



# Pay Your Money & Take Your Pick

## Defence Spending Choices for Australia

AN ASPI POLICY REPORT



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### Cover image

Shopping Trolley—Courtesy of Australian Picture Library



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## Defence Spending Choices for Australia

AN ASPI POLICY REPORT

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Australian Army soldiers parachute from a RAAF C-130J Hercules aircraft © Defence Dept.

## Director's introduction

Decisions about Australia's defence spending should be made in the same way that we make any other choice in public policy: by exploring the options until we find one that strikes the best balance between costs and benefits.

In practice that is not the way that defence spending usually gets debated. Most discussion is focused on the size of the defence budget as a percentage share of GDP. GDP share is one index of defence spending, and it can be informative in some circumstances. But it tells only a small and often somewhat distorted part of the story. What's needed for a wider and more informed debate on defence spending is information on the actual costs and the benefits of a range of different defence policy choices.

Such information can seem hard to come by. Defence costs appear opaque to those without military and technical expertise. And the benefits we are seeking—the risks we are seeking to avoid—often seem remote and intangible. As a consequence the linkage between how much we spend on Defence and what we get for it can be hard to grasp. The aim of this report is to bridge that gap.

Like all of ASPI's publications, the views expressed herein are not those of ASPI as an institution. Many people have contributed to the development of the paper, including by their comments on earlier drafts, and I thank them all. The bulk of the work has been undertaken by my colleague Dr Mark Thomson, Director of ASPI's Budget and Management Program, who as always has been a pleasure to work with. Responsibility for the views expressed herein lies with Dr Thomson and with myself as Director.

**Hugh White**

*Director*

## Executive summary

This year the Government will spend \$15.4 billion on Defence which amounts to 1.9% of GDP. Should we be spending more or less than this? The only way to know is to see what impact more or less spending would have on the capabilities of the Australian Defence Force (ADF) and the military tasks they can undertake. After all, it's what you get for the money that matters, not how much you spend. To this end we have examined five different options for future defence spending. Two options look at higher spending levels, two at lower spending levels, and a fifth looks at the Government's current plans.

These options look at what could be developed if we began smoothly and realistically increasing or cutting defence spending tomorrow. As a practicality, the options are constructed by adding and subtracting from the capabilities of the current force and the Government's recently updated Defence Capability Plan (DCP) for future capabilities. Because it takes a long time to develop new military capabilities we have chosen the year 2010–11 to compare costs (expressed in billion 2003–04 dollars).

We draw no conclusion about which option is right for Australia. Our aim is to inform the defence spending debate by linking ends and means.

### **Where are we now?**

Australia probably remains today the most capable air and naval power in South East Asia. Our fleets of F-18 fighter and F-111 strike aircraft are significant even in comparison to the major powers of the Asia Pacific. Our Army is very high quality but very small and ill equipped for substantial land force operations against capable adversaries.

We have a wide range of niche contributions to global coalitions for conventional or peace operations, and could offer substantial contributions



of air, special and naval forces, though with significant risks against more advanced adversaries. The size and combat weight of our Army limit significant land force contributions. Today's ADF can defend Australia and protect our immediate neighbourhood—defined broadly as the inner-arc of islands to our north within range of our combat aircraft—from major attack through air and naval operations, and undertake up to brigade-sized peacekeeping deployments in our immediate neighbourhood.

## Five options for the future

### **Option One—Back to the 90s (Budget in 2010–11: \$13.1b, 1.3% GDP)**

If we returned defence spending to 1990s levels, major chunks of capability would be lost. Option One accommodates such a cut by retiring the F-111, foregoing the purchase of the Joint Strike Fighter (JSF) by retaining the F-18 until 2020, retiring the Navy's older FFG frigates and cancelling the planned three Air Warfare Destroyers. Army would be cut by around 3,000 troops to pre-1999 levels.

This would have three consequences. First, it would scale down our ability to contribute substantial forces to global coalitions in either conventional conflicts or peace operations. Second, it would limit our ability to play a leading role in our immediate neighbourhood, especially our ability to handle multiple crises, or to sustain long-term deployments. Third, over the long term it would erode our air defence capability, as regional countries overtook our increasingly outdated air combat and naval forces. Over time we would have to rely more on the US for our own direct defence, and for the defence of our interests in the Asia Pacific and beyond. Nonetheless, we could still exercise a reasonable level of control of our maritime approaches, at least as far as our closer neighbours were concerned, and at least for the next several years.

**Option Two—Reordered priorities (Budget in 2010–11: \$15.1b, 1.5% GDP)**

Option Two rebalances the ADF by making all the cuts to Navy and Air Force from Option One and by adding three battalions to Army along with a land-based Theatre Ballistic Missile Defence capability.

This would have all the limitations of Option One in terms of air and maritime capabilities. But with a larger Army we would be better placed to make a significant ground force contribution to coalition operations in our own neighbourhood. In fact, with the recent announcement to acquire new tanks we could contribute to high intensity operations like Iraq once other already planned land force enhancements are complete. Yet in absolute terms our Army would still be small by regional standards.

This kind of posture might make sense in a world in which the US is strongly committed to its allies like Australia. Perhaps we could rely more on America's command of the air and sea for the defence of our own territory and the stability of our immediate neighbourhood, and to balance that greater dependence by an increased capacity to contribute land forces to US-led coalitions. We do not know what they would make of such a deal.

**Option Three—Current plans (Budget in 2010–11: \$16.7b, 1.7% GDP)**

The Government's current DCP sets out a program to upgrade and replace much of the ADF over the next fifteen years. This includes replacing the F-18 with the F-35 JSF and acquiring three Air Warfare Destroyers. In its most recent announcement the Government added replacement tanks and larger replacement amphibious vessels to its plans.

These initiatives will ensure that Australia remains a substantial maritime power in the Asia Pacific, with a high level of confidence that it can defend its own maritime approaches, and respond effectively to any intrusion of hostile forces into our nearer region. We would have the capacity to offer substantial air, special or naval forces to global or regional coalitions in higher-level conflicts, even against quite capable adversaries. We would also have the capacity to undertake and lead modest land operations in our immediate neighbourhood, and to contribute to global or regional peace operations further afield. Nonetheless our land force capabilities would remain limited by their size to relatively small-scale operations.

**Option Four—Stepping up (Budget in 2010–11: \$20.3b, 2.1% GDP)**

Option Four builds on current plans by accelerating and doubling the size of the planned Air Warfare Destroyer project while increasing the planned purchases of air-to-air refuelling and Airborne Early Warning and Control from four to six aircraft each. In addition, the boost to Army outlined in Option Two would be made.

This would constitute a substantial expansion of Australia's military capabilities both for independent operations close to home and for global and regional coalition operations. It would enhance our standing as a regional power and as a US ally, and enhance our ability to defend our continent. But it would not amount to a qualitative change to our strategic posture. We would be able to operate independently in our own near neighbourhood against any credible conventional adversary, and make a modest but valuable contribution to coalitions in the wider region or beyond. But our ability to influence events on the ground even in our immediate neighbourhood would remain very limited due to the relative size of our forces, and our ability to project power beyond our own neighbourhood would likewise remain limited.

**Option Five—Thinking big (Budget in 2010–11: \$24.9b, 2.5% GDP)**

This option boosts the ADF across the board including an additional mechanised brigade, six strategic transport aircraft, extra Army helicopters and two modest sized aircraft carriers plus aircraft.

Option Five offers Australia a qualitatively different range of strategic choices from those provided by our current plans or by the enhancements envisaged under Option Four. This option moves the focus of our force planning away from a capacity to dominate our extended maritime approaches towards a substantial capability for power projection beyond those approaches. It moves the focus away from the ability to undertake relatively low-level land operations in our immediate neighbourhood towards a capacity for sustained higher-level amphibious operations. And it moves the focus away from niche capabilities to global coalitions towards the ability to make substantive contributions to major land campaigns against capable adversaries. Under Option Five, therefore, Australia's standing as a regional power and as a US ally would be significantly enhanced.

## CHAPTER

## 1

# Means and ends

In the eight years since the current Government came to office, defence funding has increased by around 25% in real terms. Yet over that same period defence spending as a share of GDP has stayed more or less constant at 1.9%, which is more than 25% below the post-WWII average for Australia. To many people, the fact that real spending has increased by such a margin shows that the Government is doing more than enough. To others, the historically low GDP share is a sure sign that we are spending too little—especially in comparison with the 2.4% spent by the UK and the more than 3.3% spent by the US.

