with humanitarian and disaster relief needs, and to support their stability and security. Given our size and resources, Australia will be expected to take a leadership role within the South Pacific if these states are overwhelmed by a natural or man-made crisis.

7.12 Such operations need to be very closely integrated with efforts by civilian agencies, with the ADF taking the lead particularly where there might be a need to demonstrate a willingness and capacity to employ military force, or where its substantial level of capacity is required in circumstances that are beyond that of other agencies. In other cases, the ADF will take a more secondary role, supporting other agencies. The ADF's arrangements for enhancing interoperability and coordination with the Australian Federal Police in such operations are a good example of what needs to be done to build such linkages, and Defence will do more in the area of building civil-military coordination capacity and inter-agency linkages.

## Contributing to Military Contingencies in the Asia-Pacific Region

7.13 The next most important priority task for the ADF is to contribute to military contingencies in the Asia-Pacific region, including in relation to assisting our Southeast Asian partners to meet external challenges, and to meeting our alliance obligations to the United States as determined by the Australian Government at the time. The strategic transformation of the region over the period to 2030 will mean that Australia should be prepared to make contributions - including potentially substantial ones - to such military contingencies in support of our strategic interests.

7.14 Operations at the less demanding end of the scale of possible contributions include humanitarian relief, disaster recovery and, on occasion, the evacuation of our nationals. Other operations in the form of counter-terrorism, counter-piracy and resource protection assistance to regional partners, including the protection of critical sea lanes, especially in Southeast Asia, might also be contemplated.

7.15 At the highest end of the scale, Australia might need to be prepared to engage in conventional combat in the region, in coalition with others, in order to counter coercion or aggression against our allies and partners.

7.16 We have an overwhelming interest in working to avoid such conflicts, not just because of the human tragedy which they bring, but because such conflicts do not always remain limited in nature. For all of that, if our allies and partners are attacked, we may need to be prepared to go to their assistance. Any decisions on committing forces will take into account the extent to which our direct strategic interests are engaged as well as any alliance obligations that might be involved.

7.17 For defence planning purposes, we need to assume that we will make appropriately sized contributions to such military contingencies. Of particular relevance in this regard might be our submarine force, special forces, surface combatants and air combat capabilities.

7.18 In making such contributions, our planning will need to take into account our local defence needs in the event of retaliatory action being taken against us, which could not be ruled out if we are engaged in combat operations or if we are providing basing, sustainment and other support for allies and partners. This remote scenario could entail aggressive intelligence collection operations being conducted against us; missile strike, air attack, or special forces raids against Australian territory or offshore facilities; mining of our ports and maritime choke points; threats to or harassment of critical shipping between Australia and its trade partners; hostile submarine operations in our approaches and our waters; and cyberattacks on our defence, government and possibly civil information networks, among other threats. Current defence planning does not assume that Australia would be involved in such a conflict on its own. Nonetheless, in such a circumstance, the ADF needs to hold sufficient forces in and around Australia at heightened levels of readiness to meet such threats.

## Contributing to Military Contingencies in Support of Global Security

7.19 Finally, the ADF has to be prepared to contribute to military contingencies in the rest of the world, in support of efforts by the international community to uphold global security and a rules-based international order, where our interests align and where we have the capacity to do so.

7.20 Based on experience and having regard to likely future contingencies, the ADF will need to be prepared to contribute to the enforcement of sanctions imposed by the United Nations, including actions by the international community to deal with ethnic and other forms of internal strife; coalition operations, including in the Middle East and Central Asia, to counter terrorism; and the evacuation of our nationals from trouble spots.

7.21 In some cases, Australia might provide small, tailored contributions to such operations, utilising specialist elements such as command teams for the United Nations, logistics or communications capabilities or mine clearance expertise. On other occasions, such as occurred in the first Gulf War in 1990-91, Somalia in 1992-94, Rwanda in 1994-95 and Afghanistan in 2001, it may be in Australia's wider strategic interests to deploy more substantial forces.

7.22 Australia has a long and proud history of helping to keep the peace in many of the world's trouble spots. We have monitored ceasefires, provided security for the delivery of humanitarian aid, election processes and the demobilisation of belligerents, and otherwise helped to bring peace to troubled areas. Our contributions have earned widespread respect, demonstrated Australia's strong commitment to the role of multilateral institutions in promoting peace, security and international order, and reinforced Australia's standing and credibility as a good international citizen.

### *High Intensity Land Warfare in the Middle East*

7.23 The Government has decided that it is not a principal task for the ADF to be generally prepared to deploy to the Middle East, or regions such as Central and South Asia or Africa, in circumstances where it has to engage in ground operations against heavily armed adversaries located in crowded urban environments. This entails a requirement to engage in high-intensity close combat which brings with it the risk of an unsustainable level of casualties for an army the size of Australia's.

7.24 If, on occasion, the Government decided that it is in Australia's wider strategic interests to undertake operations in the Middle East or nearby regions, such as those operations underway in Afghanistan, Australia would do so only after the Government had satisfied itself that our forces have the necessary weapons, protection, logistic support, training, combat readiness and force preparation to ensure successful operations with the least risk to our deployed forces. Experience has shown that such operations, if prosecuted with the vigour required, are still likely to entail a significant risk of casualties, and the Australian community would have to be prepared to accept this risk.

### *ADF Operations in Afghanistan*

7.25 The ADF continues to be actively engaged in combat operations in Afghanistan. It is disrupting the Taliban insurgency and hampering the Taliban's freedom of movement and influence; helping to build Afghan institutions, particularly in the security sector, by mentoring the Afghan National Army; developing infrastructure, including facilities for Afghan security forces, as well as schools, hospitals, health centres, bridges and causeways, mosques and other community-based facilities; and generally assisting in the implementation of an integrated political-military strategy in the Oruzgan province, where the ADF is deployed.

7.26 The ADF is making a real difference to security efforts in southern Afghanistan. These operations continue to involve tough fighting and real risk for our troops, particularly as Australia's special forces remain focused on targeting the Taliban leadership and degrading the Taliban's ability to mount attacks and move freely.

7.27 This deployment demonstrates that, where it is in our wider strategic interests to do so and we have at our disposal resources able to be committed, the ADF can operate effectively in support of those interests. In this case, it can do so in a complex counter-insurgency setting, involving close combat; operations among host populations; the establishment of pervasive security; the pursuit of reconstruction in challenging circumstances; the mentoring and development of indigenous security forces; and complex political-military coordination with allies and partners, in this case, our Dutch partners and the broader North Atlantic Treaty Organization (NATO) system.

Chapter Eight:

# THE FUTURE DEVELOPMENT OF THE ADF

## The White Paper Force Structure Review

8.1 In order to determine the nature, size and structure of the armed forces we will need in the future to undertake the tasks which were spelled out in the previous Chapter, the Government commissioned a force structure review. This was a comprehensive review of the current and projected force, evaluated against the strategic framework laid out in the previous Chapters.

8.2 The force structure review examined plausible defence planning contingencies, the capabilities required for successful operations in those contingencies, and the systems and equipment that would deliver the necessary capabilities. From that analysis, the review identified gaps in our current and projected force structure and presented options to remedy these gaps for the Government's consideration.

8.3 The Government is confident that this White Paper is informed by the most comprehensive force structure analysis ever undertaken in support of a White Paper. It provides the basis for pursuing the future development of the ADF in a strategic manner, which both creates the future force we need and remediates the most important gaps and deficiencies in the current and projected force.

## Making Force Structure Choices

8.4 Under the defence policy described in Chapter 6, Australia needs a force that can meet the requirement for self-reliance for our direct defence and our unique strategic interests, with a capacity to selectively do more in relation to our wider strategic interests.

8.5 This does not mean that we can take the easy option of having elements of everything in our force structure. We have to make choices in favour of focusing on those capabilities that are going to be most relevant to fighting and winning on our terms in independent operations or where we are leading coalitions. That is the point at which having the right balance of military capabilities matters most. No other capability aspiration should be countenanced if we have not developed the types of forces we need, with the necessary weight, reach and structural features, to address the mandatory requirements of securing our unique strategic interests.

### *Defending Australia*

8.6 As explained in Chapters 6 and 7, the Government has decided that Defence should focus on developing a force that meets the primary obligation to **deter and defeat attacks on Australia**.

8.7 This entails a fundamentally maritime strategy, for which Australia requires forces that can operate with decisive effect throughout the northern maritime and littoral approaches to Australia, and the ADF's primary operational environment more generally, as described in Chapter 6.

8.8 The types of operations which we would need to conduct in order to achieve this are described in more detail in Chapter 7. In summary, our military strategy will be a proactive one in which we seek to control the dynamics of a conflict, principally by way of sea control and air superiority, and also by defeating hostile forces in their bases, in staging areas, or in transit. We will use strategic strike if we have to, and land operations in our approaches.

### *Forces Required for Other Tasks*

8.9 Of course, the ADF has to be able to do more. In developing the future force, we must ensure it has sufficient capacity to do other tasks within the framework set out in this White Paper.

8.10 Defence has to be able to provide appropriate support to civil authorities in relation to **domestic security and emergency response efforts**, such as border protection and counter-terrorism. This does not necessarily create a requirement to maintain an extensive range of specialised capabilities within Defence, as these tasks are primarily the responsibility of civil authorities. Nonetheless, the Government will need to be able to call upon the full breadth of Defence capabilities, where Defence is able to provide relevant assistance.

8.11 In some limited cases, Defence capabilities will need to be designed for and dedicated to domestic security and emergency response tasks where they provide specialised capacities beyond the ability of other Australian Government agencies and other Australian jurisdictions to efficiently develop and maintain. For example, Defence will need to maintain specialised capabilities to deter and defeat attacks on us by non-state actors with strategic capabilities, especially should such groups acquire WMD. While civil authorities might lead initial efforts against such groups, the weight and reach of military power might ultimately have to be employed against them.

8.12 As explained in Chapter 7, the ADF should also be able to contribute to the **stability and security of the South Pacific and East Timor**, including by way of leading coalitions.

8.13 Such operations create a requirement for predominantly land force elements to conduct combat operations to restore and maintain order; support forces to restore essential services and to assist local populations, in concert with civilian agencies; air and sea lift; and other capabilities necessary for stabilisation and reconstruction operations. The prolonged nature of some stabilisation tasks means that we must maintain depth in certain military capabilities, to allow the rotation and sustainment of forces over time.

8.14 The ADF requires adequate weight and reach to carry out such tasks, and a narrow 'defence of Australia' approach would not necessarily provide sufficient capacity to do so.

8.15 In terms of **contributing to military contingencies in the wider Asia-Pacific region and in support of global security**, the Government has decided that while the base capability of the ADF is sufficient to give us strategic options to make contributions - including potentially substantial ones - to such operations, the ADF has to be able to adapt to unfamiliar operating environments, by way of mission-specific capability enhancements and modified operational procedures, designed to increase the survivability and interoperability of our deployed forces.

8.16 The ADF also has to be able to undertake **humanitarian assistance and disaster relief tasks** in our immediate neighbourhood and beyond, and undertake **other essential tasks** such as the evacuation of Australian nationals from foreign trouble spots, when other Australian Government agencies are unable to fully respond due to capacity constraints or the level of risk associated with such tasks.

8.17 These tasks do not create a requirement for maintaining an extensive range of specialised capabilities within the ADF. The characteristics and structural features of the force we need to undertake the tasks outlined in this White Paper will generate a wide range of capabilities which can be deployed for such tasks with very little warning (for example, amphibious ships, sea and air lift, aero-medical evacuation assets, and logistics and medical support).

## What Types of Forces Do We Need?

8.18 Against this background, this section sets out the types of forces we need to achieve these objectives. The next section then discusses how we might best determine how much we need of each type of force structure element. The following force structure priorities are not listed necessarily in priority order but constitute the key elements the future force must contain.

### *Maritime Forces*

8.19 Major surface combatants (destroyers and frigates), submarines and other naval capabilities, supported by air combat (for air superiority and maritime strike) and maritime surveillance and response assets, are necessary to establish sea control, and to project force in our maritime environment (including for the purposes of maintaining freedom of navigation, protecting our shipping, and lifting and supporting land forces).

### *Land Forces*

8.20 Land combat, combat support and combat service support forces (such as infantry, armour, artillery, combat engineers, and aviation), which are able to operate as combined-arms teams and undertake combat in our littoral environment and territory, are necessary to secure offshore territories and facilities, defeat incursions onto Australian territory and potentially deny adversaries access to staging bases from which they could attack us. They are also required to undertake amphibious manoeuvre, and stabilisation and reconstruction operations in our immediate neighbourhood, as well as operations further afield in support of our wider interests, as determined by Government at the time.

8.21 The Army also generates our ***Special Forces*** capability. Highly-trained and specially equipped forces such as the Special Air Service Regiment and the Commandos, and enabling capabilities such as special forces capable rotary and fixed wing aircraft, are necessary for strategic surveillance and reconnaissance, offensive action, strategic strike missions, high-end counter-terrorism and counter-WMD operations, hostage recovery, special protection duties in high-threat environments, advanced training for indigenous forces, and other specialised roles, some of which are classified in their entirety.

### *Air Power*

8.22 The air combat capability system consists of multirole combat fighters and assets such as Airborne Early Warning and Control (AEW&C) aircraft, air-to-air refuelling aircraft, air bases, and command, control and surveillance capabilities. These capabilities are necessary for air superiority, maritime strike, long-range strategic strike, offensive air support and close air support. Air power assets are also required to conduct maritime surveillance and response; ISR tasks; strategic (inter-theatre) and operational (intra-theatre) air lift; and to otherwise establish and exploit control of the air.

### *Strategic Strike*

8.23 A variety of air combat assets, submarines, special forces, long-range land-attack missiles and, potentially, non-kinetic capabilities such as electronic attack are required to conduct land strike operations against various strategic and operational military targets, such as an adversary's operating bases, staging areas and critical military infrastructure.

### *Information Superiority*

8.24 ISR capabilities, intelligence collection and assessment systems, space-based surveillance systems including intelligence collection satellites, cyber warfare, EW, strategic communications, and battlespace management and command support systems constitute an information superiority capability. This is required to give our forces a winning edge in comprehensive situational awareness, rapid decision making, networked capabilities, and the precise application of force.

### *Force Projection*

8.25 Amphibious and sea-lift ships, strategic (inter-theatre) and operational (intra-theatre) air lift, mounting bases and forward operating bases in northern Australia and our maritime and littoral environment, major fleet bases and ports, expeditionary combat support assets, basing rights in foreign countries and other capabilities are required for strategic mobility for our forces and to provide us with the ability to project military power throughout our primary operational environment and, on occasions, beyond.

### *Joint Enablers*

8.26 Defence-wide 'baseline' enabling capabilities, such as command and control, communications, logistics, transport and movement capabilities, repair and maintenance elements, and health support, are required for all forms of operations from warfighting to humanitarian relief and disaster assistance.

### *Support to Domestic Security and Emergency Response*

8.27 This category includes all Defence capabilities which are assigned to, or purpose designed for, supporting whole-of-government border protection efforts to secure our offshore maritime domain; domestic counter-terrorism efforts; disaster relief and emergency consequence management following catastrophic natural or man-made events; and otherwise assisting civil authorities in relation to domestic security and emergency response tasks.

### *Emerging Capability Priorities*

8.28 A number of new capability areas require hedging investments, such as space capability assurance against counter-space threats, ballistic missile defence and counter-WMD capabilities (the latter in the event that a rogue state or non-state actor acquires WMD capability that is likely to threaten Australia).

## Determining the Weight and Reach of our Forces

8.29 These are the types of forces we need. But how much of each element do we need? What structural features and characteristics should these forces possess? To answer these questions, the force structure review examined the level of capacity and the performance levels required in each of the priority force structure areas, in order to undertake the tasks set out in this White Paper in a strategically effective manner.

8.30 The specific defence planning contingencies used in developing the White Paper cannot be described in detail in a public document. For one thing, it would give others, including potential adversaries, too clear a view of our operating parameters and limitations. Every nation undertakes such sensitive defence planning and wargaming, and protects official information associated with those activities.

8.31 The contingencies used in the White Paper process were realistic and hard-edged. They were specifically designed to stretch the ADF of the future to the limits of its operating parameters, across the spectrum of plausible operational contingencies. These encompassed the defence of Australia and its approaches (in challenging circumstances), as well as military operations in the immediate neighbourhood concerned with the security and stability of states around us, in the wider Asia-Pacific region, and in support of global security.

8.32 This process allowed the Government to make clearly informed choices, for today and into the future, about where to invest scarce defence funds to ensure that we are developing the force we need.

8.33 The Government was especially concerned to ensure that the future force will have the necessary combat weight and reach to be able to operate with decisive effect against credible adversaries, as well as the necessary structural features to be able to act independently or as a coalition leader when required, especially in critical areas such as information superiority, force projection and joint enablers which would be integral to all types of ADF operations.

## Future Directions for the ADF

8.34 This section summarises the new directions which the Government has set for the ADF in order to achieve its primary obligation to build Force 2030 (and remediate the current and projected force) required for the defence of Australia and its approaches, and in relation to our unique strategic interests. In doing so, it has also provided a strategic hedge against future uncertainty. The details of these decisions, as well as others regarding future capability priorities, are contained in the next Chapter.

8.35 As a result of the priorities contained in this White Paper, Force 2030 of the future will be a more potent force in certain areas, particularly in undersea warfare and anti-submarine warfare (ASW), surface maritime warfare (including air defence at sea), air superiority, strategic strike, special forces, ISR and cyber warfare. It is the Government's judgement that these are the crucial areas which required particular attention in this White Paper in terms of securing our unique strategic interests.

8.36 These decisions also address the need over the next few years to consider the long-term replacements for our major defence capabilities (including the air combat force of F-111s and F/A-18s, the Collins class submarines and the Anzac class frigates), all of which will need to be replaced over the next 15-20 years. Each of these is a long-lead time, multi-billion dollar decision which should properly be taken within the context of a comprehensive strategic review, which only a White Paper can provide.

8.37 In addition, the Government is confident that the priorities expressed in this White Paper for remediation of critical capability and supporting infrastructure will ensure that the ADF has sufficient capacity to undertake foreseeable stabilisation and security tasks in our immediate neighbourhood. In order to ensure that this remains the case, the Government has decided to enhance some relevant capabilities, including in our land forces, and air and sea lift. Our forces could also protect themselves in undertaking such tasks, should they be contested by any credible adversary.

8.38 The Government is also confident that it has provided suitably for areas of Defence support to domestic security, border protection, counter-terrorism and emergency response, as well as other essential tasks such as overseas humanitarian assistance, disaster relief and the evacuation of Australian nationals. Finally, for the reasons spelled out above, the force development planning guidance provided in this White Paper will give us real military options in relation to our wider strategic interests, as the force evolves to meet the planning guidance we have articulated for Force 2030.

### *Enhancing our Maritime Forces*

8.39 The major new direction that has emerged through our consideration of current and future requirements is a significant focus on enhancing our maritime capabilities. By the mid-2030s, we will have a heavier and more potent maritime force. The Government will double the size of the submarine force (12 more capable boats to replace the current fleet of six Collins class submarines), replace the current Anzac class frigate with a more capable Future Frigate optimised for ASW; and enhance our capability for offshore maritime warfare, border protection and mine countermeasures.

8.40 In the case of the submarine force, the Government takes the view that our future strategic circumstances necessitate a substantially expanded submarine fleet of 12 boats in order to sustain a force at sea large enough in a crisis or conflict to be able to defend our approaches (including at considerable distance from Australia, if necessary), protect and support other ADF assets, and undertake certain strategic missions where the stealth and other operating characteristics of highly-capable advanced submarines would be crucial. Moreover, a larger submarine force would significantly increase the military planning challenges faced by any adversaries, and increase the size and capabilities of the force they would have to be prepared to commit to attack us directly, or coerce, intimidate or otherwise employ military power against us.

### *Enhancing and Remediating the Rest of the ADF*

8.41 While focusing on building our maritime capabilities, the Government has also been able to make provision for the enhancement of other key elements of the ADF, including our air combat capability (by proceeding with the acquisition of around 100 fifth-generation multirole combat fighters); strike capability (through the acquisition of long-range, land-attack strike missiles); the Army's fleet of heavy protected vehicles and other land force capabilities; the capabilities of our special forces; and in the emerging area of cyber warfare.

8.42 In addition, the Government has made provision for remediation of the current and projected force, by addressing crucial deficiencies and gaps which might limit the size and duration of deployments, or create unacceptable risks in some more demanding scenarios in which the weight, reach and relative combat power of major capabilities would make a crucial difference.

8.43 Finally, the Government has also made provision for remediating Defence's critical 'backbone', such as facilities and infrastructure, ICT systems, warehousing and distribution systems.

## Major Power Adversaries?

8.44 In making these decisions, the hardest question which had to be addressed was that of determining whether the weight and reach of the ADF would have to comprehend the remote but plausible potential of confrontation with a major power adversary. The more likely this risk, the heavier the force we would need.

8.45 It is conceivable that, over the long period covered by this White Paper, we might have to contend with major power adversaries operating in our approaches - in the most drastic circumstance, as a consequence of a wider conflict in the Asia-Pacific region. In such a circumstance, it is not a current defence planning assumption that Australia would be involved in such a conflict on its own. But we do assume that, except in the case of nuclear attack, Australia has to provide for its own local defence needs without relying on the combat forces of other countries.

8.46 The Government considered such contingencies because although they are unlikely, they are not so remote as to be beyond contemplation. The weight and reach of the force the Government intends to build gives us an acceptable margin of confidence that hostile military operations in our primary operational environment can be contested effectively by the ADF. This includes circumstances where we have to attend to our local defence needs against a major power adversary in the event of our being involved in a wider conflict, and that substantial costs will be imposed on our adversaries.

8.47 In such circumstances, in order to defend ourselves we might also have to selectively project military power beyond the primary operational environment described in this White Paper, for instance in maritime Southeast Asia. The Government is confident that the weight and reach of the force that it intends to build will allow us to do this.

8.48 It is unlikely that contingencies involving major power adversaries could arise in the foreseeable future without a degree of strategic warning. As discussed in Chapter 3 and in more detail in Chapter 10, in the light of such strategic warning, we might have to adjust our strategic posture and force development plans.

## Force Structuring for Wider Strategic Interests?

8.49 The Government does not intend to purpose-design the ADF for those circumstances in which it might choose to make tailored contributions to military coalitions in support of our wider strategic interests. We would offer such forces as are available from the force structure outlined in this White Paper, subject to concurrency pressures and an assessment of our strategic interests. Should the operating environment and the capabilities of our coalition partners require it, appropriate mission-specific capability enhancements to increase the survivability or interoperability of our forces, over and above the ADF's base level of capacity, may be required.

8.50 The Government has decided that such mission-specific adjustments should not be a means by which the base capability and prescribed performance levels of the ADF are materially changed over time. Our operations in Afghanistan bear out the fact that we can make a difference in coalition operations in support of our wider strategic interests by employing and adapting the forces we need for securing our more direct strategic interests.

8.51 In making decisions about the ADF's force structure, the Government satisfied itself that such forces would generate a range of capabilities available for other tasks in support of our wider strategic interests. Through the process of wargaming and planning work described above, the force structure

review actively assessed the types of forces that Australia might contribute as tailored contributions to coalition operations in support of regional or global security. Those capabilities are, in the main, subsets of the forces we need to secure our most direct strategic interests.

8.52 For example, the capabilities which we require to assist with humanitarian and stabilisation activities in our immediate neighbourhood also provide a basis for making contributions to similar operations in other parts of the world, including counter-insurgency operations, as demonstrated by our deployment to Afghanistan. Land forces, special forces, medical and logistic support elements, ISR assets, command and communications elements, helicopters, and air and sea transport capabilities among others would, depending on the circumstances, make particularly valuable contributions.

## Maintaining a Strategic Capability Advantage

8.53 Giving our forces a capability advantage is both desirable and necessary if it prevents conflict, or allows us to prevail in conflict, and minimises our casualties and materiel losses.

8.54 This approach involves maximising our strengths and minimising our weaknesses. Among our strengths are the capacity to exploit technology and the innovative skills and capacities of our people. But Australia also faces challenges due to the inherent limits of our population size, infrastructure and economic resources; and a lack of 'mass' in our armed forces in comparison to the armed forces of some other nations.

8.55 Australia therefore seeks to develop and maintain a capability advantage that can provide a bulwark against strategic uncertainty, makes up for our weaknesses, and reduces the risk of attrition of Australia's limited forces. This approach has been central to Australian defence planning for over 40 years and is accepted in these terms by our neighbours.

8.56 Military modernisation, particularly in the Asia-Pacific region, and the proliferation of advanced military technologies will mean that Australia's ability to maintain a capability advantage will come under increasing challenge. We will have to work harder to ensure that we maintain a capability advantage in the areas that matter most.

8.57 To this end, Defence will explicitly plan to maintain a strategic capability advantage, and to achieve it through capability development strategies, self-reliant defence research, development and innovation, and collaborative programs with scientifically and technologically capable partners. This will include a continued focus on new advanced technologies and their exploitation and application. This aspect is further dealt with in Chapter 17.

## Force Attributes and Capability Development Principles

8.58 To guide the development of Force 2030, the Government has identified a number of force attributes and capability development principles, which are described below.

### *Precise Force Application*

8.59 The goal for future ADF operations is to achieve precise effects, especially in the discriminate application of kinetic and non-kinetic force, which should seek to minimise unintended consequences to the greatest extent possible. Enhanced precision targeting and discrimination technologies, systems and processes will be especially important in this regard. Achieving precise effects will require the employment of reliable means to locate and identify hostile, friendly and neutral forces, conduct engagements at ranges varying from close to extended distances, and control the extent of damage.

### *Networked Capability*

8.60 The future ADF will use modern information technology to link sensors, weapons systems and commanders and their personnel in a networked environment. This will help our people to work more effectively together, provide common battlespace awareness and, most crucially, information superiority over an adversary so that our people can make critical decisions on the battlefield more quickly and with better knowledge than the adversary. This approach will be dependent on a secure high-capacity information network that allows personnel located in different areas to collaborate in real time, and to synchronise their operational actions very precisely.

### *Operational Flexibility*

8.61 Australia cannot afford to maintain a large number of narrowly applicable capabilities. The future development of the ADF is to emphasise, wherever possible, operational flexibility and multirole employment in the ADF's systems, platforms and organisations. This might involve, for example, achieving greater platform flexibility by way of inter-changeable modular design and construction techniques.

### *Fully Developed Capability*

8.62 While mission-specific capability enhancements will be applied where necessary, as a capability development principle the ADF will acquire fully developed capabilities, which are fully deployable and effective within readiness warning times.

### *Capability Advantage*

8.63 Following the earlier discussion of maintaining a strategic capability advantage, the ADF will acquire the most capable platforms and systems we can afford within our policy settings, in order to offset the relatively small size of our forces and give them a war-winning edge. Exploiting and applying new advanced technologies will be crucial to achieve this.

### *Survivable and Robust Capability*

8.64 The ADF must be able to protect itself against the range of existing and evolving threats, particularly as the proliferation of threats is unlikely to abate. Continued investments in lower signatures and stealth

for our capabilities and systems, force protection, countermeasures, protective security, and systems redundancy will be required.

### *Interoperable Capability*

8.65 Interoperability is principally concerned with the ability of personnel and systems of different nations and agencies to work effectively together, safely and securely. Where it makes sense to do so, and it is cost-effective and in keeping with the policy settings in this White Paper, capabilities and systems should be designed to be interoperable from conception, not as an afterthought in the capability development process.

### *Cost-Effective Capability*

8.66 Defence will continue to drive down the costs of ownership of military capability. This will include greater use of simulation, a more active role for ADF Reserves, smarter maintenance and leaner logistics systems, improved information management, and, where appropriate, a bias towards military- and commercial-off-the shelf capabilities. These measures are further discussed in later Chapters.

## Building the Future Joint Force

8.67 Joint operations involving the three Services, other Defence elements, such as the Defence intelligence agencies, and in some cases other Australian Government agencies are the only way in which Australia's relatively small force can successfully undertake operations. A crucial characteristic of the future force will be a joint approach that binds together single-Service capabilities and systems into an operationally seamless whole. Joint task forces will be the standard mode of operating.

8.68 Higher command and control arrangements will be inherently joint in nature. The creation of Headquarters Joint Operations Command at Bungendore, New South Wales, has set the benchmark for true joint integration at the operational level. Efforts to build the future joint force will continue on this and other foundations laid in the 1980s, when the ADF as a joint force was effectively created. The creation of a new joint capability coordination function will oversee the implementation of joint capability concepts.

### *Superior Leadership and Professional Mastery*

8.69 Building Force 2030 is not just about systems and platforms. Our people give us a winning edge. Australia's recent operational experiences in environments such as East Timor and Afghanistan have highlighted the leadership and professionalism required of ADF personnel to ensure success in combat operations. These traits have been tested and demonstrated in many ways, including by the controlled and measured way in which ADF personnel have responded to crises and combat situations, their disciplined use of force, and their empathetic, positive and friendly engagement with local communities. Such leadership and professionalism are the foundation for strategic success, as well as tactical success in combat operations.

8.70 Investment in recruitment, training, education and the career development of the ADF's junior personnel and leaders will continue to pay substantial dividends in terms of our ability to achieve campaign objectives and reduced casualties, while maintaining the high ethical standards of ADF personnel, and the proud record of the ADF on operations.

8.71 As the ADF becomes a more integrated force, it must do so in a manner that recognises the professional mastery in each of the three single Services in their environmental domains. That mastery has been achieved over decades of practice and experience, and is at the base of the joint force.

## An Improved Force Structure Development Process

8.72 This Chapter has set out the strategic basis and framework for the future development of the ADF. To build on this guidance and ensure that momentum is not lost, the Government has decided that the future development of the ADF will be driven by an improved force structure and capability development process within Defence. The central feature of that process will be stronger linkages between strategic guidance, force development and capability decisions. The Government will oversee this force structure and capability development process in a way that has not previously occurred.

8.73 Specifically the Government has decided that no force structure option or capability requirement will in future be considered unless it has been generated as a consequence of this new improved process, with proposals to adjust our strategic posture or force structure to be considered by Government through the annual classified Defence Planning Guidance (DPG). This will be the primary means by which the Government will consider how best to manage strategic risk in the defence domain.

8.74 Defence will establish improved internal processes for managing force structure development, the definition of capability requirements, and capability proposal development to give effect to these new arrangements.

# CHAPTER NINE:
# CAPABILITY PRIORITIES FOR FORCE 2030

9.1 This Chapter identifies the Government's key capability priorities for modernising and enhancing the ADF, and in particular the major capabilities that we will need to deliver to build Force 2030, and remediate the current and projected force.

## Maritime Forces

9.2 This section describes the key capability priorities for modernising and enhancing the Navy.

### *Submarines*

9.3 For the reasons spelled out in Chapter 8, the Government has decided to acquire 12 new Future Submarines, to be assembled in South Australia. This will be a major design and construction program spanning three decades, and will be Australia's largest ever single defence project. The Future Submarine will have greater range, longer endurance on patrol, and expanded capabilities compared to the current Collins class submarine. It will also be equipped with very secure real-time communications and be able to carry different mission payloads such as uninhabited underwater vehicles.

9.4 The Future Submarine will be capable of a range of tasks such as anti-ship and anti-submarine warfare; strategic strike; mine detection and mine-laying operations; intelligence collection; supporting special forces (including infiltration and exfiltration missions); and gathering battlespace data in support of operations.

9.5 Long transits and potentially short-notice contingencies in our primary operational environment demand high levels of mobility and endurance in the Future Submarine. The boats need to be able to undertake prolonged covert patrols over the full distance of our strategic approaches and in operational areas. They require low signatures across all spectrums, including at higher speeds. The Government has ruled out nuclear propulsion for these submarines.

9.6 The complex task of capability definition, design and construction must be undertaken without delay, given the long lead times and technical challenges involved. The Government has already directed that a dedicated project office be established for the Future Submarine within Defence, and will closely oversee this project.

9.7 The strategic importance of this capability is such that Australian industry involvement will need to be factored into the design, development and construction phases, and the sustainment and maintenance life cycle of these boats, which will extend well into the 2050s and possibly beyond. The Government

will give early consideration to the complex capability definition and acquisition issues involved in this substantial undertaking. The Government will also consider matters such as basing and crewing, and will seek early advice from Defence on those and other issues.

9.8 For this project to succeed, we need to engage with a number of overseas partners during the design and development phase. In particular, the Government intends to continue the very close level of Australia-US collaboration in undersea warfare capability. This will be crucial in the development and through life management of the Future Submarine.

9.9 The Government has also agreed to further incremental upgrades to the Collins class submarines throughout the next decade, including new sonars, to ensure they remain highly effective through to their retirement. The construction program for the Future Submarines will be designed to provide the Government with the option to continue building additional submarines in the 2030s and beyond, should strategic circumstances require it.

9.10 The Government is determined to respond decisively to deficiencies in the current availability of operationally ready submarines. The Navy will embark on a major reform program to improve the availability of the Collins class fleet, and will also ensure that a solid foundation is laid for the expanded future submarine force. These reforms will change how we attract, remunerate, train and manage the submarine workforce, and improve the deployment and maintenance of the submarines.

### *Surface Combatants*

9.11 The Government will proceed with the acquisition of three Air Warfare Destroyers (AWD). In order to enhance the air defence capabilities of the AWDs, the Government will equip them with with the Standard Missile 6 (SM-6) long-range anti-aircraft missile. The SM-6 missile is the most advanced weapon of its type, with a range of more than 200 nautical miles (370 kilometres) and effectively extends the air defence protection offered by these advanced ships. As they enter service, the AWDs will be equipped with a sophisticated Cooperative Engagement Capability (CEC), which enable each vessel to act as part of a wider 'grid' of sensor and weapon platforms that can share surveillance and targeting information. Defence will also investigate fitting CEC to the AEW&C aircraft in order to optimise the capability advantages offered by the SM-6 missile.

9.12 The Government will continue to monitor and assess its capability needs against strategic assessments. As a consequence, the Government will continue to assess the capability need for a fourth AWD in the future against further changes in the strategic assessment and, consistent with that assessment the most rational public investment in further defence platforms.

9.13 The Government will also acquire a fleet of eight new Future Frigates, which will be larger than the Anzac class vessels. The Future Frigate will be designed and equipped with a strong emphasis on submarine detection and response operations. They will be equipped with an integrated sonar suite that includes a long-range active towed-array sonar, and be able to embark a combination of naval combat helicopters and maritime Unmanned Aerial Vehicles (UAV).

9.14 The Government is also committed to ensuring that the current Anzac class frigates continue to be able to operate effectively until they start being replaced by the Future Frigates. Subject to the successful outcome of at-sea trials on the first ship, the Government will put all of the Anzac ships through the anti-ship missile defence upgrade program, which employs highly innovative Australian-designed digital phased array radar technology. This significant increase in capability will be complemented by upgrades to both the Evolved Sea Sparrow Missile and the Nulka missile decoy system. ASW upgrades on the Anzac class will also be undertaken.

9.15 To ensure our current surface combatants are capable of the range of operations discussed earlier in this White Paper, the Government will equip them with new weapon systems to defend against threats from incoming missiles and close-range asymmetric surface threats such as high speed boats equipped with heavy weapons.

### *Naval Combat Aviation*

9.16 As a matter of urgency, the Government will acquire a fleet of at least 24 new naval combat helicopters to provide eight or more aircraft concurrently embarked on ships at sea. These new aircraft will possess advanced ASW capabilities, including sonar systems able to be lowered into the sea and air-launched torpedoes, as well as an ability to fire air-to-surface missiles.

9.17 The Government will introduce 46 new MRH-90 helicopters as a pooled fleet shared between the Royal Australian Navy and the Australian Army to replace the Navy's Sea Kings and the Army's general troop lift Blackhawk fleets. This large state-of-the-art helicopter, equipped with an infrared system for use in low-light conditions, will provide significantly greater load- and troop-carrying capacity. The Navy will operate six MRH-90 helicopters and share a further seven for common flight training for both Services; the balance will be assigned to the Army and fleet maintenance cycles. The MRH-90 will enter service with the Navy in 2010.

### *Anti-Submarine Warfare*

9.18 The Government intends to place greater emphasis on our capacity to detect and respond to submarines in the ADF's primary operational environment through the acquisition of the Future Submarine, and enhanced ASW capabilities in the surface combatant fleet, the naval combat helicopter and the maritime patrol aircraft. As we develop our information superiority capability, situational awareness in the undersea domain will become relatively more important. The Defence Science and Technology Organisation (DSTO) will enhance its research into underwater sensors and networking to give greater emphasis to underwater situational awareness.

### *Offshore Combatant Vessels*

9.19 The Navy currently operates four relatively small fleets of vessels for important tasks such as offshore resource protection, border security, hydrographic and oceanographic environmental assessments

and clearing sea mines. This significantly increases whole-of-life ownership costs and personnel overheads. Smaller vessels also have less seagoing capacity and a reduced scope for installing more capable sensor or weapons systems over time.

9.20 The Government has therefore decided that Defence will develop proposals to rationalise the Navy's patrol boat, mine counter measures, hydrographic and oceanographic forces into a single modular multirole class of around 20 Offshore Combatant Vessels combining four existing classes of vessels. This has the potential to provide significant operational efficiencies and potential savings. The new vessels will be larger than the current Armidale class patrol boats, with an anticipated displacement of up to 2,000 tonnes.

9.21 This concept relies on the use of modular unmanned underwater systems for both mine countermeasures and hydrographic tasks. These systems are envisaged to be containerised and portable modules capable of being used in any port or loaded onto any of the Offshore Combatant Vessels or other suitable vessels.

9.22 The future Offshore Combatant Vessel will be able to undertake offshore and littoral warfighting roles, border protection tasks, long-range counter-terrorism and counter-piracy operations, support to special forces, and missions in support of security and stability in the immediate neighbourhood. Defence will examine the potential for these new ships to embark a helicopter or UAV, to allow a surge in surveillance and response capabilities without the need to deploy additional ships. This increased capability will also ensure that major surface combatants are free for more demanding operations.

### *Amphibious Capability*

9.23 Our capacity to deploy and sustain land forces from the sea will be substantially enhanced when the two new Landing Helicopter Dock (LHD) amphibious ships enter service in the coming decade. They will be able to carry a substantial quantity of equipment, stores and personnel. In terms of humanitarian assistance and disaster relief operations, they will most likely be the best means available to provide assistance in our region without becoming a burden on damaged and fragile land infrastructure. They will also provide a significant capacity for maritime manoeuvre of land forces in our littoral environment.

9.24 The Government has decided to enhance this amphibious capability by acquiring a large strategic sealift ship to move stores, equipment and personnel. Based on a proven design, the new ship will have a displacement of 10,000 - 15,000 tonnes, with landing spots for a number of helicopters and an ability to land vehicles and other cargo without requiring port infrastructure. The new ship will provide ongoing sustainment support for deployed forces, allowing the LHD ships to remain in areas of operations in direct support of the land force ashore.

9.25 The Government will also introduce six new heavy landing craft with improved ocean-going capabilities, able to transport armoured vehicles, trucks, stores and people in intra-theatre lift tasks to augment the larger amphibious vessels.

### *Sea Logistic Support and Replenishment Support Capability*

9.26 The size of the area over which our maritime forces may have to operate, and the extended periods they may be required to remain at sea, means that resupplying our deployed ships is an essential capability. Therefore, the Government intends to replace the older of the Navy's two supply ships, HMAS *Success*, with a new ship which will enter service at the end of the next decade.

## Land Forces

9.27 This section describes the key capability priorities for modernising and enhancing the Army.

### *The Structure of the Army*

9.28 The Government has considered the range of tasks that may be required of our land forces. While no major change to the size and structure of the Army is warranted, a range of capability improvements are.

9.29 Our conventional land forces will continue to be based on three combat brigades (each around 4,000 troops) consisting of multiple battalion-sized units. The growth of the two additional infantry battalions established under the Enhanced Land Force initiative will continue.

9.30 The Army will be able to combine its combat and combat support units to generate 10 battalion-sized 'battlegroups' tailored for a wide range of operations. The generation of operationally-ready land forces will be enhanced by the formation of Forces Command, located in Sydney, which will be responsible for all individual and group training, to provide troops that are ready to complete final preparation for operations. Forces Command will also take charge of logistics organisations supporting this process, along with a helicopter brigade comprising three battalion-sized units of reconnaissance, lift, and utility helicopters.

9.31 The Army will continue to provide a highly trained Special Forces group consisting of the Special Air Service Regiment, a Commando battalion, the Incident Response Regiment, a reserve commando regiment and supporting specialist troops. Special Forces capabilities are discussed in detail later in this Chapter.

### *The Adaptive Army: Next Steps*

9.32 The Government is also determined to further enhance the Army's current reforms under the Adaptive Army initiative. Additional reform will improve the Army's long-term capacity to sustain prolonged operational deployments, and to flexibly surge long lead-time capabilities, should our strategic circumstances require it. To that end, the Government has decided that, in addition to the Enhanced Land Force initiatives, the Army will make more effective use of its part-time components. The Government will also ensure that the Army has the right internal balance (that is in the number, types and mix of land force capabilities and units) to ensure that we have the depth to sustain prolonged operations, and can surge latent capacity should the need arise.

9.33 The Government has directed Defence to develop a detailed implementation plan by the end of 2009, to ensure that the Army's internal balance and mix of full-time and part-time land force elements can meet these objectives. The plan will be developed within the strategic guidance and funding parameters contained in this White Paper. The resources that the Army will need to implement the adaptation will be provided through re-investment of efficiencies realised through these reform measures within Army.