## ...we have choices to make about the range of military tasks we want to be able to undertake.

Both these arguments lose sight of what this spending is trying to achieve. Defence spending is not an end in itself. What really matter are the military capabilities that the money buys and the tasks those capabilities can accomplish. In this sense there is no absolute test of the adequacy of defence spending. Instead, we have choices to make about the range of military tasks we want to be able to undertake.

This report sets out to show what sorts of military forces Australia can afford at various spending levels, and to explain what tasks these forces can and cannot accomplish. No one true solution exists to this problem. There are always trade-offs to be made between one type of capability or another, and between defence spending and other alternatives.

Three caveats are necessary. First, our focus is on *defence* spending. Australia's security depends on much more than its armed forces, and an argument could be made that a more useful analysis would take account



RAAF C-130H Hercules transport aircraft flying over northern Australia © Defence Dept.

of other elements of our overall national security posture, such as aid, diplomacy and the increasing role of our police in Australia's international security efforts. But Defence remains by far the largest single element of our national security effort, and easily the most complex. So we think Defence warrants separate analysis.

Second, we are concerned here with long-term defence spending trends, not the detailed adjustments that happen every year in the lead-up to the budget. The year to year adjustments to defence spending make little difference to our long-term capability choices because the development of capabilities requires funding commitments over many years or even decades.

Third, we are not seeking here to address the persistent concerns that there is a mismatch between the goals of the 2000 White Paper and the funding provided. This is an important issue but it has only a relatively marginal effect on the long-term spending trajectories we are exploring here, and would require access to more detailed financial data than is available to the public.

The report is set out as follows. In the next chapter we set the scene for thinking about our future choices and options by briefly sketching the starting point—the capabilities of the Australian Defence Force (ADF) today and what they can do for us. Then in Chapter Three we lay out a range of five alternative future directions for our military capabilities and defence budgets. Finally, in Chapter Four, we briefly discuss the range of factors that influence the choice of one option over another. We have also included an annex that examines the commonly used measures of defence spending including dollars, GDP share and percentage of Commonwealth outlays.

We will not offer a quick answer to the question: 'How much should Australia be spending on Defence?' Our goal has not been to argue for one level of defence spending or another. Instead, we seek to provide the reader with the information needed to draw his or her own conclusions on the matter.

## CHAPTER

## 2

## Today's ADF

Following a period of relatively static defence spending through the late 1980s and 1990s, the Government committed to long-term sustained increases in defence funding in the 2000 White Paper: 3% real growth over ten years. Since then, the Government has added further money to cover the cost of operations in Afghanistan and Iraq, as well as to enhance certain capabilities in the wake of the September 11 attacks and the Bali bombing. The story of how this occurred and what it entailed appears in the ASPI report *Sinews of War—The Defence budget in 2003 and how we got there*, published in August 2003.

### What it costs

This year the Government will spend \$15.4 billion on Defence which amounts to around 1.9% of GDP. Of course today's ADF is not really a reflection of today's policies or today's spending levels. It is largely the result of decisions taken years and even decades ago. So protracted is the gestation of military capabilities that even after eight years in office the present Government's decisions have yet to make much impact on the substantive capabilities of today's ADF. In the same way, much of the money being spent today—especially the \$4.3 billion capital investment program—is going to fund the capabilities of the next decade and beyond.



RAAF fast jet aircraft L to R: F-18 Hornet fighter , Hawk lead-in-fighter and F-111 strike aircraft © Defence Dept.

**Table 1: The Current Force—Major Permanent ADF Assets/Units**

Current Force 2003	
<b>Sea</b>	<b>Air</b>
6 FFG Frigates	71 F-18 Fighter a/c
5 ANZAC Frigates	28 F-111 Strike Reconnaissance a/c
6 Submarines	33 Hawk Lead-in-Fighter a/c
3 Amphibious Ships	22 Orion Maritime Patrol a/c
2 Support Ships	24 C-130 Hercules Transport a/c
15 Patrol Boats	14 Caribou a/c
4 Coastal Mine Hunters	3 B707 Air-to-Air Refuellers
6 Hydrographic Vessels	1 B707 Transport Aircraft
16 Seahawk Helicopters	JORN & 2 Tactical Radar
7 Sea King Helicopters	Deployable Combat Support
<b>Land</b>	<b>Command, Control Communications &amp; Intelligence (C3I)</b>
1 Armoured Regiment (tanks)	HQ Australian Theatre & Attachments
2 Cavalry Regiments	Defence Intelligence Org.
3 Artillery Regiments	Defence Signals Directorate
1 Mechanised Infantry Battalion*	Defence Imagery and Geo-spatial Org.
3 Infantry Battalions*	Extensive C3I Infrastructure
1 Parachute Battalion*	<b>Personnel</b>
1 Commando Battalion *	Navy: 13,000
1 SAS Regiment	Army: 25,941
36 Black Hawk Helicopters	Air Force: 13,400
25 Iroquois Helicopters	<b>Permanent ADF: 52,314</b>
6 Chinook Helicopters	Reserve ADF: 20,445
1 Air Defence Regiment	
Deployable Combat Support	
Deployable Land Logistics	

Note: a/c means aircraft

\*The units make up the ADF's six infantry battalions

## What it's got

What military capabilities does this money buy for Australia? A quick look at Table 1 will give an idea of the major building blocks in the permanent ADF. There are two cautions to observe. First, the list does not do justice to the complexity of the Defence product. Here and throughout this paper we describe Australia's military capabilities in terms of the core deliverables focused around ships, aircraft, infantry battalions and other land combat formations, a small number of key support elements, and intelligence and command capabilities. But of course the delivery of military capability involves a lot more than these high-profile deliverables. Indeed, much of the combat effectiveness of the ADF depends on the ability to employ the various elements in joint inter-service operations. Also, a big share of the defence budget under any option will be spent on the myriad supporting activities which contribute to the delivery of combat effect on the front line. They should not be forgotten.

Second, the bare list does not tell us much about the real level of capability delivered by these forces. So in the following few paragraphs we will sketch very briefly how today's forces measure up. Let's start with the Navy. The heart of today's Navy is a fleet of eleven frigates and six submarines. The frigates fall into two classes—six older guided missile frigates (FFGs) delivered between the late 1970s and the early 1990s, and five newer ANZACs built over the past decade. Three more ANZACs are now being completed and will join the fleet over the next few years, at which time the oldest two FFG will be retired. Both classes of ship are now commencing major upgrades to their weapons systems. The Seahawk helicopters that operate on the frigates can find and attack submarines beyond the horizon of the ships themselves. The physical range of these warships is enhanced by two support ships that can refuel and resupply them at sea.

These are moderately capable small warships, broadly superior in quality and quantity to the kinds of ships now in service in South East Asian navies, but inferior to the best ships in the navies of major Asia Pacific powers like China and India. They can work well alongside the US Navy, but would add little real capability to any US-led naval task force in a high-threat environment. In lower-level operations they are more than adequate for tasks like patrolling our immediate neighbourhood or maritime interception operations further afield. But in higher-level operations against the more capable forces of major powers they would be vulnerable to missile and torpedo attack, especially from aircraft and submarines. This vulnerability will ease but not disappear once the current program of upgrades is complete.





Australian Army soldiers in an ASLAV armoured vehicle on patrol in East Timor during the INTERFET operation in 1999. © Defence Dept.

On the other hand, the six Collins-class submarines, despite their problems, are clearly among the most capable in the Asia Pacific, and could operate effectively against any of the region's navies. Week-in week-out, the Navy's fifteen ageing small patrol boats are busy on the frontline of our maritime border patrol. The Navy's ships are kept at high states of readiness and, despite recruiting problems, a good proportion of the fleet is available for operations at short notice.

## ...the six Collins-class submarines, despite their problems, are clearly among the most capable in the Asia Pacific,...

The heart of the Army's combat capabilities is the infantry battalions, cavalry regiments, special forces regiments, artillery regiments, helicopter regiments and front-line logistic support units. These are the bits that deploy and fight. Soldier for soldier this is probably the best-trained army in the Asia Pacific, and among the best equipped. But it is also the smallest serious army in the region, which limits the size and duration of operations. Its lack of heavy armoured capability and self-propelled artillery are two of the several limiting factors in high-intensity land warfare, and some of its equipment is ageing and in need of upgrade. Also many of the units are under-manned.

Our land forces are supported by amphibious transport ships and aircraft in the Navy and Air Force, including three amphibious ships, twenty-four C-130 Hercules transport aircraft, and a number of watercraft and smaller aircraft including a range of helicopters.

The heart of Australia's air-combat capability is our F-18 and F-111 fleets. The twenty-eight F-111s, with their combination of long-range and big weapon load, are powerful strike platforms. On the other hand, programs to improve their anti-missile defences and fit them to deliver precision weapons have fallen behind schedule, and they are getting more expensive to operate as they age. As a result they are becoming increasingly vulnerable to the kinds of fighters and air-defence capabilities entering service, not just among the major powers but in South East Asia as well.