9.34 Among other things, the implementation plan will contain options for:

- changing the internal balance of full-time and part-time components of the Army, without reducing the overall combat power of our land forces;
- how the Army's part-time forces can be best provided with a greater operational focus in order to increase the utility of part-time personnel;
- how part-time force elements might act as a 'repository' of some high-end, longer lead time capabilities for contingencies related to the defence of Australia, as a hedge against strategic risk, and an expansion base should we require it;
- how the Army might better use civilian skills and ex-Regular personnel in its force structure; and
- a better model for the Army's preparedness which more appropriately balances strategic risk, sustainment and concurrency pressures and future adaptation pressures to ensure we get better value from our full-time and part-time components, including through more effectively utilising the Army Reserve links with regions and local communities.

9.35 The plan will also consider a new form of part-time service based on workforce sponsorship in areas such as in the provision of high technology communications support, simulation systems support, training utilising technical colleges, and the targeting of selected industrial skills bases (for example railways, other transport and apprentice training). The current High Readiness Reserve scheme could be adapted to support such an initiative.

9.36 As part of this plan, Defence will ensure that the Army Reserve will continue to be based on brigade-sized formations, which will be responsible for raising and training units and individuals within the Army force structure of the future. The plan will, however, consider different unit/brigade affiliations to achieve its main aim, which is to improve the Army's overall ability to sustain prolonged operational deployments and to provide additional capability when the regular Army is facing concurrency challenges.

9.37 More detailed discussion on part-time capability issues and employment issues can be found in Chapters 10 and 14 respectively.

### *Land Force Survivability, Mobility and Communications*

9.38 The Government places a high priority on the survivability and mobility of our land forces. To meet this priority, Defence intends to acquire a new fleet of around 1,100 deployable protected vehicles. These

new vehicles will replace existing armoured personnel carriers, mobility vehicles and other combat vehicles which, in the past, have had limited or no protection. These new vehicles will offer greatly improved firepower, protection and mobility, in response to the increasing complexity and lethality of land operations. In the shorter term, Defence will continue to upgrade the protection, mobility and firepower of the M113 Armoured Personnel Carriers, some of which are already in service. By the time this project is completed in late 2011, the Army will have around 430 of these enhanced vehicles.

9.39 Defence will continue a further major vehicle-related project to replace the current deployable support vehicle fleet of wheeled transport and logistic vehicles with a mix of around 7,000 support vehicles. The new vehicles will provide transport, command and control, liaison and logistic support.

9.40 Furthermore, the Government will equip our land forces with enhanced communications, networking and battle management systems, both for the new vehicle fleet and for troops down to the individual level, along with new friendly-force identification systems for soldiers and vehicles.

9.41 Defence will continue to enhance the capabilities of the individual soldier in dismounted close combat to improve combat power, survivability, and command and control right down to the lowest levels within combat teams. The integrated soldier system provides enhanced lethality through the upgrade of current small arms with better day and night surveillance capabilities, and increased survivability through continuous enhancement of personal body armour. Such enhancements will also provide a dismounted and networked command and control battlefield management system. The integrated system will lighten the load on the soldier, increase mobility and enable the soldier to operate more effectively for longer by providing enhanced sustainment methods (rations and power systems).

### *Battlefield Lift Capability*

9.42 Operations in our region will generate considerable demands for intra-theatre lift to support dispersed deployments and to access remote areas.

9.43 The Government has decided to replace the current fleet of six CH-47D helicopters with a new fleet of seven CH-47F aircraft, the most modern and capable type of this proven and versatile helicopter. These new medium-lift helicopters will see Australia operating the same aircraft configuration as the US Army, which has a fleet of around 500 aircraft. Not only will these aircraft have improved electronic warfare self-protection systems and maintenance arrangements to increase their operational effectiveness and employability across the battlefield, but future operating costs will be reduced as we take full advantage of the development, engineering, training and spares systems that are in place for the US Army.

9.44 The Army will be the major beneficiary of the 46 MRH-90 helicopters to be introduced as a pooled fleet shared between the Navy and the Army. The Army will operate 30 MRH-90 helicopters to replace its Blackhawk troop lift aircraft, and share a further seven helicopters for common flight training for both Services. This larger and more capable new helicopter will enter service with the Army in 2011.

### *Fire Support*

9.45 The Government has decided to further enhance the direct and indirect combat power available to the Army's combined-arms teams. The Government will proceed with the acquisition of new 155mm artillery systems, both self-propelled and towed type, able to fire precision munitions at very long ranges, and high rates of fire. These systems will comprise a deployable capability of two batteries of self-propelled guns and four batteries of towed guns. The towed guns will be able to be moved by helicopter and transport aircraft.

9.46 Army's mortars will also be replaced with a new and more capable system, and the Government will equip our soldiers with new direct-fire anti-armour as well as automatic grenade launcher systems.

9.47 The Army's fire support will be augmented by the new Australian-assembled 'Tiger' Armed Reconnaissance Helicopters which are currently undergoing operational acceptance testing. Armed with guided missiles, unguided rockets and a 30mm chain gun, the Tiger can provide direct fire support and, using advanced onboard optical and electronic observation systems, can provide precision targeting information.

9.48 When deployed on combat operations, our troops could be exposed to rocket and mortar fire. The Government will replace or upgrade the Army's ground-based air defence system (currently based on the RBS-70 missile) with more advanced systems that will also include a new counter rocket and mortar capability to protect land forces from artillery, rockets and mortar fire.

### *Land Operations in Complex Environments*

9.49 The Army will require a greater ability to operate in proximity to civilian populations. The Government has decided that it will further develop the ADF's capacity to deploy specialists to conduct field intelligence and information operations.

9.50 Defence will also broaden the delivery of foreign language training through new regionally-based training facilities and the Melbourne campus of the Defence Force School of Languages.

9.51 To improve the ADF's imagery capability at the tactical level, the Government has decided to establish five Geospatial Imagery Analyst teams and associated training staff. The utility of smaller Tactical Uninhabited Aerial Vehicles has been demonstrated on recent operations and the Government has determined that Defence will enhance its capability in this area. Tactical UAVs will enhance the effectiveness and survivability of ground forces by providing real-time situational awareness directly to forces on the ground.

9.52 The Government has also decided that our deployed troops will have access to an enhanced suite of non-lethal weapons. This will give our troops options short of lethal force, including short-term incapacitating agents, visual and acoustic attention gaining devices, and non-lethal projectiles.

### *Special Forces*

9.53 Australia's Special Forces are among the best trained and most competent in the world, and have an enviable record of courage and skill on operations. They have access to the best equipment and training we can provide. Nonetheless, their equipment and systems must be continually updated.

9.54 The Government will continue the capability edge provided by our special forces through regular acquisition of advanced equipment, provision of state-of-the-art training facilities and the recruitment and retention of high quality soldiers. The acquisitions will include new special operations vehicles; direct fire support weapons; and enhanced chemical, biological, radiological and nuclear protective equipment. Significant improvements will also be made to digital networking within the area of operations to strengthen the capability of deployed forces. Defence will enhance 'stealthy' methods of inserting forces into target areas. Special Forces troops will also benefit from projects principally aimed at the rest of the ADF, such as the acquisition of improved night vision equipment, and enhancements in EW and communications systems.

9.55 The Army will continue to maintain an Incident Response Regiment (IRR) within the Special Forces, with advanced skills and equipment for detecting and responding to chemical, biological, nuclear, radiological and explosive threats. The IRR is able to undertake high-risk search, access and disablement functions in a range of complex environments. The Government is committed to developing these capabilities further.

## Air Power

9.56 This section describes the key capability priorities for modernising and enhancing the Air Force.

### *Air Combat Capability*

9.57 On coming to office, the Government commissioned the Air Combat Capability Review to provide advice on aspects of Australia's air combat requirements. That study and its findings were incorporated into the Force Structure Review.

9.58 The Air Combat Capability Review assessed that the squadron of F/A-18F Super Hornets being acquired as a bridging air combat capability is a highly capable 4.5 generation aircraft and, as long as it retains commonality with the planned US Navy development path, will remain effective until at least 2020. The F/A-18F Super Hornet will begin to enter service from the end of 2010.

9.59 The Review concluded that a fleet of around 100 fifth generation multirole combat aircraft would provide Australia with an effective and flexible air combat capability to 2030. A further judgement of the review was that the F-35 Joint Strike Fighter (JSF) is the preferred solution for that requirement. Other fourth and fifth generation combat aircraft considered by the Review were judged to be less capable of fulfilling Australia's multirole air combat capability requirements.

9.60 The Government has decided that it will acquire around 100 F-35 JSF, along with supporting systems and weapons. The first stage of this acquisition will acquire three operational squadrons comprising

not fewer than 72 aircraft. The acquisition of the remaining aircraft will be acquired in conjunction with the withdrawal of the F/A-18F Super Hornet fleet, and will be timed to ensure that no gap in our overall air combat capability occurs.

9.61 Australia's future air combat capability will therefore be based on four operational air combat squadrons consisting initially of three JSF squadrons and a squadron of Super Hornet aircraft, which will be replaced by a fourth JSF squadron. Defence will continue to progressively upgrade the systems and airframes of the current F/A-18 aircraft to ensure that they remain capable and sustainable until the JSF enters service with the ADF.

9.62 Maritime strike capability will be provided by the Hornet and Super Hornet fleets using Harpoon missiles, with the Government to acquire a new maritime strike weapon for the JSF. New air-to-air and air-to-surface weapons will also be acquired.

9.63 There has been considerable public interest in the potential acquisition of the JSF. The Government has examined its capabilities very carefully in the context of the Air Combat Capability Review, and remains confident that the JSF's combination of stealth, advanced sensors, networking and data fusion capabilities, when integrated into the networked ADF, will ensure Australia maintains its strategic capability advantage out to 2030.

9.64 The Government has decided that it would be prudent for the ADF to acquire an airborne electronic attack capability. To that end, it has decided that the production arrangements for the second batch of 12 Australian F/A-18F Super Hornets will include wiring those aircraft to enable them, should later strategic circumstances dictate, to be converted to the electronic warfare 'Growler' variant - the EA-18G. Should we acquire this capability, it would provide a potent ability to protect our own communications and electronic systems while jamming, suppressing or otherwise denying an adversary the full use of the electromagnetic spectrum in the area of operations.

### *The Broader Air Combat System*

9.65 Air combat capability is achieved by having a sophisticated system built on advanced multirole combat aircraft as well as ISR systems, Airborne Early Warning and Control (AEW&C) and air-to-air refuelling aircraft, air bases with their supporting functions and seamless joint command and control systems. Defence will continue to improve its capability to develop full situational awareness of Australia's airspace through a project that will fuse air surveillance information from multiple sources, to create a 'Recognised Air Picture' of the ADF's primary operational environment. Additionally, we will invest in improved military air traffic control, navigation and communications systems and deployable mobile regional operations centres.

9.66 The Government will continue with the acquisition of five KC-30A air-to-air refuelling aircraft, and six new AEW&C aircraft. When the KC-30A aircraft enter service from 2010, they will not only greatly enhance our air combat capability by extending the range and endurance of our fighters, but will also

augment our air-lift capability, as each aircraft can deploy around 270 troops and significant quantities of stores over strategic distances.

9.67 The Wedgetail AEW&C aircraft will transform our air combat capability when it enters service from 2011, by providing vastly improved situational awareness and an ability to control and coordinate aircraft to enable mission execution. Defence will also investigate upgrading the AEW&C aircraft with CEC to enable it to more effectively cue weapons systems and perform other functions in an air warfare information 'grid'.

### *Maritime Surveillance and Response*

9.68 The sheer size of the air and sea space within our primary operational environment presents particular challenges in relation to surveillance and armed maritime response across such a vast area.

9.69 To meet this challenge, the Government will acquire eight new maritime patrol aircraft to replace the current AP-3C Orion fleet. These new aircraft will provide a highly advanced surface search radar and optical, infra-red and electronic surveillance systems. With these systems, along with a high transit speed and the ability to conduct air-to-air refuelling, these aircraft will provide a superior capability for rapid area search and identification tasks. They will also provide a highly advanced ASW capability, including an ability to engage submarines using air-launched torpedoes. After subsequent upgrades, they will be capable of firing stand-off anti-ship missiles.

9.70 We will also acquire up to seven large high-altitude, long-endurance UAVs to supplement the manned maritime patrol aircraft. These large UAVs, with an ocean-spanning range, will markedly expand the surveillance coverage of the maritime approaches to Australia, in both area and duration. They will also have a significant overland capability to provide support to our ground forces in a range of circumstances. Strategic UAVs provide persistent ISR, enhancing our situational awareness in both the land and maritime domains.

### *Air Lift Capability*

9.71 Large transport aircraft such as the C-17 Globemaster heavy air transport aircraft and the C-130 Hercules have a crucial role in providing the capability to lift, deploy, and sustain our forces, and in supporting other tasks such as humanitarian assistance, disaster relief and aero-medical evacuation.

9.72 The Government has decided to increase our air transport capability through the acquisition of two additional C-130J Hercules aircraft and up to ten light tactical fixed-wing aircraft to replace the DHC-4 Caribou aircraft. These new aircraft will complement the current air transport fleet of four C-17 and 12 C-130J aircraft. The older C-130H aircraft will be retired. The Government will ensure that these new light tactical fixed-wing aircraft will have significantly greater range, speed and payload than the retiring Caribou transports. Extra lift capability will be provided by the five KC-30A multirole tanker-transport aircraft.

## Strategic Strike

9.73 Currently, Australia relies primarily on its air combat capability for strategic strike. In the future, the stealthy JSF, employing a range of precision weapons and supported by AEW&C and air-to-air refuelling aircraft, will deliver a potent and survivable strike capability. This builds on the enhanced strike capability provided by the upgraded F/A-18A/B fleet, which will employ the Joint Air to Surface Standoff Munition (JASSM) with a range of over 200 nautical miles. Special Forces could also carry out strike missions, principally by providing targeting information but potentially also by direct means.

9.74 The Government places a priority on broadening our strategic strike options, which will occur through the acquisition of maritime-based land-attack cruise missiles. These missiles will be fitted to the AWD, Future Frigate and Future Submarine. Defence will fit the necessary control and firing systems to the AWD as an early enhancement. The incorporation of a land-attack cruise missile capability will be integral to the design and construction of the Future Frigate and Future Submarine. We will not seek to retrofit this capability to the Collins submarine fleet.

9.75 The acquisition of a maritime-based land-attack cruise missile capability for the ADF will provide the Government with additional options to conduct long-range precision strike operations against hardened, defended and difficult to access targets, while minimising the exposure of ADF platforms and personnel to attack by enemy forces. Advanced internal guidance and supporting weapon control systems in modern versions of this capability would also better enable the ADF to fulfil its obligations under the laws of armed conflict through greater accuracy and control. This long-range precision strike capability will be supported by enhanced geospatial capabilities and targeting analysis support.

9.76 Acquisition of a land-attack cruise missile capability is fully consistent with Australian treaty obligations and customary international law. It is also consistent with our long held policy of maintaining credible capabilities for the defence of Australia, and will act as a hedge against longer-term strategic uncertainty.

## Information Superiority

9.77 This section describes the key capability priorities for modernising and enhancing the ADF's information superiority capabilities.

### *Intelligence, Surveillance and Reconnaissance*

9.78 We need comprehensive levels of situational awareness in the ADF's primary operational environment, including a capacity for continuous wide area surveillance of our northern approaches. In other contingencies, we need very high levels of situational awareness in the specific area of ADF operations.

9.79 The Government will make a substantial investment in ISR capabilities. This includes expenditure on a number of mostly classified projects specifically related to enhancing Defence's intelligence capability.

9.80 As a significant new measure, the Government places a high priority on assured access to high-quality space-based imagery to meet Defence's needs for mapping, charting, navigation and targeting data. It has decided to improve Australia's intelligence collection capabilities by acquiring a satellite with a remote sensing capability, most likely to be based on a high-resolution, cloud-penetrating, synthetic aperture radar. This important capability will add to Australia's standing as a contributing partner within our alliance framework with the United States, which will be given access to the imagery collected by this system.

9.81 The Government will also continue to progressively upgrade the Jindalee over-the-horizon Radar (JORN) system, to ensure that this capability meets our needs into the future.

### *Situational Awareness*

9.82 To conduct operations successfully, Defence will increasingly need to merge information from many sources and deployed assets. These will include submarines, JORN, airborne ISR assets, maritime patrol aircraft, long-range UAVs, AEW&C aircraft, the JSF aircraft (which will have unprecedented ISR capabilities for a combat aircraft), the AWDs and other surface combatants, as well as signals and human intelligence, imagery and outputs from a variety of space-based intelligence and surveillance systems. This vast pool of information will be augmented by data from non-Defence sources. When fused and distributed, the information provides a common operating picture across the ADF's primary operational environment, and selected areas of interest beyond that, depending on strategic and operational imperatives.

9.83 To achieve this goal, Defence will embark on a major enhancement of its ISR management processes and information architecture. Defence will enhance its ISR capabilities through bringing together all relevant assets into a Defence-wide architecture, employing very secure, high-capacity ICT systems. This will ensure that ISR resources and information sources are more effectively utilised, different systems are linked, universal data standards and protocols are employed, and critical information is made available to those who need it, in real time. As part of this initiative, Defence will ensure that 'stove-piping' of information is eliminated and that the principle of 'need-to-share' (within sensible security constraints) becomes pervasive.

9.84 We will bolster this approach by improving ISR linkages with the United States, especially in the wider Asia-Pacific region covered by the US Pacific Command. At the Australia-United States Ministerial Consultations in April 2009, Australia and the United States agreed on principles that will guide greater cooperation on intelligence, surveillance and reconnaissance. The principles reflect the recommendations of a joint study team, established following AUSMIN 2008, which considered options for improving our capability to gather and share information from a wide range of sensors. This initiative has the potential to improve the visibility of activities in our maritime approaches and across the region through the sharing of surveillance information and capabilities. Increased investment in ISR cooperation with the United States will allow us to boost our ISR capability and contribute practically to the deepening of our already strong alliance relationship.

### *Cyber Warfare*

9.85 In the past decade the growing importance of operations in cyberspace has become more apparent. Our national security could potentially be compromised by cyberattacks on our defence, wider governmental, commercial or infrastructure-related information networks. The potential impacts of such attacks have grown with Defence's increasing reliance on networked operations. Therefore, we must focus on developing capabilities that allow us to gain an edge in the cyberspace domain, and protect ourselves.

9.86 This emerging threat will require significant and sustained investment by Defence in new technology and analytical capability to guard the integrity of its own information and ensure the successful conduct of operations.

9.87 The Government has decided to invest in a major enhancement of Defence's cyber warfare capability. A comprehensive range of expanded and new capabilities will maximise Australia's strategic capacity and reach in this field. Many of these capabilities remain highly classified, but in outline they consist of a much-enhanced cyber situational awareness and incident response capability, and the establishment of a Cyber Security Operations Centre to coordinate responses to incidents in cyberspace.

9.88 The Cyber Security Operations Centre will include a continuously staffed watch office and an analysis team to respond to cyberthreats in a timely fashion. Its staff will include ADF and DSTO personnel. This new Centre will be created within the Defence Signals Directorate (DSD), which already possesses significant cybersecurity expertise.

9.89 While this capability will reside within Defence and be available to provide cyber warfare support to ADF operations, it will be purpose-designed to serve broader national security goals. This includes assisting responses to cyber incidents across government and critical private sector systems and infrastructure. Whole-of-government coordination will be achieved through the appropriate representation within the Centre from relevant Government agencies. Those agencies include the Attorney-General's Department, which has the lead on e-security programs for Government and the private sector, as well as the Australian Federal Police and relevant agencies of the Australian intelligence community.

### *Electronic Warfare*

9.90 Electronic warfare covers a range of techniques to protect our own electronic systems, while denying the adversary the full use of their systems. Effective use of EW techniques can enhance the protection of our deployed forces, increase their effectiveness, and deny our adversaries information about our locations, intentions and capabilities.

9.91 The Government places a high priority on strengthening the ADF's EW capabilities. This will occur through a number of projects aimed at delivering enhancements to reporting systems and databases, such as those supporting analysis and dissemination of EW-related information; intelligence capabilities for maritime and land forces; and improved EW detection systems. The Government will

continue to develop our force level EW capability. These new capabilities will be an integral part of an enhanced information environment for ADF personnel. The DSTO will continue to undertake research and development of new and emerging EW techniques and technologies.

9.92 Defence will establish a Joint EW Centre through the collocation of a number of different ADF EW organisations, aimed at growing a critical mass of personnel and expertise. This centre will be responsible for training, research and development, countermeasure development, and the validation and verification of EW systems. Subject to further evaluation, the new centre will probably be located in Adelaide.

### *Command, Control, Communications and Battlespace Management*

9.93 Effective command and control of our joint forces will remain a crucial information superiority function. Joint Operations Command plays a central role in satisfying this requirement. Defence must also retain its ability to deploy, at very short notice, joint headquarters of various sizes to command assigned forces whenever they are deployed.

9.94 Defence requires a fully integrated command support system covering all levels of operation and all environments, with the ability to participate in coalition operations, and to collaborate with other agencies. To help achieve these goals, the Government intends to enhance Defence's joint command support system, as well as protected, high-speed communication systems and associated networking capabilities.

### *Building the Networked Force*

9.95 To take maximum advantage of the suite of sensors, weapons and other systems that are being acquired, Defence needs to ensure that it adheres to a centrally coordinated plan to link those elements together in what will over time become the networked force. The development of such a force presents new challenges in the way Defence manages projects that deliver capability and will require significant coordination, cross project collaboration and industry liaison. It will also need the support of a comprehensive joint training and education program and a clear master plan with key milestones.

9.96 The Government has confirmed that Defence is to build a networked ADF, and that it will achieve this by way of progressively delivering networked maritime, land, air and ISR domains. The Government has decided that Defence is to have in place the ICT infrastructure, information tools, command support, battlespace management systems and joint training programs necessary to provide a reliable battlespace network across the entire ADF.

## Emerging Capability Priorities

9.97 In a number of emerging capability priority areas, the Government has decided to hedge against future risk through modest capability developments, while keeping open the option of enhancing our capabilities, should circumstances require. This is a response to emerging areas of potential

direct threat which might pose serious and even grave threats to our national security if they are not countered. These areas include:

- cyberattack on our defence, security, government and civilian information infrastructure;
- space warfare involving attacks on critical space systems, especially those of our principal ally, the United States;
- ballistic missile attack on our population centres and infrastructure, especially where WMD warheads might be involved; and
- WMD attack by non-state actors using unconventional means.

9.98 Relevant priorities announced in this White Paper should be regarded as hedging developments against future risk. The Government will monitor emerging threats very closely and adjust our plans if necessary. Cyber warfare capability is dealt with in the preceding section on information superiority, and is not further discussed here.

### *Space Situational Awareness and Mission Assurance*

9.99 Space assets, including communications, intelligence, surveillance, positioning, navigation and targeting systems, will play an increasingly important role in military operations. Counter-space technologies will pose an increasing risk to the networked space-based systems on which we rely so heavily on for operational success. The emergence of counter-space technologies that can deny, disrupt and even destroy space-based capabilities will make space mission assurance and survivability increasingly important.

9.100 Our strategic capability advantage depends on our ability to access space, gain the benefits of space-based systems and protect ourselves from foreign exploitation by space-based capabilities. Protecting our assets from counter-space capabilities and from accidental damage caused by space debris will be critical. We rely on the United States for much of our space advantage, but we should also seek ways to develop our nascent but growing expertise in space capabilities.

9.101 The Government has placed a priority on space situational awareness and has requested that Defence explore means by which to strengthen our space situational awareness and mission assurance capability. This will include the ADF developing a career stream for space specialists.

### *Missile Defence*

9.102 Threats posed by ballistic missiles and their proliferation, particularly by states of concern such as North Korea, constitute a potential strategic challenge for Australia. Such threats include potential direct threats to Australia, threats to deployed Australian forces (particularly in East Asia and the Middle East), and other threats to regional security and stability.

9.103 The Government is opposed to the development of a unilateral national missile defence system by any nation because such a system would be at odds with the maintenance of global nuclear deterrence.

We would be especially concerned at developments that might undercut the deterrent value of the strategic nuclear forces of the major nuclear powers, and especially the viability of their second strike capabilities.

9.104 Within this policy framework, Australia's approach to ballistic missile defence will continue to be based on examining capability options appropriate to Australia's strategic circumstances. We will explore the development of capabilities for in-theatre defence of ADF elements and the defence of other strategic interests - including our population centres and key infrastructure.

9.105 The Government will review its policy directions in this field annually, at which time it will authorise an annual plan of Defence engagement, research and development activities.

### *Counter-Weapons of Mass Destruction Capabilities*

9.106 The Government has decided to enhance the counter-WMD capabilities of the ADF by establishing a deployable defensive counter-WMD capability in the Incident Response Regiment in support of land force or special operations activities. This will include some decontamination capabilities, as well as area and close survey, technical advice, and sophisticated measurement capabilities.

9.107 Although we do not intend to develop a more substantial deployable counter-WMD capability in the immediate future, the Government has not ruled out doing so if our strategic circumstances warrant such a move. Such a force could provide cueing to assist in strike tasks (for example, by special forces) to eliminate the source of a WMD threat. The Government would, of course, only take such action in self-defence within the bounds of our international legal obligations.

## Future Capability Options

9.108 The Government has directed Defence to develop additional force structure options for possible consideration in future years. Those options may be brought forward as Australia's strategic and fiscal circumstances change, in which case they would be a basis for force structure options which might be considered in the next White Paper.

9.109 Such options could potentially include measures to further boost our capacity to deter and defeat attacks on Australia, to contribute to stability and security in our immediate region, to further hedge against emerging strategic risks, or some combination of those.

# CHAPTER TEN:
# HOW PREPARED DOES THE ADF NEED TO BE?

## Preparedness

10.1 Military capability is achieved by developing a force structure appropriately prepared for a range of potential operations. Defence preparedness, the ADF's ability to undertake military operations, comprises two key components: readiness and sustainability. Preparedness is core business for Defence and, other than success on operations, is the most significant performance outcome that Defence delivers to Government.

10.2 Judgements about preparedness are important for both strategic and cost reasons. Striking a balance between maintaining some forces at high levels of preparedness and others at lower levels is critical if we are to optimise strategic outcomes within the resources invested in Defence by Government. This challenge has implications for both the readiness of our forces and their sustainability on operations and directed tasks.

10.3 Having our forces at high rates of preparedness would enable us to respond rapidly and efficiently to a short-notice contingency; not holding sufficient forces at appropriate preparedness levels could leave us unprepared should a contingency arise that we had not planned for.

10.4 But preparedness comes at a cost. The higher the preparedness levels, the higher the cost. The cost of preparedness is driven by the timeframe within which forces must be ready for contingency operations, the expected duration of the contingency, the quantity of forces expected to be able to respond, the professional skills and pre-deployment training required to deliver the desired effects, and the complexity of the equipment to be used. Units at a very short notice to move (in some cases, a few hours) cost more to maintain than units at longer notice to move. Maintaining a large number of force elements to meet a wide range of potential contingencies at short notices to move is not a practical or effective use of limited resources.

10.5 Defence needs to hold some forces at high states of **readiness** to commit to short-notice contingencies that may arise. When determining which short notice contingencies to be prepared for, the likelihood and consequence of an event arising is analysed.

10.6 The ability to continue to conduct directed tasks and operations over time, which is known as **sustainability**, is a consequence of having enough military personnel to replace or rotate deployed troops during a prolonged operation, the serviceability of major platforms and other equipment, the quantities of available supplies and replacement items, and the ability of critical functions such as sea and air lift to be used at elevated or prolonged rates of effort. Sustainability is also influenced by the

capacity of industry to provide contracted support services, maintain, repair and replace equipment, generate supplies, provide specialist skills, and contribute to reconstitution once the mission is complete.

10.7 An important aspect of preparedness is the concept of **concurrency**, which is the ability of the force to conduct a number of operations in separate locations simultaneously. Concurrency poses challenges in particular ways. While there may be sufficient combat forces to conduct simultaneous deployments in geographically diverse environments, crucial joint enabling capabilities can often be stretched by the concurrent need to support and sustain our forces over long distances in different operating environments.

## Force Levels and Preparedness Goals

10.8 The Government has decided that, in return for the resourcing to be provided to Defence in the years ahead, the ADF must be able to maintain prescribed levels of operational capability, measured against force levels and preparedness goals. These requirements have been set in relation to the ADF's base level of capacity, and readiness, sustainability, concurrency and operating limitations. They represent what the future force, when fully built, must be able to do without further significant mobilisation of other national resources.

10.9 The Government expects the ADF to be postured to be able to carry out the following missions, potentially at the same time, or in carefully managed sequences over concentrated periods of time:

- establish and maintain sea control and air superiority at key locations in the ADF's primary operational environment;
- project maritime and air power beyond that area if that is necessary to defend Australia;
- maintain persistent situational awareness of our sea and air approaches;
- undertake strategic strike missions if that is necessary to defend Australia;
- deploy a brigade group able to engage in combat operations, and sustain that force for a prolonged period of time in our primary operational environment (but for much shorter periods beyond that area);
- deploy a battalion group to a different area of operations for a prolonged period of time in our primary operational environment (but for much shorter periods beyond that area);
- maintain other forces in reserve for short-notice, limited-warning missions, such as the evacuation of Australian citizens from regional trouble spots;
- project and sustain land forces operating in our primary operational environment by air and sea, including in credible non-permissive contingencies;
- provide tailored contributions to operations in support of our wider strategic interests (for example, a Special Forces Task Group, a combined arms Army Battalion Group or Company Group, a

detachment of maritime patrol or air-lift transport aircraft, a major surface combatant, or specialist elements such as medical, logistics, command, and communications teams);

- support civil efforts to protect and secure our offshore maritime domain, including in relation to dealing with unauthorised arrivals, fisheries protection, and other border security tasks;
- contribute ADF ISR and wide area surveillance capabilities to the national surveillance and border protection effort;
- maintain high readiness force elements to support domestic or offshore counter-terrorism efforts, particularly in relation to resolving complex terrorist incidents and securing ships or offshore resource infrastructure;
- assist civil authorities in securing major events of public significance, such as the 2000 Sydney Olympics and the 2007 APEC Leaders Meeting;
- assist civil authorities in dealing with the proliferation of WMD, explosive ordnance disposal, and chemical, biological, radiological and nuclear defence;
- support emergency response efforts in the event of man-made or natural disasters within Australia, and particularly assist in situations where the scale of a disaster exceeds the capacity of other agencies and jurisdictions;
- provide humanitarian assistance and disaster relief assistance to our neighbours, and more broadly if necessary; and
- provide search and rescue support, especially across the breadth of Australia's area of maritime search and rescue responsibility, whether close to the mainland or in remote parts of the Southern, Pacific and Indian Oceans.

## Improving Preparedness

10.10 As part of the White Paper process, Defence reviewed its preparedness management arrangements to provide greater transparency on preparedness and associated personnel and operating cost pressures. Based on that review, the Government has directed Defence to refine its preparedness management arrangements so as to ensure a better alignment between strategic guidance, preparedness goals and ADF activity levels, and to optimise the resources available for frontline activities.

10.11 Defence will develop a better process for translating preparedness requirements into activity levels, to ensure that the ADF is prepared to do what is required of it by Government, while containing unnecessary growth in personnel and the operating costs of preparedness, and achieving significant potential savings in this area over the long term. Specific preparedness management reforms include:

- the development of a comprehensive preparedness decision support capability;
- the reform of applicable personnel and operating cost policies and processes; and

- the development of relevant information systems and skills to support improved management of preparedness and to ensure better control of personnel and operating costs.

## The Use of Reserves

10.12 In some circumstances, Defence may be required to surge its capabilities to rapidly increase force levels, enhance preparedness or broaden our military response options. The balance and structure of the ADF's full-time and part-time forces can be a force multiplier in such circumstances, and could be managed more strategically.

10.13 Over recent years, Defence has employed part-time units in several operational deployments and large scale 'national security' activities such as the Olympics, the Commonwealth Games, APEC meetings and visits by international dignitaries. Critical specialists, such as surgeons and other professionals, provide invaluable service to Defence operations on a part-time basis. Part-time personnel also routinely undertake extended operational deployments in the near region, such as the infantry company group currently deployed on rotation to Solomon Islands. Part-time units can also undertake very short notice aid to the civil community tasks, such as assistance during and after bushfires and floods. Individual part-time personnel from all Services have also contributed to multinational peacekeeping tasks in a number of theatres, and have served in multinational headquarters and coalitions.

10.14 However, a number of factors have constrained the ability of part-time personnel to play a larger role in the delivery of trained and ready capability. These factors include:

- the complexity of the tasks performed by the ADF (and the sophisticated and intensive mission preparation required);
- the availability of part-time personnel for extended duty;
- the complexity, cost and availability of some equipment (and the higher training load required to maintain competencies);
- the significant annual wastage rate among part-time personnel, which can be a brake on the delivery of capability; and
- the dispersion of part-time units and facilities.

10.15 The Government is committed to a better integration between part-time and full-time service in the ADF, and removing the factors which can impede the contribution that part-time forces can make to ADF capability. Chapter 9 describes how this will be done in relation to the Army, which contains the largest number of part-time personnel.

10.16 The Government also intends to further enhance the High Readiness Reserves (HRR), a category of part-time service that allows for some part-time personnel in the Army and the Royal Australian Air Force to be held at much higher readiness for deployment than most reservists. By January 2010, six company-sized Army combat teams, made up of HRR personnel, will be available for operational

tasking such as protecting points of entry (for instance ports or airfields), and guarding headquarters and vital installations. Defence will grow this capability, to provide a total of more than 1,000 troops in deployable combat teams, and more than 1,700 additional individuals and small teams to round-out other elements of the Army, including Special Forces. Additionally, the Army's Reserve Response Forces (RRF) provide six teams, each of company-size, for the purpose of Defence Assistance to the Civil Community, in the case of natural disasters, and Defence Force Assistance to the Civil Authority tasks. As discussed in Chapter 9, Defence will also investigate a new form of part-time service based on workforce sponsorship, with the current HRR scheme possibly being adapted to support such an initiative.

10.17 The Air Force Reserve contributes to an integrated total force capable of timely and effective employment and deployment to meet Air Force capability requirements over a range of contingencies and offers Government a range of options in meeting contemporary operations, peace-making and peacekeeping, disaster relief and other local or regional activities. The Air Force Operational Reserve, incorporating the HRR, augments Air Force operational capability by providing an additional just-in-time, prepared personnel surge. The current operational Air Force Reserve is trained and prepared to the same standard as regular forces and capable of taking its place alongside regular personnel. Over the past two years some 150 Air Force reservists have deployed on overseas operations voluntarily and a similar number have backfilled positions behind deployed permanent Air Force members in the same period.

10.18 The Navy will continue its workforce integration program, which focuses on discrete capability outputs. The Navy Reserve Capability Enhancement Program, currently in its third year, will continue the participation of trained reservists in providing surge capacity for all Navy force elements. The Navy will continue to assess the optimal workforce size and mix, including part-time service, in the transition phase to the new amphibious capability to be provided by the LHDs from 2011 and beyond.

10.19 The Government also intends to investigate other models of part-time service, including focused contributions to operations, and 'sponsored Reserves'. Focused contributions, in which a part-time force element is focused on a particular type of mission, provides specialist capabilities or supports a long-term operational commitment, are particularly useful. Sponsored Reserves is a system by which private companies are contracted to deliver trained and ready groups of personnel, with skills in particular fields such as transport, maintenance, supply and health.

## The Use of Contractors on Operations

10.20 The ADF has undertaken a series of demanding operational deployments in recent times, and commercial contractors have been used, in some form, on all of those deployments. Contractors have worked best in secured environments and their deployment has allowed ADF elements to redeploy, reconstitute and prepare for subsequent operations. Contractors have also provided significant support in East Timor and the Middle East by assisting in the preparation of stores and equipment for return to

Australia. The ADF will continue to develop the skills and experience necessary to manage and support commercial contractors in operational environments.

10.21 The greater use of contractors through such methods as support contracts and Sponsored Reserves, for longer-term stabilisation and reconstruction operations will potentially give the ADF more flexibility and the ability to choose the most cost-effective workforce mix for a given operational task.

## Mobilisation

10.22 Chapter 3 describes the concept of strategic hedging, which provides a way to manage the risk that the strategic environment might deteriorate to a greater extent than is anticipated. In some circumstances that deterioration could be so significant that the currently available full-time and part-time forces would be insufficient to meet Australia's defence needs, even if we surged latent capabilities within Defence. In such circumstances, we might need to draw on significantly greater contributions from the national economy and society.

10.23 If circumstances of national peril were to arise, and the defence of Australia required it, the Government would of course direct a national effort to protect our territory and population and to preserve our way of life. The act of national mobilisation would not be taken lightly. Only a very substantial deterioration of our strategic environment that placed Australia under grave threat would justify such a course.

10.24 A substantial national mobilisation effort would require additional planning for the employment of national assets such as transportation systems, logistics capabilities, and hospital and health support services. Defence will pursue adequate mobilisation planning in order to have appropriate strategies in place, and to assess the issues associated with mobilisation.

# CHAPTER ELEVEN:
# ALLIANCES AND INTERNATIONAL DEFENCE RELATIONSHIPS

## Importance of Alliances and International Defence Relationships

11.1 Central to Australia's strategic posture, and one of the most important ways Australia seeks to promote its strategic interests, is our network of alliances, our bilateral and multilateral defence relationships, and the growing range of multilateral security forums and arrangements in our region. These connections help us to promote stable strategic frameworks in our immediate neighbourhood, in the wider Asia-Pacific region, and at the global level. Such frameworks help to reduce the potential for threats to emerge and to mitigate their consequences when they do. Our defence relationships give Australia an important voice that underpins our credibility as a middle power which is active in promoting security.

11.2 Australia's defence relationships also strengthen the ADF by providing access to equipment, intelligence and training opportunities. Ultimately, our defence relationships are designed to underpin the possible use of military force.

11.3 Such relationships require long-term investment and effort to establish ties able to withstand pressures that may emerge. This Chapter explains why we make that investment and outlines how our international defence relationships complement our broader foreign policy goals, how they assist in building confidence and transparency, especially in the Asia-Pacific region; and how they provide the ballast which ensures that when circumstances demand we can work together with trusted allies and partners in crises and, if necessary, in conflict.

11.4 Australia's capacity to engage in defence diplomacy with key allies and regional partners is underpinned by the skills of our ADF personnel and civilians in Defence, including Defence personnel posted overseas and the resources available to them. Promoting Australia's middle power role puts a premium on highly developed analytical and policymaking skills, and our ability to understand and shape strategic developments. The Government remains committed to enhancing these skills and retaining the resourcing necessary for this essential foundation of our global and regional engagement plans.

## The US Alliance

11.5 Our alliance with the United States is our most important defence relationship. In day-to-day terms, the alliance gives us significant access to materiel, intelligence, research and development, communications systems, and skills and expertise that substantially strengthen the ADF. The alliance relationship is an integral element of our strategic posture, as explained in Chapter 6. Without access to US capabilities,

technology, and training, the ADF simply could not be the advanced force that it is today, and must be in the future, without the expenditure of considerable more money.

11.6 Formal undertakings to support each other in time of need underpin our defence relationship with the United States. Those undertakings are stated in the Australia-New Zealand-US (ANZUS) Security Treaty of 1951, in which the parties agreed to "act to meet the common danger". This does not commit Australia or the United States to specific types of actions, but it does provide a clear expectation of support. In this context, Australia chose to invoke the ANZUS Treaty for the first time following the 11 September 2001 attack on the United States.

11.7 Australia and the United States will continue to look for ways to deepen our defence cooperation. Under the umbrella of the Enhanced Defence Cooperation Initiative, agreed between our two countries in 2007, we are exploring how we can develop a combined humanitarian assistance and disaster relief capability to enhance our joint responses to catastrophic regional events. Significant collaboration is also underway in the ISR field, with Australian and US officials actively pursuing new options for enhanced cooperation. Australia and the United States have also agreed to continue development of the Joint Combined Training Capability which both reduces the cost, and improves the quality, of unilateral and bilateral training. Australia will also continue to provide access to training and exercise ranges for US forces, including strategic bombers.

11.8 Satellite communications are vital to the United States and Australia, and we will continue collaboration in this area. The US-Australia Military Satellite Communications Partnership Statement of Principles of 2008 commits both nations to exploring further technical collaboration and joint access to satellite communications capabilities. Without this collaboration, Australia would have to devote significantly more resources to develop the intelligence and communication capabilities we need.

11.9 Both countries are also committed to fostering cooperation in other areas, such as: strategic planning and wargaming; the harmonisation of capability requirements and interoperability; technology access and acquisition; combined operational planning; regional engagement cooperation; missile defence and space situational awareness and mission assurance (which were covered in Chapter 9); research, development, test and evaluation; and logistics and materiel support.

### *Joint Facilities*

11.10 For almost 50 years, through the joint defence facilities, Australia has made a significant contribution to US national security by hosting or supporting some of the United States' most sensitive and critical strategic capabilities. These include systems related to intelligence collection, ballistic missile early warning, submarine communications, and satellite-based communications.

11.11 Australia's geography, stable democratic system, developed economy and technical expertise, combined with our close alliance with the United States, will continue to underpin the enduring value of the joint defence facilities. The contributions of these facilities to global US capabilities both strengthen the alliance and greatly enhance our own capabilities.