## ...the fleet of nineteen P-3C Orion long range maritime patrol aircraft, which are being upgraded to be among the most capable in the world.

Our own fighter fleet of seventy-one F-18s were among the most capable aircraft in the region when they were introduced in the mid-1980s, but since then regional capabilities have grown steadily, and they have now lost any decisive edge over the better aircraft in the wider Asia Pacific. In South East Asian terms they remain a potent force, and major upgrades now underway, along with introduction of Airborne Early Warning and Control (AEW&C) aircraft, will keep them competitive for some time yet.

Both F-111s and F-18s have important maritime roles through their ability to launch anti-ship missiles, and Air Force's maritime surveillance and strike capability is strengthened by the fleet of nineteen P-3C Orion long range maritime patrol aircraft, which are being upgraded to be among the most capable in the world.

A general caveat needs to be placed on the availability and sustainability of many of the ADF's aircraft, be they operated by Navy, Army or Air Force. Crew shortages, upgrade programs, maintenance problems and logistics limitations conspire to restrict the number of platforms that can be deployed and the period they can be sustained for. So the numbers in Table 1 should not be taken at face value.

Finally, Australia has a big investment on the information side of military operations: command systems, intelligence and surveillance capabilities, and the information systems and communications to support them. These capabilities compare well with those of other militaries in the region, but Australia's advantage in information technology could be exploited better and projects are in train to do this.

## What it can do

Today's ADF is an inherently flexible strategic instrument, and its capabilities can be put to use in many different ways and for many different purposes. This is important, because in Australia's strategic circumstances it is not possible to predict the precise nature and location of the operations the Government might want to call on the ADF to perform, even a few years ahead. How much harder is it to guess what they might be asked to do in ten or twenty years' time?

The set of strategic options and military tasks outlined in this section is therefore not intended to be exhaustive or definitive. It simply reflects a range of tasks to which governments have given a high priority in the past and current defence policy, and which are likely to feature to some degree in future policy priorities. No judgments are offered or implied here about the relative priority between them under current conditions.

### **Contributing to US-led global coalitions for higher-intensity operations**

Today's ADF provides the Government with a wide range of options to contribute niche capabilities to US-led coalitions in higher intensity operations. These options include the kinds of forces we sent to Iraq and Afghanistan: special forces, fighters, naval ships, transport aircraft, maritime patrol aircraft, air-to-air refuelling aircraft, medical units and some specialist staff and support capabilities. These 'niche' capabilities can provide a highly visible and valued contribution despite their relatively limited combat power in a conventional sense.

...in Australia's strategic circumstances  
it is not possible to predict the precise  
nature and location of the operations the  
Government might want to call on the  
ADF to perform, even a few years ahead.

There are many fewer options to offer larger forces which might make a substantive, as opposed to primarily symbolic, contribution to the military outcome of coalition operations, especially against more capable adversaries. Much will depend on the Government's judgment about the relative priority between supporting a more distant coalition operation and keeping forces to meet problems closer to home.

In principle, from the current land force, the ADF would be able to send up to a brigade to a coalition operation, which could amount to 4,500 or more personnel depending on the task. But the light weight of our land forces limits the tasks they could be given in higher-intensity land operations to supporting roles away from the main fight. And in practice, the Government is unlikely to be prepared to deploy more than a battalion group of the Army—around 1,500 personnel—for a sustained deployment beyond Australia’s immediate neighbourhood. To do more would leave it with too few options to respond to local problems. However, sending less than a brigade probably means having to place our forces under the tactical control of the US or another coalition member.

**At present the Collins class submarines, special forces and P-3C Orion maritime patrol aircraft are probably our most potent systems in regional terms.**

So with our present capabilities, the Government would probably need to draw on air, naval and special forces to make a substantial contribution to higher-intensity coalition operations—for example, in a major conflict in the wider Asia Pacific. Our air and naval forces have more punch than our land forces, but even here the Government’s options would be limited. At present the Collins class submarines, special forces and P-3C Orion maritime patrol aircraft are probably our most potent systems in regional terms. If we sent all we had available they would make a real difference in a regional maritime campaign, even for the US—though that would run risks if we faced the possibility of submarine attacks closer to home. Our frigates could join a US-led naval task group, but they would add little to its capabilities, and have no substantive capacity for independent operations in a high-threat environment. Our F-111s and F-18s—if we could send and sustain, say, half of each fleet—would make a major contribution in many situations. But the emergence of more capable fighters and anti-aircraft missiles in the Asia Pacific means that they would be vulnerable to some forms of attack.

#### **Contributing to global coalitions for peace operations**

The key military capabilities required for peace operations of various sorts—from Somalia to Iraq—are light land forces and the means to support and sustain them, and naval ships for operations such as sanctions enforcement. The ADF’s frigates and infantry battalions are well-suited to this kind of work, and many other elements of the ADF, including transport aircraft, logistics and support capabilities, provide a wide range

of options as well. Today's ADF can sustain long-term deployments of one or two frigates for operations like enforcing sanctions against Iraq in the Gulf—although this has meant long deployments for the crews involved and a heavy burden on Navy overall. Following the recent announcement that the two older FFGs will leave service in 2006, there will be little extra capacity as the new ANZAC frigates enter service. And on past experience, the Government would probably limit the land force contribution to a distant peace support operation to a battalion of infantry or specialist capabilities like medical or logistics units—once again mindful of the need to maintain a capacity to respond to problems closer to home.

## ...today's ADF does not have the capacity to independently undertake major land operations in the archipelago against substantial land forces...

### **Operations in Australia's immediate neighbourhood**

Australia would probably take the lead in any military operations in our immediate neighbourhood, so the focus is less on what we can contribute to others' forces than on what we could do ourselves. In the unlikely event of major conventional conflict in Australia's immediate neighbourhood—defined broadly as the inner-arc of islands to our north within range of our combat aircraft—the ADF should be able to win the critical battles in the air and at sea. To do that we would rely on our air and naval forces; today's ADF does not have the capacity to independently undertake major land operations in the archipelago against substantial land forces, including those of Indonesia or of a major regional power projected into our neighbourhood.

In lower-level operations such as peacekeeping, the ADF can provide up to a brigade group probably built around a core of two, and at a stretch three, infantry battalions. However, sustaining the rotation of forces would require long deployments for individual soldiers and units—perhaps as long as twelve months—and much more extensive use of the reserves than has been done in the past. This situation would be akin to that which the US faces in sustaining its current force in Iraq. In addition, the poor civil infrastructure in the region can place heavy demands on deployed logistics, especially if Australia as lead nation has to cover the support of coalition partners.

It would probably also be possible to mount a short deployment of up to a battalion elsewhere in the neighbourhood at the same time—say, for an emergency evacuation—but this would stretch the Army to its limits and divert logistics effort from the main deployed force for the duration of the operation.

Overall, we have the ability to undertake small peacekeeping and humanitarian assistance tasks, but the ADF has very limited capacity to maintain stability in a place as large as PNG, and none at all in Indonesia. And of course our ability to take on smaller tasks depends on how heavy our ongoing commitments in places like East Timor and Solomon Islands are.

### **Protecting Australia from non-conventional threats**

The ADF has a role in helping to protect Australia from non-military threats including transnational crime and terrorism. One contribution the ADF makes is to undertake operations in our region or beyond, which helps combat such trends—for example, by helping to forestall state failure in the Solomon Islands, or by removing state sponsors of terrorism in Afghanistan. The capabilities to undertake such operations are addressed under other headings, but today's ADF also has significant capacity to contribute directly to these tasks in and around Australia itself. They include the special forces' counter-terrorism assault capability, the role of the Navy and Air Force in maritime surveillance, the contribution of defence intelligence capabilities to the campaigns against terrorism and transnational crime, and the role of ADF units in responding to and recovering from terrorist attacks including chemical, biological and radiological attacks. Nonetheless it is worth noting that few ADF capabilities have been developed specifically to meet these tasks, and none of them is principally an ADF responsibility.

## Today's ADF has a robust capacity to defeat the highly unlikely eventuality of a direct attack on Australia.

### **Defeating direct military attacks on Australia**

Today's ADF has a robust capacity to defeat the highly unlikely eventuality of a direct attack on Australia. Australia's air and naval forces should be able to detect and destroy forces in our maritime approaches. The scale of this capability would most likely deter any attempt to lodge or sustain forces on our continent, or to mount sustained air or sea raids, and our long-range strike capabilities would raise the possibility of strikes on an adversary's home bases.