11.12 The Joint Defence Facility at Pine Gap near Alice Springs continues to be the pre-eminent example of this strategic cooperation. The capabilities at Pine Gap will evolve to meet new demands and take advantage of new technologies, and the facility will remain a central element of Australia's security and of our relationship with the United States. It will continue to contribute to the intelligence collection capabilities of both countries, support monitoring of compliance with arms control and disarmament agreements, and underpin global strategic stability by providing ballistic missile early warning information to the United States. The activities conducted at Pine Gap will continue to be undertaken on the basis of our full knowledge and concurrence, and with direct capability benefits for Australia. Any future proposal for hosting similar facilities will have to meet the same standards.

## The Wider Asia-Pacific Region

11.13 **Japan** is a critical strategic partner in our region and more broadly, not least because of our shared interests as close US allies. Given its strong national capacity and defence capabilities, Japan can make a significant contribution to the security and reconstruction of fragile states and to the development of greater international capacity in areas such as humanitarian assistance, disaster relief and peacekeeping operations. We will continue to work to develop our practical defence cooperation with Japan, building on our operational cooperation in Iraq and improving the interoperability of our defence forces, bilaterally and with the United States through the Trilateral Strategic Dialogue.

11.14 The 2008 Memorandum on Defence Cooperation will underpin our defence relationship with Japan by providing a framework for expanding practical engagement between the ADF and the Japan Self Defense Forces. The Memorandum recognises the gradual maturation of the defence relationship from one based on dialogue to one based on practical cooperation. Key elements include an expression of intent to further cooperation in counter-terrorism, disaster relief, humanitarian assistance, peacekeeping and maritime security; a commitment to explore cooperation in science and technology; a commitment to develop an annual calendar of defence activities; an emphasis on multilateral and trilateral defence cooperation with the United States; and a formal commitment to regular bilateral Defence Ministers' meetings.

11.15 As **China** assumes a greater role on the regional and world stage, the Government recognises that Australia must build a deeper understanding of China's security policies and posture. China is critical to stability in Northeast Asia and the wider region. Its approach to regional security in North Asia and the wider region, and how it interacts with our key strategic partners (the United States, Japan, and increasingly India), is fundamental to Australian interests. Along with these countries, China will be central to the development of a cooperative security community in the Asia-Pacific region. Closer to home, we need to engage China as a responsible stakeholder in support of our common desire to see stable, prosperous and well-governed nations in our immediate region.

11.16 Developing our defence relationship with China is therefore a priority. Greater engagement is essential to encourage transparency about Chinese military capabilities and intentions, understand each other's

approaches and secure greater cooperation in areas of shared interest. To that end, in 2008 we upgraded our bilateral Defence Strategic Dialogue to talks at the Secretary of Defence and Chief of Defence Force level. At a practical level, we are committed to deepening our educational and professional exchanges with China, and to exploring opportunities for future joint activities.

11.17 Australia also has a strong bilateral relationship with the **Republic of Korea**; one that reflects our mutual interests in regional stability and common alliance with the United States. We will continue to pursue cooperative activities, including peacekeeping training, professional and educational exchanges and defence industry cooperation. The Government will also explore opportunities to work together on maritime security and disaster relief and humanitarian assistance in the region.

11.18 **India** is an important partner for Australia given our shared democratic values, our maritime interests, and our commitment to combating regional and global terrorism and maintaining a rules-based global security order. As India extends its reach and influence into areas of shared strategic interest, we will need to strengthen our defence relationship and our understanding of Indian strategic thinking. In the near term, we are looking for opportunities to expand high-level defence dialogue, building upon annual talks between the Chief of the Defence Force and his Indian counterpart. We should also increase education and training exchanges and practical cooperation in areas such as defence information sharing, counter-terrorism and peacekeeping.

11.19 Australia and India will have a strong mutual interest in enhancing maritime security cooperation in the Indian Ocean, where we both have key strategic interests to manage. Maritime trade through the eastern Indian Ocean is particularly important for both countries, and we will explore opportunities to work together with India to ensure that those waters are kept secure and open over the decades ahead. The Government has specifically directed Defence to examine opportunities for increased bilateral maritime cooperation.

11.20 Our engagement with major and emerging powers is part of the Government's strategy to develop a regional community with the capacity to forge a constructive **Asia-Pacific security environment**. We need to secure the constructive engagement of all of the major powers in this arrangement, while promoting the interests of the region's middle powers and protecting the more fragile states in our neighbourhood. This should be an integral part of an Asia Pacific Community that should, ultimately, engage these countries across the spectrum of economic, political and security issues.

## Southeast Asia

11.21 For reasons of size, strategic weight, and outlook, Australia's relationship with **Indonesia** remains our most important defence relationship in the immediate region. Our proximity means we share many of the same security challenges, not least terrorism, narcotics and people smuggling. Australia has a fundamental interest in a stable, unified and democratic Indonesia underpinned by a professional military. Indonesia has undergone a significant transformation since the last Defence White Paper in 2000, and the defence relationship has broadened and matured into a sophisticated partnership.

11.22 The Lombok Treaty on Security Cooperation, ratified in 2008, is the key element in a robust framework of agreements being developed to advance our shared security interests. In the Defence relationship, that framework includes the Joint Statement on Defence Cooperation signed by the Chief of the Defence Force and his Indonesian counterpart in January 2009. Our ability to manage this key relationship will be underpinned by the strong commitment by both governments to the sustained advocacy of our shared strategic interests. In coming years we will look to further expand our practical cooperation, exercises, personnel and institutional links, capacity building and strategic dialogue.

11.23 **Singapore** is another key partner in Southeast Asia. We have a close defence partnership with Singapore based on common strategic understandings and close cooperation between our military forces. We will continue to look for opportunities to expand our combined training and other practical bilateral cooperation, and explore ways we can work together on multilateral peace and security initiatives.

11.24 The FPDA with Singapore, Malaysia, the United Kingdom and New Zealand remains a useful mechanism to confront both traditional and emerging challenges. The arrangements also help to facilitate our strong defence ties with **Malaysia**, which have been proven during our history of joint operational deployments - including most recently in East Timor - and through our cooperation at RMAF Butterworth.

11.25 Deepening bilateral cooperation with other Southeast Asian countries, including **Vietnam** and **Cambodia**, will remain an important goal. We will work particularly closely with modernising defence forces in the **Philippines** and **Thailand**, where we will continue to have an interest in helping them develop their counter-terrorism capabilities, and the professionalism of their armed forces as they confront difficult internal security challenges. We will also continue to assist our Southeast Asian neighbours to develop greater capacities to contribute to regional security.

11.26 Defence can also work with neighbours in building **regional counter-terrorism capacity**. In the recent past, Australia has worked hard with regional nations to establish relationships aimed at strengthening regional counter-terrorism arrangements and capabilities. This is exemplified by our work with Indonesia under the auspices of the Lombok Treaty on Security Cooperation. We have also worked with other regional neighbours, such as Singapore and the Philippines. Defence will continue to undertake its substantial program of cooperation in this crucial area.

## New Zealand

11.27 Our defence relationship with New Zealand continues to be reinforced by our work together on successive deployments and combined operations in East Timor, Solomon Islands and elsewhere. Security crises in East Timor, instability in Fiji, and insurgency in Afghanistan underscore the coincidence of our security interests and the critical need for close coordination of defence postures and forces.

11.28 The Government especially reaffirms its commitment through this White Paper to working with New Zealand to promote security, stability and development in the Pacific and East Timor. This requires that we continue to align our approaches to defence relations and capacity-building and preventative

diplomacy. But we must also plan together on the basis that our combined operations in pursuit of our common security interests, as has occurred over recent years, are the new norm. It is therefore critical that our two defence forces maximise interoperability and align our operational planning, logistics, communications, capability development and procurement activities to the maximum extent practicable.

11.29 As the ADF incorporates new systems and capabilities, maintaining the current level of interoperability between our separate defence forces will require a concerted effort on the part of both countries. With this in mind, Australia and New Zealand should look for opportunities to rebuild our historical capacity to integrate Australian and New Zealand force elements in the Anzac tradition. This operational integration would of course be without prejudice to our respective policy choices. It could be as modest as integrating our air transport logistics support to operations, or as ambitious as an Anzac task force capable of deploying seamlessly at short notice into our immediate region. To be effective, any integrated force elements would need to exercise regularly together as a unified capability.

## South Pacific and East Timor

11.30 Australia's security interests in the South Pacific require that we continue to lead efforts to promote economic security, good governance and internal stability. Stabilisation operations will remain an option in extreme cases of instability. But for Australia to make any lasting progress in helping our immediate neighbours our efforts must encompass elements from across government to build capacity and administrative, economic, legal and police institutions. While continuing to lead by example, a key to the success of our efforts will be enlisting the support of regional governments and coordination with other donor countries in the Pacific, including the United States, France, Japan, China, and New Zealand.

11.31 We will continue to work closely with the Government of **East Timor** and our international partners to adjust the ADF presence as the security situation improves. As this plays out, the focus of our defence engagement will transition to capacity building in order to develop the professionalism and capability of East Timor's defence force, including its capacity to protect East Timor's significant maritime resources.

11.32 In **Papua New Guinea** (PNG), we will continue to support the development of a professional defence force with improved capabilities in core areas such as border and maritime security. Importantly, we will work closely with the PNG Government to ensure that the PNG Defence Force is affordable and sustainable.

11.33 For over 20 years, the Pacific Patrol Boat Program, and other measures designed to assist in the development of **maritime security** capacity, have been a feature of our Defence cooperation in the Pacific. Our aim has been to assist our neighbours to develop the capacity to protect their maritime resources and enforce sovereignty. The Government has directed Defence, the Department of Foreign Affairs and Trade and other Australian Government agencies to develop an approach to regional

maritime security that reflects Australia's commitment to assisting our neighbours in these areas in future. In particular, working with regional stakeholders, we will seek measures to enhance the capacity of regional countries to enforce their sovereignty, protect their resources and counter transnational crime.

## South Asia

11.34 Aside from Australia's growing relationship with India, discussed in an earlier section, Australia has a range of relationships with the countries of South Asia. **Pakistan** has pivotal importance in relation to international efforts to defeat terrorism. Pakistan faces a range of challenges in relation to its security, demography and economy. As a nuclear power, fragility in Pakistan could present a real challenge to a stable global order. Australia will need to continue to support Pakistan's democratic institutions while also urging and reinforcing Pakistan's efforts to eliminate terrorist networks from its territory through greater defence engagement and capacity building assistance.

11.35 Australia enjoys a modest defence relationship with **Afghanistan**. It is based primarily on Australia's ongoing contribution to International Security Assistance Force efforts in Afghanistan that is helping to strengthen security and build the capacity of the Afghan National Security Forces. High-level meetings involving Defence Ministers occur regularly, supplemented by extensive engagement by senior officials. A Defence Attaché is cross-accredited to Kabul from Australia's Embassy in Islamabad.

## The Middle East and Africa

11.36 Australia has a range of national security interests in the Middle East, including substantial economic and trade interests, maintaining peace and security within the region, preventing the proliferation of WMD, and helping to ensure global access to Middle East energy reserves. The Middle East is also the location of our longest-running naval deployment, where we have had a continued presence since 1991. As the armed forces of Gulf States become more sophisticated, we will continue to pursue opportunities for cooperation.

11.37 It will remain in Australia's interests to encourage peace and stability in Africa as part of our contribution to global security, through targeted defence cooperation and capacity building in areas such as peacekeeping. These efforts will contribute to Africa's capacity to manage its security, and a newly-established Defence Attaché to the African Union will strengthen Australia's ability to engage with Africa in areas of mutual interest.

## The United Kingdom

11.38 Australia's longstanding defence relationship with the **United Kingdom** has been strengthened by our recent shared operational experience in Iraq and Afghanistan. We also cooperate in the areas of intelligence, capability development and science and technology. This collaboration is underpinned by closely shared strategic priorities, including in areas such as countering international terrorism and

the WMD proliferation. We will continue to work with the United Kingdom to enhance interoperability between our forces and improve our ability to work together in coalitions, including as part of the FPDA.

11.39 Building on shared history, our work together in Afghanistan and Iraq provides a strong basis for close cooperation and gives impetus to a more contemporary relationship focused on our common strategic interests, maximising the benefits of interoperability, capability development and training. The announcement of annual senior-level bilateral defence cooperation talks at the 2008 Australia-United Kingdom Ministerial Consultations, to draw together our various dialogues and to set out a strategic framework for future cooperation, demonstrates both nations' continuing commitment to strengthening bilateral defence cooperation into the future.

## Europe and the North Atlantic Treaty Organization

11.40 Australia continues to benefit from a broad range of cooperative programs in capability development, materiel, industry, logistics, and science and technology with a range of European countries, especially Spain, France, Germany, Italy and Sweden. We also value our strong practical cooperation with France in the Pacific and Southern Oceans as well as our work in Afghanistan alongside a number of European countries, particularly the Netherlands, United Kingdom, France and Germany.

11.41 Australia's engagement with the North Atlantic Treaty Organization (NATO) and the European Union (EU) centre on three main themes: seeking ways to respond effectively to threats posed by international terrorism; contributing to international counter-proliferation efforts; and sharing the challenge of dealing with the destabilising effects of failing and failed states. Australia's international engagement strategy centres on developing our capacity to work effectively with NATO and the EU to address these challenges where it is in our strategic interests to do so. Our focus will be on developing and enhancing strategic and operational-level mechanisms that support the achievement of coordinated responses.

## Multilateral Security

11.42 Globally, Australia's defence relations will remain an important tool to promote our middle power influence; and to build support and capacity for peacekeeping, coalition operations, and other collective security activities in support of a stable global security order. The strength of those relations and the credibility of our alliance relationships enhance our capacity to support the United Nations, NATO and other multilateral institutions.

11.43 Strong and activist engagement with the United Nations will be integral to promoting a favourable global security order. Our regional neighbours generally view the United Nations as an important multilateral entity and one that can be used to shape behaviour in the global security order. The United Nations brings credibility to our peace and security efforts when we operate directly under the auspices or mandate of the United Nations, as we have in East Timor.

11.44 In order to maintain broader regional and global security interests, Australia is a longstanding supporter of key disarmament and arms control initiatives. The threat from state-based WMD programs, and potential access to them by non-state groups, will remain serious security concerns for Australia. The introduction of WMD and their means of delivery into our region would have profound effects on our security and on future defence capability requirements.

11.45 Australia will continue to lead and participate in efforts to promote disarmament and counter-proliferation through practical and cooperative measures. The Government, together with the Government of Japan, recently established the International Commission on Nuclear Non-proliferation and Disarmament seeking to shape a global consensus ahead of the 2010 Nuclear Non-Proliferation Treaty Review Conference. Australia is also an active member of the international Proliferation Security Initiative and remains committed to assisting regional states to implement arms control and nonproliferation treaties, and promote effective national export control regimes.

# CHAPTER TWELVE:
# DEFENCE INTELLIGENCE

12.1 A strong Defence intelligence capability is central to Australia's strategic posture. It helps to prevent strategic or operational surprise, to inform policy, to stay abreast of developments that complicate the ADF's ability to do what we need it to do, and most crucially, to support our deployed forces on operations. Defence also has a national intelligence role in support of broader national security.

12.2 At its core, Defence intelligence helps decision makers interpret and anticipate complexity and uncertainty by providing intelligence which provides vital inputs to strategic and operational decision making, whether in relation to ADF operations, strategic policy or decisions on capability.

12.3 Specifically Defence intelligence provides:

- support to the planning and conduct of operations and direct operational support to deployed ADF commanders and units;
- insights into the strategic posture, policy, intent and military capabilities and proliferation activities of countries relevant to Australia's national security;
- insights into the actions, capabilities, motives and intent of foreign non-state actors that pose a potential or actual threat to Australia's national security;
- assessments of conventional and WMD-related weapon systems and defence technologies and knowledge to enable the development of tactics, techniques, procedures and countermeasures to defeat threats to the ADF;
- collection, analysis and distribution of foreign signals intelligence and geospatial intelligence;
- guidance on communications, computer and information security to Defence and the Government;
- mapping, charting and other forms of geospatial support to ADF operations and national security operations and planning; and
- other functions that go beyond the direct needs of the Defence portfolio and support other agencies in safeguarding Australia's national security.

## Long-Term Strategic Warning

12.4 Defence intelligence has a vital role in providing us with strategic warning. It gives decision makers time to think, plan and act before events occur. At the strategic level, indicators and warnings help provide the lead time necessary to make longer term capability investments and to adjust plans. This helps to prevent strategic surprise. The modernisation of forces in our region and developments in major power relations are two areas in which this warning function is invaluable. As others in the

region build their military capabilities, we need to anticipate them and plan accordingly in our force development process. As the distribution of strategic power changes, we have to reassess our posture and risk environment.

## Crisis Warning and Support to Operations

12.5 We must carefully balance the longer term strategic warning function with the crucial operational intelligence function, which is so important to our ability to prosecute operations. At times of crisis or heightened operational periods, Defence intelligence provides timely and action-focused intelligence. This capability is a critical enabler for ADF operations. Crisis warning capabilities enable anticipatory action to be taken in the case of emerging threats and inform ADF planning, readiness and force posture.

12.6 Nowhere is intelligence as critical to decision making as on the battlefield. Every possible advantage that ADF commanders and troops can be given can save lives and protect platforms. The Defence intelligence agencies and their international partners, along with their partners in the broader Australian intelligence community, provide direct operational support to deployed ADF personnel - today in the Middle East, Afghanistan, East Timor and Solomon Islands. Timely intelligence support enables the risks to ADF personnel to be managed while they achieve their operational objectives, and is crucial to the information superiority our forces require.

## Intelligence Support to Capability Development

12.7 Capability development to plan the future ADF is also supported by the work of the Defence intelligence agencies. Programs need to take account of assessments of the future strategic environment and of emerging and in-service capabilities of other forces and of non-state actors. Similarly, for the current force-in-being, Defence intelligence provides critical information that supports both the development of countermeasures and improvements in doctrine and tactics for systems and capabilities already in service with the ADF.

## Defence's National Intelligence Role

12.8 Defence intelligence performs a number of roles that support whole-of-government activities. The Defence intelligence agencies help to protect Australia's official communication and information systems; support Australia's whole-of-government counter-terrorism activities, consular activities, sovereignty enforcement and counter-proliferation operations; and provide imagery and geospatial products for national events (such as APEC in 2007). They work as an integrated part of the broader Australian intelligence community, which responds to the directions and priorities of the Government's national security machinery.

## Defence Intelligence Review

12.9 The Review of Future Defence Intelligence Capability was an integral part of the White Paper process. The review outlined how Defence's intelligence capability could be developed to meet future operational and strategic needs more cost-effectively than by simply extrapolating the current model and practices. The resulting recommendations will be implemented to deliver a more efficient and effective capability underpinned by a robust support framework that enables the Defence intelligence capability to adapt to expected future circumstances and demands. These recommendations included:

- the development of a single integrated Defence intelligence ICT capability across the three Defence intelligence agencies to provide intelligence ICT infrastructure and services on a common basis to the maximum extent possible. It will enhance connectivity and provide seamless access to tools and data for users within the intelligence agencies, including other agencies in the Australian intelligence community through the Australian Intelligence Community Network, and specialist ADF units;
- opportunity for efficiencies in the delivery of shared services such as human resources services within the Defence intelligence environment; and
- changes to the way that intelligence training is conducted.

12.10 Defence responses to these recommendations are detailed in the following section.

## Defence Intelligence Capability

12.11 Into the future, Defence intelligence capabilities need to adapt to operate in new intelligence environments and to support next-generation capabilities and operational and planning activities. The growing volume and complexity of information (including the continuing rise in the range and utility of open source information), together with the demand for more and faster intelligence support require new analytic tools and methods, such as the single integrated ICT capability discussed in the previous section.

12.12 Defence intelligence agencies will have to work in an increasingly integrated fashion with each other and across the Australian intelligence community, with the wider range of Australian agencies with national security roles, and with its international partners, especially to address difficult intelligence targets and issues, and develop new ways of providing information in easily digestible formats. Investment in Defence's intelligence capabilities will reduce operational and strategic risks and will be an important contributor to retaining Australia's overall strategic capability advantage.

12.13 The intelligence agencies rely on highly educated, skilled and effective personnel. Initiatives for recruiting, retaining and developing personnel are evolving within the intelligence agencies, and will be informed by the Defence intelligence review's recommendations on training methods and the delivery of shared human resource services. The agencies are investing in the competition for talent, and

developing programs to identify and recruit people with the necessary skills and knowledge. New intelligence technologies and capabilities depend on having the right people to use them and provide accurate, analysed intelligence.

12.14 The Defence intelligence agencies will utilise new technologies in analysis and assessment of intelligence information. Defence will deliver enhanced capability to support the intelligence needs of Government by providing more timely and effective dissemination of intelligence, and the tools to enable greater collaboration on intelligence production and assessment within the Australian intelligence community and among international partners.