If our maritime defences perform as they should, our land and air forces should be able to deal with the relatively small conventional forces that might slip through onto Australian territory. Indeed, the largest challenge would be to find small forces infiltrating ashore—once found they would be relatively easy to deal with.

## What it means

Australia probably remains today the most capable air and naval power in South East Asia, and our forces are significant even in comparison to the major powers of the Asia Pacific. Our Army is very high quality but very small and relatively lightly equipped; soldier for soldier it is a match for any army in the region, but overall its weight in our wider region is slight.

Our forces can offer a wide range of niche contributions to global coalitions for conventional conflicts or peace operations, and could offer substantial contributions of air, special and naval forces, though with significant risks against more advanced adversaries.

Today's ADF can defend Australia and protect our immediate neighbourhood from major attack through air and naval operations, and undertake medium-sized sustained peacekeeping deployments in our immediate neighbourhood. Our capacity for substantial land force operations against capable adversaries in our neighbourhood is small.

The ADF can broadly meet the demands government has made on it to support wider national efforts against non-military threats, though the adequacy of these wider efforts, and the role that the ADF might have in any future arrangements, is not clear. It's important to remember that the ADF's capabilities are very specialised military ones, and that the capacity to deal with a large-scale event would depend primarily on civil emergency response arrangements.

## CHAPTER

## 3

## Five options

In this chapter we will describe five options for Australia's future defence spending. The options are summarised in Table 2. The middle option—Option Three—will focus on the Government's current program as it is set out in the recently updated Defence Capability Plan (DCP). It is also the starting point for developing the other options by addition and subtraction.

Our approach is to explain the implications of different levels of defence spending both by outlining the capabilities that Australia could develop and sustain at each level of funding, and by describing the strategic options which those capabilities would provide to Australia in different kinds of crisis. There is an unavoidable element of judgment embodied in these assessments. We have taken care with the judgments we offer, but we make no claim to giving the final word on these issues.

Of the other four options, Options One and Two offer defence spending levels lower than Option Three, while Options Four and Five offer higher spending levels than currently planned. The treatment is of course very selective—many other levels of defence spending could have been chosen. And at each level of spending there are many different combinations of capability that could be developed, each delivering different strategic outcomes. In constructing the options we have been careful not to venture into the realm of the implausible. Our lowest-spending option roughly corresponds to the trajectory that defence spending would have followed if the Government had maintained it in real terms as it was in the 1990s. Our top-level option envisages spending at around 2.5% of GDP—just slightly above the 2.4% of GDP that the UK spends on defence, and well below America's 3.3% or greater figure.

To make sense of the options, we need to look a long way ahead. Short-term year-on-year fluctuations in the defence budget make very little difference to the long-term development of capabilities. The development of military





RAN Amphibious Vessel HMAS Manoora at Point Cruz in Honiara in 2003. © Defence Dept.

capability requires long-term investments in people, equipment and facilities which cannot be turned on and off like a tap. So we present the defence budget implications for each option as they would be in 2010–11, which has the advantage that it is the latest year for which there are firm Defence Department estimates of the baseline costs. And we look even further ahead, to the period 2015–20, to describe the capabilities that each option would provide, to allow time for long-term investments to deliver fruit. Our estimates include the impact on personnel and operating costs as well as the capital investment component. All amounts are expressed in 2003–04 Australian dollars.

**...in every case, we've kept the recent boosts to the ADF's counter-terrorist capacity via enhanced special forces and intelligence capabilities.**

All of the options include a core of basic workhorse platforms like the C-130 transport aircraft, Black Hawk and Chinook helicopters, and the ANZAC frigates. We've also assumed that the ADF will continue to support national interests through border and fisheries protection using our maritime patrol aircraft and patrol boats. And, in every case, we've kept the recent boosts to the ADF's counter-terrorist capacity via enhanced special forces and intelligence capabilities. Moreover, we assume that broadly applicable capabilities like intelligence and surveillance will be retained in every case. With these basics in place, the real choices reduce to those at the high-tech and/or high-intensity combat end of the spectrum.

Finally, and most importantly, it should be made absolutely clear that this paper is not offering any evaluation of the relative merits of the options it describes. Our aim here is to inform debate by offering information about the costs and benefits of different spending options, not to offer a view as to which of those options is best for Australia. The options are intended to highlight the sorts of choices available. Consequently they do not represent our judgment as to what the best mix of capabilities would be at each spending level.

### Note on cost estimates

Estimating the cost of acquiring and operating military equipment is difficult. We have made every effort to make the best estimates possible using publicly available information. Our basic sources are the 2001 public version of the DCP for acquisition costs, and the 2003–04 Portfolio Budget Statements for operating costs and personnel numbers. In the latter instance, we have assumed that the ‘price’ of capability outputs provides an adequate estimate of the cost and personnel requirements of a capability once depreciation is subtracted and an assumed 20% fixed overhead is taken into account. Where necessary, the cost of new capabilities has been estimated from foreign sources.

Because of the time it takes to develop new military capabilities, the budget impact in 2010–11 is dominated by cancelled projects in the lower spending options, and by the cost of new projects in the higher spending options. This is unavoidable. The average annual expenditure needed to develop a new capability is, with few exceptions, considerably greater than the eventual annual operating cost. As a result, any move to expand the force structure substantially requires a capital investment hump that will eventually subside (until the time comes to replace the equipment in twenty to twenty-five years’ time).

Throughout this report defence spending is expressed in terms of the money formally appropriated to Defence exclusive of internally generated revenues.

**Table 2: Five options**

	Decreased Spending Plans		Status Quo	Increased Spending Plans		
	Option 1	Option 2	Option 3	Option 4	Option 5	
	Back to the 90s	Reordered Priorities	Current Plans	Stepping Up	Thinking Big	
<b>Sea Capabilities</b>						
Cut the FFG Frigates and Cancel the Air Warfare Destroyers	✓	✓				
Expand and Enhance Naval Air Warfare Capability				✓	✓	
Two Aircraft Carriers and Extra Afloat Support					✓	
<b>Land Capabilities</b>						
Reduce Army to 1999 troop levels	✓					
Expand and Harden Army		✓		✓	✓	
Double Army Mechanised Operations Capability					✓	
<b>Air Capabilities</b>						
Cut the F-111 and defer the F-35 Joint Strike Fighter purchase	✓	✓				
Boost Air Combat Capability AEW&C + Air-to-Air Refuelling				✓	✓	
Increase Tactical Troop Lift & Strategic Air Mobility					✓	
<b>Other</b>						
Reduce Command, Control, Communications & Intelligence	✓					
Increase Command, Control, Communications & Intelligence				✓	✓✓	
Increase Munitions Stocks and Logistics Capability				✓	✓✓	
<b>Fiscal Impact</b>						
Budget 2003–04 (\$billion)	\$15.4	\$15.4		\$15.4	\$15.4	\$15.4
Budget 2010–11 (\$billion)	\$13.1	\$15.1		\$16.7	\$20.3	\$24.9
Annual Real Growth	-2.3%	-0.3%	1.2%	4.0%	7.1%	
<b>Economic Impact</b>						
GDP Share 2003–04	1.9%	1.9%	1.9%	1.9%	1.9%	
GDP Share 2010–11	1.3%	1.5%	1.7%	2.1%	2.5%	
<b>Personnel Impact</b>						
Full Time ADF Strength	47,600	55,800	54,000	61,500	68,600	

Note: All dollar figures are estimated in 2003–04 dollars.

## OPTION ONE—BACK TO THE 90s

This option explores what it would mean if we went back to the real level of defence funding of the 1990s. Viewed in hindsight, and in the light of the more recent big increases in defence spending, this option looks rather low. But it is hardly outside the parameters of practical policy and we think it is helpful to remind ourselves where Australia's defence capabilities were heading until quite recently.

### What it costs

To return defence spending to the long-term levels of the 1990s requires a fairly hefty cut of 2.3% per annum in real terms over the rest of the decade. If we took this path, by 2010–11 defence spending would fall to \$13.1 billion (as measured in 2003–04 dollars), which is \$3.6 billion below the level now planned for 2010–11. The defence budget would amount to 1.3% of GDP in 2010–11 on current GDP growth estimates. And reductions in personnel would bring the ADF down to a strength of 47,600.

**Salami-slicing off proportions of a capability or, worse still, mothballing parts of a fleet, saves very little because of the high fixed cost of fleet ownership.**

### What it's got

Option One makes big cuts in many areas. The fact is, if you want to save money you have to cut entire equipment fleets or large numbers of personnel. Salami-slicing off proportions of a capability or, worse still, mothballing parts of a fleet, saves very little because of the high fixed cost of fleet ownership.