12.15 Ensuring that these new intelligence capabilities are fully integrated with the ADF will be critical to the provision of intelligence support to operations, while also enhancing the ADF's ability to support the intelligence agencies. This will be accomplished by harnessing the outputs of the ADF's ISR assets, along with the intelligence agencies' own capabilities. Integrating this intelligence with the sensors will ensure that maximum support is provided to the war fighter and support for senior decision makers.

12.16 The rapid advance of technology will create challenges and opportunities for the Defence intelligence collection agencies and specialist ADF intelligence units. The increasing mobility, sophistication and agility of potential adversaries requires Australia to have access to advanced signals and geospatial intelligence technologies to maintain our capability edge. The investment outlined in this White Paper will ensure that Defence keeps up with, and exploits technology to meet, this requirement.

12.17 The increasing speed, greater volume and higher security of information will present challenges to signals intelligence access and analysis. Defence will deliver new capabilities to ensure greater access to signals intelligence and more effective analysis of that intelligence. Capabilities to provide diverse signals intelligence access and collection opportunities will be acquired, as well as new analytic tools and methods. Investment in signals intelligence provides a basis for the delivery of the cybersecurity capabilities identified in Chapter 9.

12.18 Effective command and control, situational awareness and navigation of ADF elements and the provision of appropriate targeting support for advanced weapons systems are fundamentally dependent on accurate and timely geospatial data. That information is derived from imagery that is mainly collected remotely, either from space or from aircraft. The Government has decided to acquire a satellite imaging capability to complement existing plans for airborne imagery collection, providing Australia with a robust, remote imaging capability.

12.19 Relationships with key intelligence partners such as the United States, the United Kingdom, Canada and New Zealand, and wider partnerships and exchanges including within the Asia-Pacific region, will remain vital. They will continue to provide leverage for Australia's own capabilities, and add to the contestability and robustness of the Australian agencies' work. Intelligence relationships will deepen and evolve as Defence increases cooperation in response to shared threats.

12.20 Security of information and personnel will continue to underpin the effectiveness of the Defence organisation. The role of the Defence Security Authority, which promotes an effective security culture through developing Defence's security policies, investigating security breaches and undertaking security vetting of staff for Defence and defence industry, will be developed and improved by the adoption and refinement of new techniques and technologies, such as e-vetting.

## Accountability and Oversight

12.21 The Defence intelligence agencies are subject to extensive accountability and oversight to protect important principles such as privacy, and to ensure the legality and probity of intelligence functions.

12.22 In addition to oversight by the Minister for Defence, the Defence intelligence agencies are accountable to the Parliamentary Joint Committee on Intelligence and Security, which reviews administration and expenditure, and the Inspector-General of Intelligence and Security, who provides independent assurance that the intelligence agencies are acting legally and with propriety, and in the case of collection agencies, within the legislative framework of the *Intelligence Services Act, 2001*.

# CHAPTER THIRTEEN:
# DEFENCE MANAGEMENT AND REFORM

13.1 Defence has undergone significant change over the past two decades, and the Government recognises the value of the various reforms which have over the years improved the way Defence does business. These stretch all the way back to the consolidation of the Defence group of departments in the early 1970s, and have since included:

- commercialisation of Defence support functions, starting in the 1980s, which freed up significant military resources which were able to be redirected to combat-related roles;
- the creation and enhancement of the ADF's joint command and control arrangements in the 1990s, which have been further improved with the establishment of a truly joint and collocated ADF operational headquarters in Headquarters Joint Operations Command;
- a variety of programs since the 1980s aimed at increasing Defence efficiency;
- the establishment of the Defence Materiel Organisation (DMO) and a more structured approach to capability development; and
- the strengthening of Defence's financial control systems, which in recent years has seen a steady reduction in the book value of the uncertainty associated with Defence's financial statements.

## The Need for Further Reform

13.2 While these efforts have led to significant improvements, they have not fully tackled the fundamental issues regarding Defence's management performance. Further reforms are needed in areas such as strategic planning; capability development; management and procurement; and enterprise support services. Fundamental to the success of such reforms will be a much sharper definition of individual accountabilities for the outcomes the Government expects Defence to deliver, and the processes which underpin them. Defence must become a cost-conscious enterprise in which leaders and managers at every level understand and act on the need to free up the maximum amount of funding for reinvestment in current and future capability. To achieve this, the next wave of reform must be planned, led and managed on a whole-of-enterprise basis. Defence leaders at every level must be clear about, and held to account for, their specific contribution to the success of reform and ultimately the organisation as a whole.

13.3 The Government has endorsed a Strategic Reform Program comprising a comprehensive set of reforms that will fundamentally overhaul the entire Defence enterprise, producing efficiencies and creating savings of about $20 billion.

13.4 The Strategic Reform Program will drive efficiencies without compromising effectiveness. It draws on detailed analysis of almost every aspect of the Defence enterprise, including strategic planning; capability development; the estate; ICT; intelligence; sustainment; logistics; non-equipment procurement; preparedness, personnel and operating costs; science and technology; shared services; and workforce management. This analysis was informed by an independent audit of the Defence budget.

13.5 Governments the world over are facing the most serious economic and financial crisis in decades. In this environment, the Strategic Reform Program will deliver Australia a genuinely strategic and national advantage: savings will be reinvested in capability and Defence's call on national resources constrained.

## The Strategic Reform Program

13.6 The Government considers deep reform of how Defence does business to be a critical national priority. It will regularly review progress, and will hold Defence leaders and managers to account. In broad terms, the Strategic Reform Program will:

- provide a vehicle for deep and enduring reform within Defence;
- enhance management performance within Defence;
- ensure that productivity within Defence is increased and able to be sustained, so that the maximum possible level of resources are directed to the current and future capability;
- generally improve the way Defence does business, both in terms of efficiency and effectiveness; and
- help ensure that the goals set out in this White Paper are delivered.

13.7 The Strategic Reform Program has three key objectives:

- improved accountability;
- improved planning; and
- enhanced productivity.

## Improved Accountability

13.8 To meet the objective of improved accountability, Defence will:

- clarify who is accountable for what in relation to key deliverables, in terms of :
  - the outcomes delivered to Government on a daily basis (such as joint capability or policy advice); and
  - underpinning Defence-wide management processes (such as pay and logistics);
- improve its business planning and enterprise-level risk management functions and capabilities;

- ensure that organisational and individual performance is better measured and managed;
- improve the quality of advice to Government and Ministers; and
- strengthen its internal audit function.

### *A New Budget Management Model*

13.9 To further improve accountability and better manage resources, Defence will provide its senior leaders with greater authority to manage their budgets and non-financial inputs through the introduction of an outputs-driven budget management model.

13.10 This measure will see relevant funding allocated to capability managers (such as the Service Chiefs). The capability managers will agree an appropriate level of affordable and sustainable services with the relevant internal Defence provider (such as the Defence Support Group). On the basis of these agreements, funding will be transparently transferred to the provider group. Central to this model will be consistency and standardisation of support services across Defence bases and establishments. Variations to agreed service levels will be fully costed and only pursued if they represent value for money.

13.11 Through the introduction of output-based budget management, capability managers and service providers will cut unnecessary costs and achieve value for money in delivering the outputs for which they are accountable. This initiative will be based on clear, precise and documented service level agreements and other performance management arrangements. There will be much greater visibility of the true costs of goods and services used within Defence, without the need for complex transfer pricing arrangements. At the same time, Defence will continue to consolidate, centralise and standardise shared services.

## Improved Planning

13.12 Improved defence planning processes will be crucial to the success of this White Paper. Government has directed Defence to prepare a new White Paper at intervals no greater than five years as the centrepiece of a new strategic, risk-based approach to defence planning. This five yearly cycle will act as a series of 'gates' for progression of the key aspects of Defence planning. It will consist of the annual Defence Planning Guidance for the first three years; a strategic assessment, force structure review and independent audit update in the fourth year; and development and release of a White Paper in the fifth year.

13.13 In order to ensure a tighter alignment between strategic guidance, capability decisions and resource allocation, the Government has directed that the DPG process is to be overhauled and strengthened.

13.14 Between White Papers, the DPG will become the Government's premier defence planning document. The DPG will need to take into account the Government's national security priorities as outlined in the latest National Security Statement and through the annual national security priority and budget setting mechanisms. This will ensure that Defence's priorities are consistent with the Government's

overarching national security policy and budget priorities. The National Security Committee of Cabinet will consider the DPG annually, in sufficient time to set strategic direction for Defence's corporate and budget planning cycle, and recommend any necessary adjustments.

13.15 Within Defence, the DPG will set strategic guidance for force structure and capability development, corporate planning, enterprise-level risk management and resource planning, the management of ADF preparedness and critical enabling functions.

13.16 In the year prior to development and release of a White Paper, Defence will prepare for Government consideration a strategic risk assessment that identifies key changes to the strategic environment and any need for change to the principal tasks of the ADF. There will also be a comprehensive force structure review, analysing any new major projects that may come into the Defence Capability Plan in coming years against strategic fundamentals and budgetary constraints. An independent audit update will review the affordability of current and proposed expenditure plans, review performance on all reform activities and identify opportunities for further productivity improvements.

### *Better Managing Defence Costs*

13.17 One of the most important benefits of improved planning will be a strengthened capacity for Defence to understand and manage costs and financial risks. To this end, Defence will focus especially on improving the way it plans and manages major acquisitions, and personnel and operating costs. These reforms will include changes to the capability development process to tighten the link between strategic requirements and capability decisions, and improve the quality of long-term cost estimates.

13.18 The Government has also directed that greater attention be paid in the planning process to the whole-of-life cost dimensions of capability. This will be critical in providing Government with increased levels of confidence with respect to cost, schedule and technical risk when it considers major Defence projects. This will also assist in minimising scope variations in major acquisitions, and help drive down cost pressures.

13.19 While a certain degree of volatility and movement in Defence's costs is to be expected, it will be imperative that, through improved planning, Defence better anticipates and mitigates cost pressures. More generally, the Government expects Defence to build a better picture of long-term costs and a culture of resource efficiency and continuous improvement, with a view to reducing the cost of doing business without creating undue capability or operational risk.

## Enhanced Productivity

13.20 The Government expects Defence to become more businesslike, efficient and prudent in its use of resources, with the aim of saving time and money and achieving better economies of scale. Leaders and managers at every level will be expected to promote cost-conscious workplaces in which everyone is mindful of the need to free up resources for investment in current and future capability.

13.21 Reforms to enhance productivity will cover the full spectrum of Defence business and generate significant savings. The introduction of more efficient maintenance techniques will produce savings in the sustainment budget. Other savings will come from reducing 'back office' administrative functions to the most efficient levels; reducing levels of travel and being more efficient in the use of power and utilities; and improved contracting and elimination of low priority purchases.

13.22 In terms of enterprise support services, enhanced productivity will require significant improvements in how Defence undertakes its human resources management, personnel administration, financial services, procurement and contracting, general service delivery, and administrative support functions. Wherever possible, Defence will introduce more centralised and standardised support services and processes, make greater use of e-business, reduce internal red tape and simplify business processes. Reforms in many areas, non-equipment procurement in particular, will require hard decisions involving changes to policies and practices.

13.23 Reforms to the maintenance of military equipment and inventory management will deliver ongoing productivity by redesigning work practices and focusing on the continual reduction of waste from: overproduction; maintenance waiting times; transportation; over-processing; and excess inventory. A rationalisation of the supply-chain network will streamline and strengthen the backbone of military operations.

13.24 The ICT reform program will deliver business efficiencies and lower costs in Defence's information and communications technologies. This will be achieved through measures such as the development of a single Defence desktop environment, an improved network to support higher speed connectivity and the consolidation of Defence's data centres.

13.25 Enhanced productivity will also be achieved through the introduction of an improved, integrated workforce management system. Defence will ensure that it has the right number of workers in the right jobs with the right skills. Significant savings will be achieved through avoiding unnecessary cost premiums by ensuring ADF personnel or expensive contractors are not doing jobs which require a lower and less expensive set of skills and competencies.

## Implementing the Strategic Reform Program

13.26 To enable the Government to oversee the implementation of the Strategic Reform Program, a robust governance and assurance framework will be developed. This framework will ensure that Government retains visibility of the progress Defence is making in implementing the White Paper and pursuing reform, and ensure that there is strong personal commitment and ownership across Defence for driving reform.

13.27 Accountability for implementation will be devolved to the line leadership responsible for each area of reform, but will be coordinated centrally through the Strategic Reform Program and underpinned by clear performance measures and milestones.

13.28 Reforms of the magnitude envisaged will take several years to implement. Defence is fully committed to reaping the savings that will flow from reform, all of which will be reinvested in capability. Government recognises the need for Defence to maintain flexibility in the areas that are targeted for savings, how savings are generated and the timing and ramp up of individual savings.

13.29 Defence will develop detailed implementation plans for all reform measures, for which senior leaders will be held accountable. In addition to these specific savings, Defence has also factored into its projected employee costs an allowance for productivity targets that have been judged to be feasible. Managers will be funded for their budget, less this productivity dividend which commences around the middle of the decade when the specific savings measures have been achieved.

13.30 In the case of the DMO, the planned reforms are entirely consistent with the intent of the Defence Procurement and Sustainment Review, conducted in 2008 by Mr David Mortimer AO, that the DMO become more businesslike. The DMO is fully committed to implementing the reforms and reaping the associated savings. As a prescribed agency under the *Financial Management and Accountability Act, 1997*, it will be important for the DMO to maintain flexibility in how it implements reform.

13.31 A Defence Strategic Reform Advisory Board will be established, chaired by a person from the private sector with the appropriate skills and experience to advise on a significant reform program in a large and complex organisation. The key functions of the Board will be to provide advice on how the reforms should be implemented, and assist in ensuring the reforms are being implemented in the way intended by Government. The Board will comprise an appropriate balance of internal and external members. Public sector members of the Board will include the Secretaries of the Departments of the Department of the Prime Minister and Cabinet, the Treasury, the Department of Finance and Deregulation; and the Secretary of Defence, the Chief of the Defence Force and the Chief Executive Officer of the DMO. To ensure that strategic reform is pursued on a whole of portfolio basis, the Board will encompass the functions of the former Defence Procurement Advisory Board. The Board will report to the Minister for Defence, who will in turn advise the National Security Committee of Cabinet of progress in Defence reform.

13.32 Defence will establish, and resource appropriately, internal arrangements to support and facilitate the reform effort. It will also build the expert capabilities, including by tapping commercial expertise where appropriate, to ensure that deep reform can be implemented successfully and to the standard required by Government. The Secretary and Chief of the Defence Force will lead the reform effort, ensuring there is ownership across the entire organisation and that senior leaders demonstrate personal commitment and take responsibility for particular initiatives.

# CHAPTER FOURTEEN:
# PEOPLE IN DEFENCE

## A Key Strategic Priority - Our People

14.1 People are at the heart of delivering the Defence capability. To support and sustain the current and projected future force and the new capabilities described in this White Paper, we will need to grow the full-time military workforce to approximately 57,800 personnel, and the civilian workforce, including contractors, to approximately 21,900 over the next decade. Attracting and retaining the future workforce will be one of the most significant challenges facing Defence, and the Government is determined to ensure that Defence puts in place the right strategies to achieve the required outcomes.

14.2 To ensure that we have the people we need we must be able to respond to a fast-moving and fast-changing labour environment. We must be adaptable to the changing needs of those who serve and those who are attracted to a career in Defence. The Defence People Strategy will address the key issues in building the Defence workforce over time, and provide strategies for how Defence will deliver that workforce. Specifically, Defence will seek to provide a compelling and competitive career offer, professional and personal development, career fulfilment and a safe and healthy workplace. This Strategy will also recognise the critical support that families provide, and the importance of Defence as a unique national institution.

14.3 The Defence People Strategy is informed by a review of Defence's workforce challenges undertaken as part of the White Paper. The Strategy will address the major themes that have emerged from these reviews in responding to our workforce needs and the needs of our people. The first theme to be addressed requires Defence to build the policies and remuneration that will deliver a flexible, effective and efficient workforce. The second commits Defence to an appropriate level of investment to establish and sustain a healthy workforce. The third involves a remix of the employment offer to deliver a competitive package that reflects the contemporary labour market. The final theme recognises that the Defence workforce is under pressure and that we must, as a priority, ensure we maintain capability by investing in and supporting our people to deliver capability today and into the future.

14.4 The Government has directed significant new investment in people initiatives. The effectiveness of this investment will be measured by workforce stability, strong recruiting figures, good retention rates, appropriate separation rates and overall workforce health. Success will be built on the offer of a rewarding career that motivates people to serve and stay, as well as recognition that people want to be more involved in their work, have greater control over their life, and expect higher levels of choice for broader personal and family reasons. The future members of Defence will have more options available to them and Defence understands that it must compete for their talents.

14.5 Defence will also focus on key areas of our workforce that need close attention. Defence will continue to seek new ways to recruit and retain technical trades as well as key professional groups such as tradespeople and health professionals. We will work with women, indigenous Australians, and Australians from a wide variety of ethnic backgrounds to attract these groups to our workforce. Addressing trade shortfalls and ensuring Defence reflects the make up of the broader Australian community are key priorities.

14.6 Recognising the significant workforce challenges presently being experienced by the Navy, the Government will provide funding for additional Navy personnel to fill 700 positions within the Navy's workforce structure. This will address the Navy's current structural hollowness, reduce the pressures on its current workforce, and ensure the Navy can meet the workforce demands of the future maritime capabilities. Additionally the funding will provide the workforce to plan and introduce new capabilities, such as the Future Submarine, AWD, and LHD, and improve the delivery of the Navy's essential governance systems.

14.7 Defence will require a new approach to building and sustaining the workforce requirements of the new submarine capability. The Navy has addressed this through broad initiatives in the New Generation Navy Strategy, as well as providing targeted innovations in Navy's Submarine Sustainability program that cover training, crewing, conditions of service, sea-time and others to ensure that we address current shortfalls and build a robust workforce. The new Submarine Sustainability program comprises a five-phase strategy designed to develop a sustainable submarine force over the next five years. The program focuses on getting more qualified submariners to sea and on improving support for them once deployed. The strain on seagoing submariners will be eased by increasing crew sizes from 46 to 58 people.

14.8 In order to build and sustain the workforce requirements of the Enhanced Land Force and the Adaptive Army initiative, the Army Plan has been developed. This plan sets in place the force structure, disposition and numbers required to grow the Army and will be adapted to meet the needs of this White Paper. The workforce challenges of the Army Plan will be met through the Army People Plan. This plan, which sits within the Defence People Management Framework, identifies the Army's strategic personnel themes and puts in place initiatives to attract, recruit, develop, retain and transition the quality people that the Army needs in order to provide the capability described in this White Paper.

14.9 For the Air Force, the major capability transition over the next decade will mean that the Air Force workforce will need some modest growth and to be reshaped to meet the demands of new systems, processes and modern, flexible employment practices. Further, the Air Force will need to undertake some organisational restructuring to enable our workforce to deliver the significant level of capability enhancement described in this White Paper.

## Defence's Strategic Approach to Building our Workforce

14.10 Strategically, Defence should be rigorous in determining the number and mix of people in the total Defence workforce. Managing the workforce from a total workforce perspective, in terms of total labour cost rather than by a simple measure of numbers in each component of the workforce, will lead to a more strategic delivery of capability and the management of cost.

14.11 While cost and capability issues will influence numbers, skilling and workforce mix, there are a range of people issues that impact on how the workforce is managed. The long-term strategic response to people issues must be to provide adequate investment in people and their conditions. At the same time, Defence must also ensure the leadership, culture and behaviour of the organisation creates a positive environment that builds commitment to perform at a high level and remain in Defence. An unbalanced approach that focuses too much on remuneration or too little on leadership in the workplace will lead to a poor workforce outcome.

14.12 The Government has directed Defence to develop a strategic approach to people. This will be delivered by improving workforce strategy and alignment through the defence people management framework, improving governance arrangements, and an integrated workforce intelligence model. The Defence people strategy will be the foundation on which the future workforce will be built over time. It will be based on a range of initiatives to improve Defence's management of its people, including recruitment, retention, job satisfaction and workplace reform. Over the next four years, the Government will invest in targeted improvements in the areas of remuneration, supporting Defence families, housing and accommodation, health and rehabilitation and diversity.

### *Remuneration*

14.13 The Government has provided funds for improvements to the remuneration of ADF non-commissioned soldiers, sailors, airmen and airwomen, through a new pay structure that provides more appropriate recognition and reward for rank and skill advancement in the ADF. Additionally, rates of pay for trainees undertaking longer-term training is being improved and a new 'trainee allowance' introduced.

### *Supporting Defence Families*

14.14 The Government intends to extend the trial health care arrangements announced in the 2008-09 Budget, and has committed additional funding over the next three years for the provision of basic medical and dental care to Defence families living in remote and regional locations.