Under Option One, we remove the six FFG frigates and sixteen Seahawk helicopters from today's forces, and delete the three new Air Warfare Destroyers that were planned to replace them. This would leave only the ANZAC class frigates that will grow to a fleet of eight over the next several years. This removes the most capable ships in order to preserve a reasonable number of younger but less capable ones. Navy would lose much of its surface-to-air and anti-submarine capabilities, which would severely restrict the surface fleet's ability to operate in high-threat environments, either alone or as part of a US-led task force, unless closely supported by aircraft. The capacity for concurrent operations would also be significantly reduced.

Other key navy capabilities would be retained, including the six Collins submarines, although the enhancements planned for later this decade are scrapped under Option One.

Under Option One the Army is cut back by 3,000 troops, and Air Force by 500 troops, to 1999 levels. This would take us back to before the East Timor deployment, when the Government decided to increase the Army and Air Force's ground personnel numbers, to meet the demands of sustained offshore operations. The impact would be to reduce Army's high-readiness infantry capability from the current goal of six full-strength battalions to only four plus two under-strength battalions. It would also significantly degrade Army and Air Force's deployable support forces. In addition, the Army Reserve would be halved to 8,000 personnel. And the billion dollar 'Soldier as a Combat System' project designed to equip our infantrymen with high-tech equipment would have its funding halved.



Australian Army peacekeepers patrol in East Timor © Defence Dept.

For Air Force, Option One scraps the F-111 strike force, and delays the replacement of the F-18s until after 2020. This would require a couple of billion dollars, and careful management of the fleet to keep the F-18s flying. And because the demands on the F-18s would increase as they take on the strike role from the F-111s, we might eventually need to lease some aircraft to fill the gap as well.

Overall the impact of these cuts is to significantly reduce Australia's air combat and strike capabilities from the level of current plans. Our air-combat capabilities would remain superior to those of most South East Asian adversaries well into the next decade, though this would come under pressure if current plans to introduce small numbers of higher-performance aircraft like the SU-30 materialise. Our air combat capability would fall significantly below that of major regional powers and the more advanced South East Asian air forces.

## Overall the impact of these cuts is to significantly reduce Australia's air combat and strike capabilities from the level of current plans.

Given the smaller force, modest cuts to spending on Communications, Command, Control and Intelligence projects have also been applied.

### **What it can do**

Option One substantially reduces the options available to the Government for all tasks outlined in Chapter Two, though it retains some options in relation to each of them.

This Option would still provide the Government with a number of ways to contribute small contingents to US-led coalitions in higher intensity operations. But the overall menu of options would nonetheless be reduced, and the flexibility in responding to requests would be impaired.

Option One cuts more sharply into the menu of choices to make a larger, substantive contribution to coalition operations against more capable adversaries. The ADF would lose the capacity to support even a battalion-sized land force contingent beyond our neighbourhood for long periods without taking risks with our ability to handle problems close to home. The Collins class submarines and P-3C Orion maritime patrol aircraft would remain our most potent potential contributions in the maritime field, but the capacity of our surface fleet to do more than tag along with US-led naval task groups would fall sharply. The F-18s would still be able to join coalition air campaigns against less capable forces or with close support from better-equipped allies.

With fewer frigates, Option One would reduce but not remove the Government's options for sanctions enforcement and other maritime peace operations. Likewise with the Army cut to four full-strength high-readiness battalions, Australia could still send land forces to join global peacekeeping coalitions, but the contributions would need to be smaller and the deployments shorter, unless the Government was prepared to run larger risks of being under-prepared to meet local emergencies at the same time. Specialist land contributions would remain a possibility.

Option One would reduce Australia's capacity for operations in our immediate neighbourhood in several ways. Fewer frigates and battalions would cut the resources to meet emergency situations like East Timor and the Solomon Islands. As we found in 1999, an Army of the size provided by Option One could only provide the forces needed for INTERFET with real stretching, and with real limitations of sustaining the force. The key risk is therefore that we would lose the ability to deal with more than one problem of this kind at a time or to maintain an extended presence.

Our air and naval forces would continue to have the ability to meet major conventional incursions into our immediate neighbourhood by the kinds of forces found in South East Asia, but this would degrade over the next decade, especially with the deferred replacement of the F-18s. The erosion in naval and air defence capability would also reduce our ability to conduct offshore land operations that were opposed.

**...over time, as more advanced air capabilities enter service in South East Asia, our capacity for assured dominance of our extended maritime approaches would erode.**

The cuts to our forces required by Option One would still leave Australia's air and naval forces with the ability to defend our maritime approaches from attack against the kinds of capabilities that we would expect to see in South East Asia over the next ten years. But without the F-111s our capacity to deter attack and destroy hostile forces in their home bases—an important element in our strategy for the defence of Australia—would be much reduced. And over time, as more advanced air capabilities enter service in South East Asia, our capacity for assured dominance of our extended maritime approaches would erode. Smaller land forces would also limit our flexibility in responding to incursions onto Australian territory, and leave the land force as only an expansion base for the defence of Australia, with no options to forward deploy at short notice.



**What it means**

Option One would have three clear consequences for Australia's strategic position. First, it would scale down our ability to contribute substantial forces to global coalitions in either conventional conflicts or peace operations. Second, it would limit our ability to play a leading role in our immediate neighbourhood, especially our ability to handle multiple crises, or to sustain long-term deployments. Third, over the long term it would erode our air defence capability, as regional countries overtook our increasingly outdated air combat and naval forces. Over time we would have to rely more on the US for our own direct defence, and for the defence of our interests in the Asia Pacific and beyond.

The forces provided under Option One could have met all the demands that the Government has actually placed on the ADF over the past twenty years. Of course, there is no guarantee that it would meet the demands of the next twenty years.

On the other hand Option One would not entail a complete abrogation of our strategic principles: Australia would still have forces to contribute to coalition operations near and far in niche capabilities, and could still exercise a reasonable level of control of our maritime approaches, at least so far as our closer neighbours were concerned, and at least for the next several years. The forces provided under Option One could have met all the demands that the Government has actually placed on the ADF over the past twenty years. Of course, there is no guarantee that it would meet the demands of the next twenty years.



A RAAF F-18 aircraft refuels from a USAF KC-135 during a combat mission over Iraq © Defence Dept.



## OPTION TWO—REORDERED PRIORITIES

Option One looked at the impact of quite deep cuts in defence spending. Option Two explores how Australia might accommodate a more modest contraction. The approach it illustrates is to reorder priorities among the different types of capability in the ADF to favour those that might be seen to be more relevant to our near-term needs. Option Two therefore accommodates a small cut in defence spending over the rest of the decade by making large cuts in air and naval forces, but boosting funds for Army, and investing modestly in ballistic missile defence.

Arguments in favour of such a rebalancing—though not for a budget cut—have been made often recently. They are even reflected in the Government's own Defence Update paper published in February 2003, which suggests that the long-term risk of armed attack on Australia has been reduced, although that is not to suggest that they are considering as radical rebalancing of priorities as we explore here. Nevertheless, if economic or other pressures did force a cut in defence spending, Option Two might reflect the sorts of changes that would be considered.

### What it costs

Under Option Two, defence spending would fall at a real rate of 0.3% per year to \$15.1 billion in 2010–11 (as measured in 2003–04 dollars), which is \$1.6 billion below the current budget plans for 2010–11. That is, not all that different from what is currently planned from a fiscal perspective—certainly too little to be worth discussing as a tax break. As a percentage of GDP defence spending would account for only 1.5% in 2010–11. But the ADF would actually grow in strength to around 55,800 as the transition to a more labour-intensive land-based ADF occurred. This is only 1,800 more than under current plans and therefore should not be too much of a concern from a recruiting perspective.

### What it's got

Option Two retains all the cuts to air and maritime capabilities made in Option One, but it redirects most of the savings into an expanded and hardened army. The number of full strength battalions in Army would be boosted by 50% from the current six to a total of nine. Along with the recent decision to buy a new main battle tank to replace our ageing Leopard tanks, the planned ground-based air defence project would be expanded to a Theatre Ballistic Missile Defence (TBMD) capability. These initiatives would build upon the projects already in the DCP to replace existing artillery, acquire a light armoured mortar system, increase the number of light armoured vehicles and upgrade the M113 armoured personnel carrier fleet. They would also fit with the Government's recently announced decision to enhance the Navy's amphibious lift capabilities.

**What it can do**

As with Option One, our air and maritime capability edge would be cut by the loss of the FFGs and F-111s, and would degrade further without Air Warfare Destroyers and due to the delayed replacement of the F-18s. So all of the limitations on our air and naval capabilities imposed by Option One would be felt under Option Two as well. But the increased size and effectiveness of the Army would allow us to do three things we cannot do at present.