14.15 The Government will increase the number of Community Development Officers available to help Defence families access Defence, community and local, State and Federal Government services. The Defence Community Organisation will also develop better arrangements to equip the immediate families of full-time ADF members with the information and ability to access social networks and support systems in their posting locations.

### *ADF Housing and Accommodation*

14.16 Defence will develop a simple, transparent and flexible package of housing and accommodation assistance options, aimed at reducing the number of anomalies in the current housing and accommodation assistance policy. The options will provide an outcome that will better meet the emerging challenge of changes in society's expectations, accommodation availability and family structures.

### *Health and Rehabilitation*

14.17 In an environment in which health-care costs are growing, Defence must continue to provide high-quality health care in a timely and affordable fashion that supports both operational capability requirements and efficient and effective health support to non-deployed members within Australia. To do this, Defence will reform its health-care delivery options to better achieve greater efficiency and patient satisfaction

14.18 ADF personnel will be provided with primary outpatient and low-dependency inpatient health care through improved delivery and management of clinical services. Higher acuity inpatient care will also be provided by a small number of ADF facilities. This will include integrated health workforce solutions by uniformed, APS and contracted health-care providers.

14.19 Defence will also develop strategic alliances with State Government and private institutions to provide inpatient health care to ADF personnel from state-of-the-art facilities and additional access to clinical research affecting ADF personnel.

14.20 Defence will implement workforce changes to ensure that the ADF has an effective structure to deliver physical and mental health initiatives and services, such as the ADF Rehabilitation Program, and other measures to reduce the impact of injury and illness within the ADF. These changes offer opportunities for uniformed ADF health-care providers to work in tertiary-level health facilities with improved training and continuous professional development opportunities. The Government is committed to providing the best mental health support to ADF members. Defence will improve the delivery of mental health services by implementing the recommendations of the independent Review of Mental Health Care in the ADF and Transition through Discharge conducted by Professor David Dunt. These physical and mental health initiatives are expected to improve the individual and collective readiness of ADF health personnel to operate in environments in which seriously wounded casualties can be expected.

### *Diversity*

14.21 Programs to increase recruitment opportunities for women, indigenous and multicultural Australians, including an indigenous development program, will also be implemented.

## Better Management - An Integrated Workforce

14.22 Strategic reform will create an integrated workforce that has the right mix of military, civilian and contractor personnel, able to deliver a cost-effective, flexible and adaptable workforce best placed to meet the future challenges outlined in this White Paper, as well as to manage temporary workforce shortages and address critical skill deficiencies.

14.23 Defence will seek to optimise the workforce mix by employing permanent ADF members where there is a direct requirement to do so. On average, full-time military personnel cost around 30 per cent more than their civilian counterparts, due to conditions of service. Where part-time military or Australian Public Service personnel can perform the task, their employment can be a more efficient use of Defence funds.

14.24 Contracted personnel also form part of the Defence workforce mix. However, non-deployable contractors cost Defence more than their equivalents in the Australian Public Service (on average around 15-40 per cent more due to market pricing). Defence will examine areas where positions can be converted from contractors to the Australian Public Service.

14.25 Proposed changes to the Defence workforce mix will not compromise Australia's defence capability. Approximately 78 per cent of current ADF members are posted to combat or combat-related roles, and that will not change. The remaining 22 per cent are posted to military support roles. The introduction of reform will address retention and diversity considerations, and will take into account the important role of military positions in areas such as training, respite, trade sustainability, representative duties and specialist military skills.

14.26 The ADF Reserves are a fundamental element of Defence's workforce. Over the foreseeable future, the composition and capability of the ADF Reserves will change as Defence's integrated workforce matures. In adapting the role of the ADF Reserves, Defence will work to streamline the transition between full and part-time service during an ADF career.

14.27 This will be particularly important for the Army, which will consider the contribution of part-time service in detail during the preparation of its implementation plan for the Army's force structure. This plan will be developed within the strategic guidance and funding parameters of this White Paper. The plan will propose options that will include the contribution of the ADF Reserves to Defence capability.

## Retention

14.28 ADF personnel remain in the Navy, Army or Air Force as a consequence of loyalty to the organisation, their job satisfaction, their remuneration, and their conditions of service. They leave because of location instability, impacts on families, long separations and lack of employment for spouses in remote locations, job dissatisfaction, and perceived career development limitations. To compete for

their continued commitment, Defence must offer remuneration and conditions of service that address, among other things, frequent posting moves, housing, spousal employment, children's education and family support.

## Recruitment

14.29 In conjunction with the retention measures discussed above, the Defence People Strategy will propose measures to increase Defence's competitiveness in the recruitment marketplace. This will redefine Defence's employment offer to make it more attractive as a rewarding career in which people are motivated to serve and stay.

14.30 As part of this package, Defence will clearly articulate who it is, what it offers, how it fulfils its obligations, and why that should be attractive to its current and future workforce. Importantly, Defence must be clear about what it expects from the workforce in return, by clearly articulating the mutual responsibility of Defence and the individual employee or ADF member.

## Internal Workplace Reform

14.31 Government has also directed Defence to substantially reform the workforce to drive productivity improvements, based on three initiatives: a leaner, more effective business support model; a largely civilianised and professionalised non-deployable military workforce; and the conversion of contractor positions to less expensive full-time civilian positions.

14.32 To deliver a more effective human resource business support model, Defence will redesign its core business processes to streamline and automate workflows where possible; revise the level of services offered; consolidate and centralise like functions through the increased use of shared services for functions such as payroll and accounts receivable; and improve recruiting and non-equipment contracting services. This will be critically dependent on the implementation of new information technology solutions that will improve administration and pay for Defence.

# CHAPTER FIFTEEN:
# SUPPORTING THE ADF

15.1 In all of Defence's activities, from operational deployments and day-to-day business activities to the strategic management of the organisation, enabling support functions are critical to success. Enabling functions are considered to be the 'backbone' of Defence business, and include our ICT systems, bases and infrastructure, and logistics and other support services. These areas support the ADF through the delivery of facilities, materiel, garrison support, information and other services. Other support functions, such as procurement and sustainment, and science and technology support, are covered in other Chapters of this White Paper.

15.2 In many cases, the challenges outlined in this White Paper will change the nature and types of business that Defence does. The fast pace of technological change, the introduction of new capabilities and the continued high operational tempo of the organisation, mean that Defence's support functions must be managed effectively and efficiently, and re-examined periodically for their future effectiveness.

15.3 The critical services provided by the Defence backbone were reviewed during the development of this White Paper, with the aim of optimising support to the ADF in cost-effective ways well into the future.

## Information and Communications Capability

15.4 Future demands on Defence ICT include an increasing focus on information superiority and the networked capabilities discussed in Chapter 9. The prospect of new disruptive technologies that could threaten network capabilities will also increase, as will the threat and complexity of cyber warfare.

15.5 Defence's information and communications capability has developed over many years, and there is a need to draw together the various Defence communications and information domains into a single, properly governed information environment, delivering a capability fully aligned with the priorities set by the Chief of the Defence Force and Secretary.

15.6 The ICT reform program will deliver business efficiencies and lower costs in Defence's information and communications technologies. This will be achieved through such measures as the development of a single Defence desktop environment, an improved network to support higher-speed connectivity, and the consolidation of Defence's data centres, from 200 to fewer than ten. More robust governance arrangements for Defence's ICT spending and the management of the Defence information environment will also be implemented. These measures will improve operational effectiveness and corporate functions.

15.7 The proposed reforms will deliver to Defence a secure and robust ICT capability that supports war fighting and business requirements. All Defence personnel, regardless of location, will be able to access and share information and collaborate with their counterparts in Defence, the Government and industry, and other allied or coalition partners, using social networking capabilities.

15.8 There will be one network connecting fixed and deployed locations built on a single set of standards and approved products that encompass all security levels and the ability to determine that the right person has the right authority to access information and services. A typical desktop set-up, available to all Defence sites, will be a single screen connected to a wireless network that can display multiple security 'sessions'.

15.9 Secure voice and video will be available to the desktop in most fixed and deployed locations. Deployed commanders and strategic decision makers will have a single view of the battlespace through a single Common Operating Picture accessing a wide range of data from sensors and sources, whilst corporate data will be easily accessed, manipulated and aggregated by Defence staff.

15.10 The reform program will see Defence with an enhanced ICT platform that will be characterised by tighter cost control, greater efficiencies (which will be reinvested in new capabilities), and faster decision cycles focused on delivering high-quality ICT services delivered to Defence. There are five key initiatives in the ICT reform package:

- optimising the value of Defence ICT investment through development of a single portfolio for ICT funding across all parts of Defence, the production of a single work plan for the Defence Information Environment, data centre consolidation and an ICT Products and Services Catalogue;
- closer stakeholder engagement and alignment through the implementation of a more responsive stakeholder engagement model. The Chief Information Officer will become the Coordinating Capability Manager for all Defence ICT;
- provision of agreed priority solutions involving the creation of an enterprise architecture across Defence, consolidation and simplification of the technology base, standardised ICT solutions, and the creation of a single information environment;
- strengthening ICT capability through the consolidation of software and application purchases and maintenance, re-engineering the ICT capability development and delivery methodologies, and developing better Defence ICT career path management and workforce planning arrangements; and
- programming the ICT Reform to integrate ICT reform agendas across Defence and delivering the required governance arrangements to take the reform program forward.

15.11 Reforming Defence's information environment will be a complex undertaking, and must necessarily be undertaken in stages. Some changes are already underway, including implementing new mechanisms to better govern ICT investments and spending across all parts of Defence, and implementing new sourcing strategies where ICT services will be procured through more centralised frameworks and through more strategic and enduring arrangements with fewer numbers of vendors. In the future, additional changes will also be necessary to consolidate a 'whole of Defence' approach to ICT planning and decision making.

15.12 Adopting a single Defence enterprise architecture will be a significant change to ICT planning and investment processes within Defence. As the architecture matures, a more centralised and consolidated approach to delivering ICT services and infrastructure will be implemented. As a result, Government will make changes in scope, acquisition strategies, delivery methodologies and levels of funding for a number of ICT-related capital acquisition projects while maintaining the current level of investment. This initiative in itself will ensure a more targeted approach to ICT investment, reduce risks and improve 'time to market' for the delivery of new ICT capabilities.

15.13 Assured access to military and commercial satellite communications will be needed into the foreseeable future. The core satellite communication capabilities for the ADF will continue to be provided through access to the Wideband Global System operated by the United States, which will provide global broadband communications for fixed and large mobile platforms. This will be complemented by narrow-band ultra high frequency (UHF) satellite capabilities, mainly to support mobile land forces.

15.14 There are a number of initiatives for access to narrow-band satellite communications capabilities in planning. These include capabilities to support military operations in the ADF's primary operational environment, as well as globally. The scope of the projects may well change depending on commercial, technical and alliance opportunities. The Government will accelerate decision making on UHF satellite communications capabilities needed to support land operations. In the future Australia will look to jointly pursue the development of satellite capabilities - both commercial and military - with the United States and other allies. The US-Australia Military Satellite Communications Partnership Statement of Principles of 2008 commits both nations to exploring further technical collaboration and joint access to satellite communications capabilities.

## The Defence Estate

15.15 The Defence estate is the largest and most complex land and property holding in Australia. It provides the facilities which directly enable the generation, projection and sustainment of operational capability. The Defence estate also supports our personnel, providing them with a safe place to work and their families to live.

15.16 The Government has agreed on the following strategic basing principles to meet the future needs of Defence:

- Defence base locations should be aligned with strategic requirements and ensure critical capabilities are suitably dispersed for security reasons;
- Defence should consolidate units into fewer, larger and sustainable multi-user bases aimed at increasing the alignment of functions at Joint and Service level and their capacity to support operations;
- Defence should aim to group bases near strategic infrastructure and industry to promote knowledge sharing, innovation, and to maximise the effectiveness of industry support to the ADF;

- where possible, Defence should locate bases in 'family friendly' areas which provide better employment, specialist medical and educational opportunities for families, and with the potential to reduce posting turbulence in order to improve retention; and
- Defence should maintain an urban and regional disposition to enable the continued provision of part-time capability into the future.

15.17 The Government will invest $200 million over the next four years in the Defence estate. Defence will also introduce improvements to estate planning to ensure that funding is prioritised according to the ADF's capability needs, the strategic basing principles and to maximise value for money from Defence's facilities works contracts.

15.18 Defence bases, training areas and ranges are increasingly under pressure from urban encroachment. Residential developments are now much closer to operating Defence sites, giving rise to concerns about impacts on the community including aircraft, vehicle and other noise, explosions and other activities. Defence will continue to work closely with state and local government planning authorities to ensure the ongoing sustainability of Defence sites and the management of any impacts on communities.

15.19 Environmental management is another important aspect of the sustainability of the Defence estate. Defence is the responsible steward of 3.4 million hectares of land and over 120 Commonwealth heritage listed sites. Effective environmental management is not only vital in its own right, but is essential to ensure the long-term sustainability of ADF capability and the Defence estate. Through sustainable environmental management, Defence aims to leave a positive legacy for future generations, while preserving the capacity to undertake land, sea and air activities necessary to support ADF capability.

### *Infrastructure Enhancements to Support Capability*

15.20 The mounting of Defence operations relies upon significant infrastructure support. Darwin and Townsville remain critical ports for operations in the defence of Australia and in our immediate neighbourhood, although southern ports and bases also play a vital role. Some ports are limited in their ability to support operations due to the current physical and logistics infrastructure, including loading facilities, the availability of large vehicle marshalling areas and the reliable provision of specialist stores, such as naval aviation fuel and explosive ordnance.

15.21 The Government has decided to enhance some specific infrastructure to support the mounting and sustainment of operations, including:

- remediation of instrumented ranges used for testing and evaluation (including Woomera in South Australia);
- lengthening the wharf in Townsville and providing a new boat ramp in Darwin to facilitate the loading and unloading of our LHDs: and
- enhancing fuel storage capacity in both Townsville and Darwin.

## Defence Support Services

15.22 In addition to those support functions described earlier, Defence support services also include personnel, family, accounts, other financial and business support services, as well as non-equipment procurement and contracting advice, garrison support services and the provision of accommodation, meals and other supplies. Defence spends around $5 billion a year on these support services.

15.23 The cornerstone of improvement to Defence support services will involve maximising the delivery of services and the development of better buying and contracting practices to ensure a more efficient service to the organisation. Defence will also consolidate, centralise and standardise 'like' services, delivering improved shared services such as garrison support, payroll, human resources and finance functions and developing more efficient methods of service delivery. A new 'centre of excellence' will be created within the Defence Support Group to provide advice and carry out the standardisation process. Consequential workforce impacts will be carefully planned and managed, and subject to appropriate consultation with staff.

15.24 These reforms have the potential to produce significant savings over the decade in productivity improvements to non-equipment procurement spending. Workforce reductions are also expected from the consolidation and centralisation of services. Whilst the efficiency and productivity improvements will see reductions, overall there will be a net growth in the workforce through White Paper initiatives, civilianisation of military back office functions and 'insourcing' of contractor support. Consequential workforce impacts would be carefully planned and managed, and subject to appropriate consultation with staff.

15.25 To achieve the required outcomes of reform of Defence support services, the proposed changes will challenge the orthodoxies about demand and consumption policy and how services have traditionally been provided. The emphasis will be on adopting a more commercial mindset to guarantee productivity improvements and efficiency gains while providing the support vital for a capable ADF.

15.26 This approach will require the introduction of a whole-of-Defence enterprise resource management system coupled with stronger governance arrangements to deliver an improved performance management framework. These changes will provide budget transparency, clearer lines of accountability, improved product costing, garrison support, estate management information, and personnel and financial support systems.

## Joint Logistics

15.27 A robust, flexible and responsive logistics system is at the heart of the ADF's capability. To attain the standard of logistics support required for the ADF in the future, Defence will improve its logistics infrastructure network, optimising the use of associated technologies and then applying similar reforms to its retail network. Defence will also optimise its equipment maintenance.

15.28 Therefore, the Government has decided to rationalise the Defence storage and distribution network. Outdated facilities will be replaced and Defence's 24 wholesale sites will be consolidated into seven, supported by seven specialist logistics units. The rationalisation will optimise the storage and distribution functions of Defence to provide effective operational support sustainably and efficiently. Furthermore, Defence will pursue the most cost-effective procurement option, which could potentially involve a public-private partnership arrangement. To drive better value into its contracts, Defence will also re-tender its base storage, distribution and maintenance function.

15.29 Defence's fuel management will be improved. This will have national impacts, as Defence is a significant national user of fuel. A strategic fuel management program will be put in place to coordinate all aspects of fuel management.

15.30 Defence will pursue opportunities for significantly increasing the productivity of logistic support activities in inventory management and the supply-chain. Reform will focus on optimising inventory holdings through improved modelling and analysis of inventory requirements. The Government has directed that Defence both reduce the size of inventory holdings and improve the alignment between inventory holdings and actual demand to optimise the return on expenditure.

# CHAPTER SIXTEEN:
# PROCUREMENT, SUSTAINMENT AND INDUSTRY SUPPORT

16.1 Procurement, sustainment, and industry support are critical to defence capability and operational effectiveness. The ADF requires a deep, diverse and secure supply chain to acquire and maintain the capabilities it needs, and Defence's procurement and sustainment systems must continue to be as flexible and responsive as possible.

## Procurement Reform

16.2 The Government requires the DMO to deliver military acquisition and sustainment projects on-time, on-budget and to the required level of capability, safety and quality. The process of Defence procurement and sustainment has undergone significant reform over the years, and there have been a number of important achievements. Following the 2003 Defence Procurement Review, the DMO became a prescribed agency under the *Financial Management and Accountability Act, 1997* in July 2005.

16.3 In May 2008, the Government commissioned an independent, formal evaluation of the DMO and a re-examination of Australia's defence acquisition and sustainment process. Conducted by Mr David Mortimer AO, the review recommended a more commercially-focused DMO in order to promote improved outcomes for Defence.

16.4 In response to the Mortimer Review, the Government supports the need for the DMO to become more businesslike and recognises the urgent need to make further changes to the way Defence develops, acquires and sustains military capability. The Government has directed the DMO to launch a significant internal change program, building on what Mr Mortimer identified as a strong record of reform since the 2003 Kinnaird Review.

16.5 Four key principles will underpin the DMO's more businesslike approach. First, the entire Defence portfolio must become more accountable to Government and more transparent in managing the billions of dollars invested in developing and acquiring military capabilities.

16.6 Second, as the key implementation body within the Defence portfolio, the DMO must strengthen its capacity to provide independent advice on the cost, risk, schedule and acquisition strategies for major capital equipment.

16.7 Third, the DMO must develop a stronger businesslike culture to deliver projects on-time, on-budget and to the agreed requirements. To complement this, there will also be substantial change within the rest of Defence to improve the way the capability development process is carried out.

16.8 Fourth, the already strong procurement relationships within the Defence portfolio must be further strengthened. In particular, Defence will clarify the authorities, roles and responsibilities of the Defence capability managers, the DMO and other Defence stakeholders, and ensure earlier engagement between the DMO and the Capability Development Group.

16.9 Later this year, the Government will publicly release an implementation plan for building a more businesslike and commercial culture in the DMO. The plan will:

- set quantifiable key performance indicators and measures of success, in particular by providing directors of the DMO's Systems Program Offices with a charter of responsibilities and accountabilities;
- identify the individuals who will be accountable for delivering the cultural change plan;
- specify necessary structural and staffing changes within the DMO, which will include a strengthening of the DMO's senior level commercial expertise; and
- develop an appropriate framework for the DMO to report to Ministers and the Parliament.

## Smart Maintenance

16.10 Defence will also pursue opportunities for significantly increasing the productivity of the supporting maintenance activities. Maintenance reform will focus on eliminating waste and reducing incidental work in the supply-chain processes. Defence will roll out a program of established efficiency management techniques, which will deliver ongoing productivity, increased equipment availability and savings.

16.11 Productivity improvements in maintenance and supply-chain processes performed internally by Defence and externally by defence industry will be targeted. Defence will also develop appropriate incentive arrangements in its future maintenance contracts to encourage industry providers to implement ongoing productivity improvements. Defence will expect industry to make commensurate productivity improvements to maintain their long-term supply opportunities.

## International Defence Materiel Relationships

16.12 The DMO maintains a number of relationships with allies and other partner nations in order to ensure that Australia has access to the world's best technologies, systems and capabilities; to promote best practice in defence contracting; and to coordinate global responses to commercial behaviours in the international defence supply chain.

16.13 The DMO uses those relationships to identify interoperability objectives, explore collaborative activities, share data on reciprocal projects, benchmark acquisition and sustainment processes, and streamline technology transfer arrangements. Recent examples include technical exchanges of information on submarines, radar systems and stealth characteristics. The relationship with the United States is particularly important in this regard.