## This would allow us, for example, to assist the US and UK with a sizable contribution to the kinds of operations now underway in Iraq.

First, we would be able to deploy and sustain a brigade for extended periods while retaining the ability to deploy another brigade in an emergency. This would allow a major ground force contribution to be made to a distant global operation while retaining the ability to deploy a brigade closer to home. Also, the potential size of the deployed brigade could comfortably set at three battalions—the international norm—with no pressure to compromise at a smaller force. This would allow us, for example, to assist the US and UK with a sizable contribution to the kinds of operations now underway in Iraq.

Second, the new tanks, combined with other equipment upgrades already planned in the DCP, would provide the basis for a brigade-sized combined-arms force: the kind of mechanised brigade that would have made a credible and highly-visible contribution to Operation Iraqi Freedom, and could contribute to global coalitions in similar circumstances elsewhere, such as the Korean Peninsula. This assumes that the existing planned upgrade projects are sufficient to fill other gaps like the need for self-propelled artillery.

Third, a larger and more capable army would also expand the range of land force options we have to contribute to regional operations, such as helping a neighbour to resist external aggression, or respond to a wider or more demanding range of concurrent crises in the immediate neighbourhood.

The ADF's residual air and naval forces would be able to provide an adequate level of support for such deployed forces in low level contingencies. But against an air threat we would not be able to protect a deploying force beyond the operating range of our land-based



US Marines with M1A1 Abrams on exercise in Australia in 2001 © Defence Dept.

fighters. This would limit the range of tasks that could be undertaken without allied support. And this limitation would only become more acute as regional forces acquire more advanced air and naval capabilities. However, the addition of a TBMD capability would enhance existing ground-based air defence capabilities and provide a level of protection for deployed forces beyond that currently available.

## This kind of posture might make sense in a world in which the US is strongly committed to its allies like Australia...

### **What it means**

Option Two offers a credible strategic policy for Australia provided that the limitations are accepted. It would substantially increase our land force capabilities both in our own neighbourhood and beyond, while leaving our air and naval forces still with some significant, though diminishing capabilities. This kind of posture might make sense in a world in which the US is strongly committed to its allies like Australia, and enjoys an unprecedented dominance in air and naval capabilities against any conceivable combination of adversaries. Perhaps we could rely more on America's command of the air and sea for the defence of our own territory and the stability of our immediate neighbourhood, and to balance that greater dependence by an increased capacity to contribute land forces to US-led coalitions both in our own region and around the world. We do not know what they would make of such a deal.

## OPTION THREE—CURRENT PLANS

The Government's current plans are set out in the ten-year DCP. This was first published following the Defence White Paper released by the Government in December 2000, and has since been modified in various ways, especially to take account of some new priorities after 11 September 2001, including a revision of some priorities announced in November 2003.

### What it costs

In the *Defence 2000* White Paper, the DCP was underwritten by a firm commitment to sustained defence spending increases over the decade averaging 3% per annum in real terms. The Government has since met that commitment, as well as providing additional funds to cover the costs of operations such as those in Afghanistan, Iraq, Solomon Islands and East Timor.

On the Government's current plans, and if it meets its commitments, defence spending will grow to \$16.7 billion in 2010–11 (as measured in 2003–04 dollars). That reflects planned defence spending growth averaging 1.2% per year between now and 2010–11. The rate of growth appears to be less than that promised mainly because of the many new items of spending that have been added in the last couple of years due to deployments and new initiatives post September 11 and the Bali bombing. Put simply, by spending a lot more money in the near term the planned rate of growth into the future has been reduced. On current projections, Defence's share of GDP will slip from 1.9% to 1.7% by the end of the decade despite this sustained growth, because the economy is predicted to grow even more strongly.

**The Government currently plans major upgrades and enhancements to almost all of the ADF's major capabilities over the next decade.**

### What it's got

The Government currently plans major upgrades and enhancements to almost all of the ADF's major capabilities over the next decade. Table 3 details the main features of the force structure as it stands today, and as it is planned to develop over the next ten to fifteen years. It is important to note that although many of the numbers stay static, most platforms are either replaced or upgraded over that period.

**Table 3: Key Force Structure Elements under *Current Plans***

Current Force 2003	Future Force circa 2015+
<b>Sea</b>	<b>Sea</b>
6 FFG Frigates	3 Air Warfare Destroyers
5 ANZAC Frigates	3 FFG Frigates
6 Submarines	8 ANZAC Frigates
3 Amphibious Ships	6 Submarines
2 Support Ships	3 Amphibious Ships
15 Patrol Boats	2 Support Ships
4 Coastal Mine Hunters	12 Patrol Boats
6 Hydrographic Vessels	4 Coastal Mine Hunters
16 Seahawk Helicopters	6 Hydrographic Vessels
7 Sea King Helicopters	16 Seahawk Helicopters
<b>Land</b>	11 Seasprite Helicopters
1 Armoured Regiment (tanks)	7 Sea King Helicopters
2 Cavalry Regiments	<b>Land</b>
3 Artillery Regiments	1 Armoured Regiment (tanks)
1 Mechanised Infantry Battalion	2 Cavalry Regiments
3 Infantry Battalions	3 Artillery Regiments
1 Parachute Battalion	1 Mechanised Infantry Battalion
1 Commando Battalion	3 Infantry Battalions
1 SAS Regiment	1 Parachute Battalion
36 Black Hawk Helicopters	1 Commando Battalion
25 Iroquois Helicopters	1 SAS Regiment
6 Chinook Helicopters	36 Black Hawk Helicopters
1 Air Defence Regiment	25 Iroquois Helicopters
Deployable Combat Support	12 Trooplift Helicopters
Deployable Land Logistics	24 Armed Recon Helicopters
<b>Air</b>	6 Chinook Helicopters
71 F-18 Fighter a/c	1 Air Defence Regiment
28 F-111 Strike Reconnaissance a/c	Deployable Combat Support
33 Hawk Lead in Fighter a/c	Deployable Land Logistics
22 Orion Maritime Patrol a/c	<b>Air</b>
24 C-130 Hercules Transport a/c	100 JSF (F-35) a/c
14 Caribou a/c	33 Hawk Lead in Fighter a/c
3 B707 Air-to-Air Refuellers	22 Orion Maritime Patrol or replacement a/c
1 B707 Transport Aircraft	24 C-130 Hercules Transport a/c
JORN & 2 Tactical Radar	14 Caribou Replacement a/c
Deployable Combat Support	4-5 Air-to-Air Refuellers
<b>Command, Control Communications &amp; Intelligence (C3I)</b>	4 AEW&C
HQ Australian Theatre & Attachments	JORN & 4 Tactical Radar
Defence Intelligence Org.	Deployable Combat Support
Defence Signals Directorate	<b>Command, Control Communications &amp; Intelligence (C3I)</b>
Defence Imagery and Geospatial Org.	HQ Australian Theatre & Attachments
Extensive C3I Infrastructure	Defence Intelligence Org.
<b>Personnel</b>	Defence Signals Directorate
Navy: 13,000	Defence Imagery and Geospatial Org.
Army: 25,941	Extensive C3I Infrastructure
Air Force: 13,400	<b>Personnel</b>
<b>Permanent ADF: 52,314</b>	Navy: 13,834
Reserve ADF: 20,445	Army: 26,564
	Air Force: 13,555
	<b>Permanent ADF: 53,953</b>
	Reserve ADF: 20,445

Note: a/c means aircraft

Briefly, under current plans the Government plans to upgrade all the major combatants in the Navy's surface fleet, especially to improve their capacity to defend themselves against missile attack, and to introduce a new class of Air Warfare Destroyers which would be larger and more capable than any of the RAN's current major surface combatants. It plans evolutionary upgrades to the Collins class submarines which will keep them at the forefront of submarine capability in our wider region, and the acquisition of new support tankers. Amphibious capabilities would be enhanced by the replacement of older ships with new, much larger ones.

For Army, the Government's current plans include new helicopter gunships (armed reconnaissance helicopters)—already ordered—more transport helicopters, new tanks and artillery, a light armoured mortar system, more light armoured vehicles and upgrades for the M113 armoured personnel carriers, as well as enhanced logistics and communications equipment, and trucks. Personnel numbers grow somewhat to accommodate these new systems, but overall the number of key combat units remains at the levels of 2000.

For Air Force, the DCP initially provides substantial upgrades for the F-18 fleet to improve weapons, sensors and self-protection, and to keep them airworthy. It also provides four new AEW&C (although the contract has an option for up to seven) and up to five air-to-air refuelling aircraft to replace the old B707s. With these upgrades and support capabilities the F-18 will remain among the most capable aircraft in the wider region until they are phased out in 2012–15. At that time the DCP provides for them to be replaced by up to 100 of the US F-35 Joint Strike Fighters (JSF). The F-111s were to be upgraded and provided with new stand-off weapons before retiring between 2015 and 2020, but the Government has recently decided to withdraw them in 2010.

### **What it could do**

The broad effect of the Government's current capability development plans is to keep pace with long-term capability developments elsewhere in the region, to ensure that the current levels of the ADF's capabilities are maintained relative to other regional forces. Taken together with the post East Timor expansion of the Army, it also aims to enhance the ADF's capability to deploy and support forces especially in operations in our immediate neighbourhood.

The early introduction of the Joint Strike Fighters in these numbers would ensure that the RAAF retains one of the most potent air combat capabilities in the wider region, able to operate with confidence against any potential regional adversary. It would also ensure that we retain the capability to sustain a significant strike campaign against targets within a wide range of Australia, and against targets throughout the region from bases overseas.

Our naval forces would remain at the forefront of regional capabilities in key areas, especially submarine and air-warfare capabilities. Our Army

would be more than capable of dealing with a range of short-term emergencies in the region even if opposed, but its relatively small size would still be an important limitation. It could contribute effectively to coalition operations in any environment.

## The early introduction of the Joint Strike Fighters in these numbers would ensure that the RAAF retains one of the most potent air combat capabilities in the wider region...

Of course, problems remain in relation to all three services. For example, some would argue that Army remains under-strength to meet the Government's objectives, especially in support and logistics areas—even with the additional personnel provided after East Timor and to operate new capabilities. And the relatively small number of platforms such as Air Warfare Destroyers, AEW&C aircraft and air-to-air refuellers limits the capacity of the force to operate in several places at once, and risks severe degradation of capability if we were to take losses in combat.

Nonetheless the Government's current plans as set out in the DCP provide the basis to maintain the range of options available to the Government under the present force well into the future. Recent adjustments to the plan, while reducing capability in some areas, enhance it in others. For example, the two larger replacement amphibious ships will allow the transport of a full battalion and the helicopter insertion of a company of infantry to the shore in a single lift.

For contributions to global coalitions in high level conflicts, Option Three broadly maintains the capacities and limits of the current force: we would be able to offer a wide range of niche capabilities, and could make more substantial contributions from our higher-level air and naval forces. However, the recently announced replacement tank will provide a basic combined arms capability once currently planned upgrades in the DCP are concluded.

For contributions to global peace operations, Option Three offers enhancements over the current force because the Navy's surface fleet expands and adds an air warfare capability, but otherwise the limits imposed by the size of Army on extended large scale deployments beyond our own neighbourhood would remain.

Option Three would sustain the current capability to operate within our own region, both against local forces and against those of major powers deployed in our neighbourhood. The enhancement of air and naval

capabilities would maintain and perhaps even extend our present position as the pre-eminent maritime power in our part of the world. Again, the size of our land forces would limit the scope for major land operations. The goal of being able to deploy and sustain a brigade on operations in our neighbourhood and retain a battalion group in reserve for short notice operations would remain a stretch, dependent on improvements in logistics and troop numbers.

Current plans would sustain the ADF's ability to help protect Australia from non-military threats, though the recent decision to reduce the number of frigates would somewhat erode the capacity for border protection and related tasks. The cut in patrol boat numbers from fifteen to twelve should be offset by the individual vessels being able to spend more days at sea per annum.

## The enhancement of air and naval capabilities would maintain and perhaps even extend our present position as the pre-eminent maritime power in our part of the world.

Finally, Option Three would maintain the ADF's capacity to mount an essentially maritime defence of Australia's own territory from direct attack. The substantial upgrades to our air and naval forces would ensure that we maintained the capacity to find and stop any significant hostile forces in our maritime approaches, even against the most capable forces in the wider region over the next couple of decades. And our Army should remain capable of defeating the relatively small-scale hostile land forces that might be landed and sustained in the face of our maritime defence.

### **What it means**

The Government's current plan for the development of the ADF is essentially conservative. Few major new types of capability are being introduced; by and large existing capabilities are being replaced or upgraded to keep them current and to match the trends in capability development elsewhere in the region. Under Option Three, Australia remains a substantial maritime power in the Asia Pacific, with a high level of confidence that it can defend its own maritime approaches, and respond effectively to any intrusion of hostile forces into our immediate neighbourhood. We would have the capacity to offer substantial air, special or naval forces to global or regional coalitions in higher-level conflicts, even against quite capable adversaries. We would have the capacity to undertake and lead modest land operations in our immediate neighbourhood, and to contribute to global or regional peace operations further afield. Nonetheless our land force capabilities would remain limited by their size and weight to relatively small-scale operations.



## OPTION FOUR—STEPPING UP

Option Four aims to address the weaknesses in Option Three by outlining an expanded force that would deepen Australia's current range of capabilities significantly. Option Three's small army imposes clear constraints on our strategic choices, and the small numbers of some key types of ships and aircraft mean that Australia could not deploy substantial forces for coalition operations beyond our neighbourhood and retain forces for major operations in defence of our own territory at the same time. Option Three also makes no provision for ballistic missile defence, which under some circumstances could become important.

### What it costs

Option Four would see defence spending rise to \$20.3 billion in the year 2010–11 (as measured in 2003–04 dollars), \$3.6 billion above the level now planned for 2010–11. This would require a real rate of growth of 4.0% per annum over the rest of the decade. Beyond this it would level out and probably decline a little as the hump in the capital investment program declined. In fiscal terms, \$3.6 billion dollars would be an embarrassingly large deficit although it only translates to a \$7 per week tax increase per capita. As a percentage of GDP, defence spending would still only account for 2.1% in 2010–11 on current GDP growth estimates, and the ADF would grow in strength to around 61,500. On past experience with recruitment and retention in the ADF, gaining and maintaining so many additional personnel would not be easy.

### What it's got

Option Four builds on the Government's current plans in three main ways.

First, it increases our ability to deploy and sustain land forces by adding the program to expand and harden the Army that was set out in Option Two, providing an increase from six to nine battalions, and the addition of a TBMD capability. By itself this would be a valuable addition to Australia's current defence plans. It would retain all the capabilities that the 2000 White Paper had for defending Australia, and it would provide a much-enhanced ability to provide ground forces to coalition or other operations.

**As a general rule it's more cost effective to expand an existing capability than introduce a new one.**

But Option Four also adds to air and maritime capabilities. This is accomplished not by adding entirely new capabilities, but by increasing the number of platforms in high pay-off areas. As a general rule it's more cost effective to expand an existing capability than introduce a new one. The additional air and maritime enhancements come in two packages.

First, it expands and enhances Navy's air warfare capability. Current plans are to acquire three Air Warfare Destroyers next decade. Option Four would accelerate this plan, and increase the number of Air Warfare Destroyers to six. At the same time it would increase the capability of the new vessels to include a Ballistic Missile Defence (BMD) capability. To accelerate the acquisition we would probably have to acquire the vessels from the US either as part of a new construction run (for example, the DDG-51 Arleigh Burke Destroyer) or by purchasing and upgrading second-hand vessels (like the CG-47 Ticonderoga Cruisers).

Second, Option Four boosts air combat and strike capability by buying more air-to-air refuellers and AEW&C aircraft. Under current plans we will probably buy four of each of these types of aircraft. The easiest way to boost our air combat and strike capability is to increase the number of these 'force multiplier' platforms. As it stands, the ratio of these platforms to combat aircraft is roughly half that which could be fully utilised. So buying more of them would be a very cost-effective way to enhance our capability. It would enable us to operate in more dispersed areas, and it would also help make our capability more robust in the face of battle losses of these high-value platforms.

## For a relatively moderate increase in spending, Option Four offers quite substantial increases in capability, and significant additional strategic options to government.

Finally, Option Four provides for extra money to be spent on the command, communications and intelligence capabilities of the ADF. And we've added a substantial wedge of funding for enhanced logistics and munitions stocks to improve the sustainability of the force.

### **What it can do**

For a relatively moderate increase in spending, Option Four offers quite substantial increases in capability, and significant additional strategic options to government. It offers a higher level of concurrency and sustainability for many tasks, and enhances the robustness of our capabilities.

The expanded and hardened Army would give us all the additional land options outlined under Option Two, but with the added advantage of being able to more confidently deploy and protect those land forces with air and naval capability.

A fleet of six BMD capable Air Warfare Destroyers would increase our maritime capability in our own region, and significantly expand our ability to make a substantive contribution to US naval task groups in high-level conflicts. It would allow the Government to deploy such ships to distant conflicts while still retaining some closer to home in case they are needed.