## Industry Capacity

16.14 A significant proportion of the funding allocated to Defence for the procurement of goods and services is likely to go to locally-based companies, which are a key element of the Australian industrial landscape. The Government expects Defence to ensure best value for money in Defence spending, based on open and effective competition.

16.15 Major defence acquisitions are large in scale and scope. Some sensitive or classified programs can only be delivered by skilled Defence professionals. The DMO's and industry's workforces need to be highly skilled if the ADF is to gain maximum return on the Government's investment.

16.16 The DMO and Australian industry face many challenges in delivering the required capability to the ADF. In the recent past, Defence's major capital equipment projects have suffered schedule delays because of constraints on the availability of sufficient skilled Defence industry workers. This has resulted in unplanned slippage of defence capital expenditure and schedule delays against agreed milestones.

16.17 While Defence will seek to maximise the spending in local defence industry, such expenditure must be managed within the acceptable cost, schedule and risk constraints of the strategic guidance in this White Paper. Project requirements must ultimately reflect the demands of operational performance, but they need to be tempered by an understanding of cost, risk and what the market can deliver, including 'off-the-shelf'. The Government needs to make informed decisions about the appropriate mix of cost, risk and capability. Consequently, the Government has decided that military-off-the-shelf and commercial-off-the-shelf solutions to Defence's capability requirements will be the benchmark against which a rigorous cost-benefit analysis of the military effects and schedule aspects of all proposals will be undertaken. Such an approach is consistent with the Defence Procurement and Sustainment Review.

## Defence Industry Policy

16.18 The Government recognises the important role that defence industry plays in support of ADF capability, from the provision and maintenance of military equipment to the delivery of a wide range of support services. Growing the capacity and competitiveness of local defence industry is a policy objective of the Government and will require ongoing investment in skills development, workforce growth and improved productivity. The Government will remain closely engaged in defence industry policy to ensure that Australian industry provides the maximum support possible to the ADF while maintaining control of cost, schedule and quality.

16.19 The best way to manage, over time, a real increase in local industry capacity and competitiveness is to continue to grow local industry at an achievable rate. As a consequence, Defence will adopt procurement and industry strategies to grow local industry capacity and competitiveness, including:

- increasing industry capacity and competitiveness through targeted productivity and workforce growth initiatives;

- building greater flexibility into Defence Capability Plan reprogramming to mitigate the adverse capacity and capability impacts associated with large expenditure peaks and troughs; and
- if necessary, increasing the amount of offshore expenditure, to a level that allows for a more managed, sustainable and achievable local industry growth rate.

16.20 Total self-sufficiency in defence industry capabilities would be impractical for a nation of Australia's size, and is not necessary in any event under our defence policy as explained in Chapter 6. The Government is committed to ensuring that certain strategic industry capabilities remain resident in Australia. Defence should not pay a premium for local industry work, unless the costs and risks of doing so are clearly defined and justifiable in terms of strategic benefits. Choices are necessary when identifying which local industry capabilities should have priority.

16.21 To this end, Government has decided to establish priority industry capabilities (PIC), which are defined as those industry capabilities which would confer an essential strategic capability advantage by being resident within Australia, and which, if not available, would significantly undermine defence self-reliance and ADF operational capability. The Government is prepared to intervene in the market to ensure that PICs remain healthy and available.

16.22 The Government will determine the level and focus of assistance necessary to support PICs through a rigorous process based on clear criteria. The National Security Committee of Cabinet will make decisions about whether and how to support PICs. Support would only be provided in cases where market failures would be so detrimental to our strategic interest as to justify such intervention. The Government would take the following factors into account in making any intervention decision:

- the criticality of the industry capability to our posture of defence self-reliance;
- the value-for-money represented by such intervention;
- the 'health' of the industry sector, in terms of workforce size and skill levels; capacity constraints; individual firm viability (in cases where this would be justified); and
- market structure.

16.23 Possible intervention strategies might include demand management by Defence, export promotion and support, skills development, investment facilitation, and long-term contracting arrangements to assist firms in terms of access to finance and productivity investment decisions. The Government has also decided that Centres of Excellence be established to address any identified capability and capacity shortfalls in PIC categories. These centres will have a number of roles, including managing skill enhancement programs, targeting research and development activities, and exploiting commercialisation and export opportunities.

16.24 The Government has decided not to publicly identify in detail the specific capabilities that are likely to attract PIC support. To do so would confer an advantage on any adversary seeking to exploit critical

strategic vulnerabilities, and would compromise commercial leverage. However, the Government accepts that the maximum level of transparency consistent with this constraint is desirable.

16.25 The Government has directed Defence to develop strategic policy advice (in the context of the annual DPG) for its consideration on the strategic basis for identifying those industry capabilities which would attract priority support as PICs. On the basis of that strategic advice and employing the criteria explained in this Chapter, the Government will decide on levels of support for PICs in a rigorous manner which ensures that value-for-money is achieved.

16.26 To assist this process, the Government will monitor a broad range of industry capabilities, such as:

- 'high-end' system and 'systems of systems' integration capabilities, including for EW development, the protection of networks and computers, including in the field of cyber defence, communications security testing services and through-life support of cryptographic equipment, and system life cycle management capabilities to maintain and extend the service life of ADF systems;
- naval shipbuilding, including specialist design and engineering services; warship repair, maintenance and upgrade capabilities, and essential facilities; submarine design and construction, repair, maintenance, upgrade and overhaul capabilities; selected development, production, upgrade and through-life support of underwater acoustic technologies and systems;
- development, repair and precision machining of composite and exotic materials, signature management capabilities and coatings, and anti-tampering capabilities;
- the ability to produce selected ballistic munitions and explosives; repair, maintain, test and evaluate guided weapons; repair, maintain and upgrade capabilities in relation to infantry weapons, small arms and remote weapons stations on combat vehicles;
- through-life and real-time support of mission and safety critical software; system assurance capabilities for both ICT hardware and software; the repair and maintenance of specialist AEW&C systems; the development and through-life support of JORN and phased-array radars; secure test facilities and test ranges; the development and support of targeting and precision navigation capabilities;
- development of capabilities in the field of combat clothing and personal load carriage equipment;
- repair and maintenance of armoured vehicles; and
- the repair, maintenance and upgrade of rotary- and fixed-wing aircraft.

16.27 In addition to these initiatives, the Government has decided to develop and implement a range of measures to overcome capability and capacity shortfalls in both prime suppliers and small to medium enterprises. These measures include:

- encouraging international prime contractors to take up opportunities for local industry participation in international global supply chains;

- enhancing the Skilling Australia's Defence Industry (SADI) program to expand the pool of appropriately skilled workers, enhance work and career pathways in the defence industry sector and address specific defence industry capability and productivity gaps. In particular, the SADI programs will continue to work with defence industry, secondary schools, universities and other institutions to encourage students to enter engineering courses and then to mentor and create career pathways for those that do so;
- developing of a skilling program specifically targeted at improving Australia's system integration and engineering skills base; and
- if necessary, rebalancing offshore and local procurement activities.

16.28 Through these reforms, Defence will deliver an improved capability procurement and acquisition service to Government. Guided by a stronger businesslike philosophy, increased accountability and greater efficiency, the DMO will support and sustain the ADF in its pursuit of the strategic priorities outlined in this White Paper.

# CHAPTER SEVENTEEN:
# DEFENCE SCIENCE AND TECHNOLOGY

## Australia's Strategic Capability Advantage: The Science and Technology Dimension

17.1 The future operating environment of the ADF will be shaped in very large measure by changes in military technology and its employment, especially in the Asia-Pacific region. Superiority in combat and other forms of military operations will hinge on continual advances in military technology, especially in areas such as EW, precision targeting, stealth and signature management, battlespace awareness, command and control and information networking.

17.2 In particular, the ready availability of commercial-off-the-shelf military systems, including those which rely on sophisticated electronics and computing, will increasingly enable less developed countries and non-state actors to acquire modern weapons as well as electronic, surveillance and communications systems. The ADF will be required to operate in an environment which is increasingly complex, as more potential adversaries will have access to a wider range of capabilities which are comparable to ours, or will be able to exploit vulnerabilities in ours.

17.3 As the United States continues to invest heavily in modernising its military forces, the challenge for allies of maintaining interoperability with US forces will also increase, and the transfer of especially sensitive technologies, which are likely to give US forces a winning edge, will be restricted to a few very trusted partners and controlled carefully. At the same time, the United States will seek technology collaboration with trusted partners in the development of new systems. Australia will be well placed to cooperate in such endeavours.

17.4 In this environment, Australia's self-reliant scientific and technological capabilities will become a relatively more critical element of our strategic capability advantage, as will collaboration with our scientifically and technologically advanced allies and friends, particularly the United States, and access to special technologies and capabilities.

17.5 A continued focus on the exploitation and application of new advanced technologies will be especially crucial in ensuring that the ADF has access to highly advanced and networked capabilities. The ADF will also require a winning edge in terms of information superiority (especially in relation to comprehensive situational awareness, rapid decision making and precise force application).

17.6 This Chapter outlines the role of Defence science and technology in ensuring that we maintain the strategic capability advantage we need.

## The White Paper Review of Defence Science and Technology

17.7 Recognising these factors, Defence undertook a review of its scientific and technological activities as part of the White Paper process, encompassing the DSTO, as well as the academic and industry contribution to science and technology support to Defence. The review examined those capabilities required to:

- innovate and adapt generally available technology for Australia's specific defence purposes;
- access classified technologies and capabilities from allied sources; and
- commercialise defence technologies and weapon systems within Australian industry.

17.8 The review found that in order to maintain our strategic capability advantage, Australia must have deep defence science and technology expertise. It must work hard to preserve its relative advantage in this area. The review examined Defence's science and technology activities in four major areas. Firstly, 'future-proofing' Defence by increasing the resources available to focus on the early stage of capability development. Secondly, implementing an enhanced governance model for the DSTO. Thirdly, simplifying the mechanisms for prioritising the DSTO's funding to support the development of capability, and adjusting the DSTO's internal business and management structures. Finally, providing greater clarity around the delivery of Defence science and technology to support non-Defence national security capabilities. The Government's response to this review is explained in this Chapter.

## The Defence Science and Technology Organisation

17.9 The DSTO's mission covers the full spectrum of science and technology support for Defence, namely:

- support to ADF operations;
- support to the current force;
- advice throughout the planning and development phases of defence acquisition programs including advice on all aspects of technical risk and risk mitigation strategies; and
- enabling and long-range research to support future defence needs including by way of monitoring and exploiting breakthrough technologies.

17.10 The DSTO has major research facilities located in Melbourne and Adelaide, with additional research facilities in Sydney, Brisbane, Perth, Canberra and Scottsdale. The DSTO's 2,300 staff of predominantly scientists, engineers, IT specialists and technicians work in critical Defence technology areas such as Air Vehicles and Air Operations; Maritime Platforms and Maritime Operations; Land Operations; Command, Control and Communications and Intelligence; EW and Radar; ISR; Weapons Systems; Joint Operations; Human Protection and Performance; and Counter-Terrorism. The Defence-focused expertise of its staff and the scale and depth of its research infrastructure enables the DSTO to carry out highly classified research, from basic science right through to the development of engineered prototypes.

## DSTO Support to ADF Operations

17.11 The DSTO provides direct support to current ADF operations, including through attachment of the DSTO staff to deployed units. The DSTO will continue to embed specifically trained analysts and technologists into areas of operation to provide immediate support to deployed units. The DSTO's deployed staff will be able to rapidly reach back to Australian-based facilities to modify and adapt equipment and procedures to meet the changing requirements in areas of operation. Countering improvised explosive devices (IED), for example, requires a suite of force protection measures ranging from blast protection, electronic countermeasures, enhancements to communications and personnel protection equipment through to predicting as best we can the adversary's intentions, using modelling and analysis. The DSTO has been heavily involved in these efforts in recent years.

## DSTO Support to the Current Force

17.12 The DSTO will support the current and projected force in terms of increasing operational effectiveness, improving safety, maximising asset availability and reducing the cost of ownership of assets. The DSTO supports major platforms throughout their life to ensure, as they age, that the capability, availability and safety provided and the cost of ownership continue to meet Defence requirements. For example, as the Collins class submarines age, the DSTO will continue to use its major facilities and expertise in areas such as propeller design, materials, sensors and networks to maintain them as an effective military capability. These activities will also position the DSTO to support development of the future submarine capability.

## Supporting Effective Capability Decision Making

17.13 The DSTO will provide enhanced support throughout the planning and development phases of defence acquisition programs using its expertise in evaluating defence projects, and will advise on all aspects of technical risk including risk mitigation strategies, in close partnership with the Capability Development Group and the DMO. In supporting acquisition, the DSTO will increase its efforts early in the capability life cycle, in line with recommendations of the 2008 Defence Procurement and Sustainment Review, applying its knowledge of future technologies, combined with modelling, testing and simulation skills, to reduce the potential risks and costs in later phases of acquisition. The DSTO has already initiated a coordinated and comprehensive approach to the capability requirements of the new air combat capability and the Future Submarine capability.

17.14 As more technologically-advanced systems are introduced into the ADF, there will be an increasing need for independent, deeply-informed science and technology support to reduce capability risk, and in integrating capabilities into the force structure. For example, new weapon and sensor systems and their integration with ADF platforms will need to be more intensively supported through software and hardware modelling, simulation and live trials. The DSTO will maintain the ability to conduct both virtual

and real testing of full-scale units, both weapon systems and platforms, to provide assurance of the capability advantage.

17.15 The DSTO will apply a whole-of-organisation approach to minimise capability risk through a combination of its technical expertise, knowledge of operations analysis within a joint operations framework, ability to work with military subject matter experts, a rigorous approach to systems-level evaluation, a deep knowledge of the international defence science and technology landscape through its longstanding involvement in international partnerships, and its close links with the intelligence community.

## Long-Range Defence Research Activities

17.16 The DSTO will continue a significant program of research into forward-looking enabling technologies such as hypersonics, computer security, electro-optics and smart materials which will impact future Defence capability. With the pace of technology change increasing, and the time for technologies to reach maturity and obsolescence decreasing, leaps in technology developed in the civilian sector can also be strategically disruptive, and need to be monitored closely as a result. The DSTO will investigate emerging technologies such as nanotechnology and biotechnology, generally developed for civilian purposes, to assess how they may be used for Defence purposes and whether they may be potential threats. The DSTO will work with intelligence agencies and international partners to better understand global developments in such areas, and how they may impact on Australia's strategic capability advantage.

## Building the DSTO of the Future

17.18 To ensure that the DSTO is well positioned to be at the forefront of key technologies, Government has decided to fund a program of technology upgrades in the DSTO's laboratories and technical facilities. This will include investment in facilities such as the DSTO's missile simulation centre and phased array radar testbed.

17.18 The DSTO will also increase its investigation and application of key enabling technologies which will provide significant returns for development of the future force, such as:

- integrated ISR;
- cyber warfare (including computer security);
- electronic warfare;
- underwater warfare; and
- networked systems.

### *Enhanced Governance Arrangements for the DSTO*

17.19 The Government has established an Advisory Board for the DSTO, consisting of internal and external members, to provide guidance to the DSTO as it embarks on these future programs. The Board

has membership from Defence, industry, and academia, and includes the Chief Scientist of Australia. It supports the Chief Defence Scientist on strategic issues related to the effective development and application of science and technology in Defence.

### *Improved DSTO Funding and Business Processes*

17.20 The DSTO will also implement a change program to simplify science and technology requirement priority setting processes. The DSTO will integrate robust priority setting and reporting into its governance arrangements to ensure greater accountability and more transparent program management.

### *A Reinforced DSTO Workforce*

17.21 The DSTO is rebalancing its workforce to achieve an efficient, streamlined organisation aligned to demands of a high-tempo and high-technology acquisition program, and the need to ensure it is world class in the areas which provide significant returns for development of the future force. The DSTO workforce will grow to reach a peak within the next five years to accommodate the anticipated support required for the acquisition program.

### *Delivering Defence Support to Non-Defence National Security*

17.22 The expertise that resides in the DSTO can also provide unique capabilities to support the Government's broader national security requirements, in areas such as chemical, biological and nuclear defence; explosives effects and IEDs; intelligence-related technologies; and cybersecurity. The DSTO will continue to support broader Government needs, using its science and technology skills developed for Defence purposes.

17.23 The DSTO's support to non-defence national security agencies expands on the DSTO capacity in key technology areas of relevance to Defence and enables the leverage of technology developed for non-defence agencies back into Defence. Examples of scientific and technological developments in this area include the synthesis and analysis of 'homemade' explosives for domestic security, which are applicable to the DSTO support to countering IEDs on the battlefield.

### *Enhancing External Engagement*

17.24 To reap the maximum benefit from Australia's broader science and technology base in industry, academia and in publicly-funded research organisations as well as our strong international relationships, the DSTO will continue to collaborate closely with external organisations through a number of mechanisms. The DSTO will continue to work with industry to support Defence needs, including through the Capability Technology Demonstrator Program and the Defence Science Access Network.

17.25 The DSTO can leverage technology and capability from other nations. By undertaking world-class research in certain niche areas, and through international collaboration, Australia is able to access overseas capabilities that would otherwise not be available to the ADF. Our prime multilateral science

and technology relationship is through The Technical Cooperation Program with the United States, United Kingdom, Canada and New Zealand. This allows Australia to work with these nations across a broad spectrum of defence science and technology issues, to explore potential technological opportunities at significantly less cost to Australia, and to benefit from tests and trials using a range of methods and environmental conditions where the cost would be otherwise prohibitive. Beyond this, the DSTO has a number of bilateral international relationships, the most significant of which continues to be that with the United States. In the first few years the prime areas for engagement will be in ISR, cyber warfare, EW, underwater warfare and networked systems.

17.26 The Government has decided to fund a significant program of enhanced external engagement between the DSTO and its national and international partners, which will focus on the critical science and technology areas where Australia must innovate in order to maintain its strategic capability advantage.

# CHAPTER 18:
# THE GOVERNMENT'S FINANCIAL PLAN FOR DEFENCE

18.1 For the first time, an Australian Government has committed to funding a Defence White Paper for the life of the White Paper.

18.2 The Government's financial plan for Defence will fund the force structure, readiness, sustainment, personnel, infrastructure and other objectives outlined in this White Paper.

18.3 The Government's financial plan for Defence has two components.

18.4 Firstly, the funding parameters (excluding the net costs of major overseas operations) for Defence are:

- 3 per cent real growth in the Defence budget to 2017-18;
- 2.2 per cent real growth in the Defence budget from 2018-19 to 2030;
- 2.5 per cent fixed indexation to the Defence budget from 2009-10 to 2030;
- that Defence will reinvest savings from its Strategic Reform Program back into priority Defence capabilities as agreed by the Government; and
- shortfalls against the White Paper funding plan will be offset by Defence.

18.5 Secondly, the Government has directed Defence to undertake a substantial program of reform, efficiencies and savings to underpin the achievement of White Paper objectives. In addition to meeting the broad objectives of the White Paper, these savings will allow Defence to correct long-term hollowness and remediate the enabling functions of the Australian Defence Force.

18.6 The Government has committed to real growth in the Defence budget of 3 per cent to 2017-18 and 2.2 per cent real growth thereafter to 2030. This will allow Defence to bolster capability and ensure that our men and women in uniform have all the capability, training, and protection they need to do their job as safely, as effectively, and as efficiently as is possible.

18.7 Long term funding stability, including more certain indexation arrangements and real growth for the Defence portfolio is essential for long term planning.

18.8 In the 2000 White Paper it was decided that Defence be indexed by the Non-Farm GDP Implicit Price Deflator. At the time this was a relatively stable index, however, as evidenced during the global economic crisis, this index has been subject to substantial fluctuations.

18.9 To ensure that Defence can make the types of long-term plans outlined in this White Paper, the Government has decided that Defence should be granted fixed indexation for the period to 2030. This fixed indexation will remove the need for Defence to constantly adjust its expenditure parameters to

suit short term fluctuations in the broader economy. The Government has decided to fix indexation at 2.5 per cent for the period to 2030. Using a fixed indexation factor that accords with the target for consumer price inflation that is agreed by the Australian Government and the Reserve Bank of Australia will greatly assist Defence planning.

18.10 The Government has directed that any savings achieved within the Strategic Reform Program in the Defence portfolio should be reinvested to ensure that this White Paper can be achieved. Over the past year, Defence has carried out a major review of its budget and business to identify efficiency savings and reprioritise activities. Savings have been placed in the Defence Strategic Investment Reserve for reallocation.

18.11 The Government has committed to sustainable funding arrangements for the Defence budget in future years to provide funding certainty for planning and real funding growth to meet the growing cost of the military equipment we will need in an increasingly demanding world.

18.12 This White Paper provides appropriate funding to meet our strategic and capability needs, to ensure that every dollar is well targeted and well managed to get the right Defence capability for the right cost.

DPS: APR016/08