The addition of two extra AEW&C and air-to-air refueller aircraft would also give us more flexibility to provide niche contributions to coalition operations further afield. We could contribute one or two of each aircraft type (with or without fighter/strike aircraft) while retaining a core capability at home.

### **What it means**

Option Four would constitute a substantial expansion of Australia's military capabilities both for independent operations close to home and for global and regional coalition operations. It would enhance our standing as a regional power and as a US ally, and enhance our ability to defend our continent. But it would not amount to a qualitative change to our strategic posture. We would remain a capable middle power with substantial air and naval forces, and small but high-quality land forces. We would be able to operate independently in our own near neighbourhood against any credible conventional adversary, and make a modest but valuable contribution to coalitions in the wider region or beyond. But our ability to influence events on the ground even in our immediate neighbourhood would remain very limited due to the relative size of our forces, and our ability to project power beyond our own neighbourhood would likewise remain limited.

## **OPTION FIVE—THINKING BIG**

The additional capabilities that Option Four added to our current defence plans would strengthen our current strategic position, but they would not offer us a new kind of strategic power, or move us to a new level of strategic reach. To do that, it is necessary to spend significantly more. Option Five outlines how we might do that with the explicit goal of being able to project power through a larger Army, an Air Force with longer reach, and a Navy that can project air power to where it's needed.

### **What it costs**

Option Five would see defence spending rise to \$24.9 billion in 2010–11 (as measured in today's dollars), \$8.2 billion above the levels now planned for 2010–11. This would require a real rate of growth of 7.1% per annum. A \$8.2 billion increase is serious money and requires a growth rate that is high by recent standards, but small compared with that routinely achieved by other nations like China which has boosted its spending by more than 14% for five years in a row. It is also less than half the real rate of growth in defence spending Australia achieved in the 1960s where spending more than doubled over five years. Option Five would add only around 4% to Commonwealth spending overall. This is by no means a political impossibility, provided a clear rationale could be provided and sustained through the economic cycle.

As a percentage of GDP, defence spending would only reach 2.5% in 2010–11. The ADF would grow in strength from 54,000 under current plans to around 68,600. As before, such a large increase in numbers could strain the ability of Defence to recruit and retain sufficient personnel.

### What it's got

Option Five builds on the additional capabilities already added under Option Four. Those capabilities fully consolidate our capacity to defend the maritime approaches to the continent. So Option Five focuses on ways to improve our ability to project force into the region and beyond.

First, Option Five acquires an aircraft carrier capability. We would buy two small 30,000–40,000 tonne carriers, capable of carrying helicopters and fixed-wing aircraft. Twenty additional Joint Strike Fighters would be bought in the variant capable of operating off carriers. These ships would be somewhat smaller than the new British carriers, but comparable to those operated by other European nations. An additional tanker/supply ship has been added to support them.

Second, Option Five builds on Option Four's enhancements of Army by creating a second brigade strength mechanised operations capability which would double the maximum size of a contribution we could make to a ground war requiring a combined arms capability, and it would increase our ability to sustain a mechanised brigade on deployment for long periods.

## ...creating a second brigade strength mechanised operations capability would double the maximum size of a contribution we could make to a ground war requiring a combined arms capability...

With an expanded Army we would need more air mobility on the battlefield so we've added another twenty-four troop-lift helicopters to the force structure. In practice, this might become a mixture of marinised troop-lift and special forces helicopters, or more helicopter gunships.

Option Five also adds a fleet of six strategic lift aircraft to provide the ability to deploy and sustain these larger forces on operations.

Finally, Option Five provides still further money to be spent on the command, communications and intelligence capabilities of the ADF above those in Option Four. And we've added an even more substantial wedge of funding for enhanced logistics and munitions stocks to improve the sustainability of the force.

**What it can do**

Option Five offers significant new choices to government in the way it could use the ADF. First, aircraft carriers would provide a substantial power projection capability. The ability to operate fixed-wing aircraft at sea would enhance the ability of our surface fleet to operate beyond the range of land-based aircraft support, and strengthen our ability to undertake amphibious operations against more capable forces. On the other hand, the carriers would require protection themselves, and their use would be constrained by their vulnerability especially to submarine attack.

The expanded Army and strategic lift provided under Option Five would increase the scale, concurrency and sustainability of land force deployments. It would provide added assurance of our ability to meet any land threat on our own continent, expand the scale of adversary we could defeat on land in our own neighbourhood, and enable us to make bigger contributions to global coalition operations for high-level conflicts.

It would also provide a much wider range of options to meet concurrent demands for operations in different places, and expand our ability to use the ADF in a wide range of circumstances to maintain stability in our immediate neighbourhood.

...it moves the focus away from niche capabilities to global coalitions towards the ability to make substantive contributions to major land campaigns against capable adversaries.

**What it means**

Option Five offers Australia a qualitatively different range of strategic choices from those provided by our current plans or by the enhancements envisaged under Option Four. This option moves the focus of our force planning away from a capacity to dominate our extended maritime approaches towards a substantial capability for power projection beyond those approaches. It moves the focus away from the ability to undertake relatively low-level land operations in our immediate neighbourhood towards a capacity for sustained higher-level amphibious operations. And it moves the focus away from niche capabilities to global coalitions towards the ability to make substantive contributions to major land campaigns against capable adversaries.

Under Option Five, therefore, Australia's standing as a regional power and as a US ally would be significantly enhanced.

## CHAPTER

## 4

## Thinking about the choices

Sometimes defence policy issues are presented and debated as if there are no real choices to be made: the Government has no option but to identify the forces needed to defend the country and provide whatever money is needed to pay for them. But that is not how it is. Defence policy choices, like all public policy choices, involve a complex balancing of the costs and benefits of different options. In thinking about the options presented in this paper, the following issues are worth bearing in mind.

- Can we sustain the cost? It is bad strategy to adopt a strategic policy whose cost cannot be sustained over the long term. The strategic policy cycle is longer than the economic cycle, so it is important to build a strategy that will be affordable, or at least sustainable, during economic downturns and periods of fiscal stringency. That argues for keeping our objectives modest: better a modest policy that works and lasts than a more ambitious one that fails when the money runs out. As a point of practical politics, the scope for substantial and sustained redirection of government funds to Defence from other expenditure areas is very low in a country like Australia, and will become lower as the population ages. So those who argue for bigger defence budgets must also be prepared to argue for a bigger tax take.
- How highly do we rate the risk of armed attack on Australia over the longer term? If we think the risk is very low, we should opt for lower-cost options, or move the emphasis from options for defending our own territory towards options to contribute to coalition operations. But just how low does that risk have to be before we would be comfortable taking one or other of these directions? And how sure are we that unexpected threats could not arise quickly?



Australian Army soldiers in a Chinook helicopter on operation in the Middle East, April 2003 © Defence Dept.

- How much do we need to be able to do to support strategic interests beyond our own region? Clearly Australia's security is closely connected to developments in many parts of the world. How big a part do we need to be able to play in cooperative efforts to protect them?
- Has the threat of conventional war between states reduced significantly? Are non-state threats now more important to our security? If so, should we still place so much emphasis on conventional armed forces, or should we put more of our effort into other policy instruments such as police forces?
- How much is it right to depend on the US for our security, and how much do we need to be prepared to do in return?

**...better a modest policy that works and lasts than a more ambitious one that fails when the money runs out.**

Finally, in all strategic policymaking, it is wise to maintain an intelligent pessimism. Lurid and implausible worst-case scenarios should not dominate our thinking, but it is important to bear in mind that strategic policy choices last a long time, and that large and unexpected changes happen surprisingly often. A strategic policy that cannot encompass inherently improbable events is likely to prove inadequate.

## ANNEX



## Counting the cost

The purpose of this annex is to explore the various metrics used to measure and compare defence spending, and to explain what they do and don't tell us. Accordingly, the focus is on the methodology of measuring defence spending.

To support the discussion, a comprehensive set of Australian defence spending statistics from 1901 to the present has been included at the end of this annex along with planned figures out to 2010. This includes nominal and real defence spending, GDP share, and percentage of Commonwealth outlays. This annex also includes comparative defence spending for Australia and selected Asia Pacific nations over the last decade.

### Counting the dollars

The most straightforward way to measure defence spending is to count the dollars. Unfortunately, the complex accounting schemes used by the Government yield a number of different values for defence spending even within a single year. The revenues Defence gets from the sale of assets and services further complicate this. In ASPI's annual *Cost of Defence* budget brief, we devote a lot of effort to disentangling these various factors. For the purposes of this report we will limit our discussion to the actual budget appropriation received by Defence because it adequately captures the broad scale of funding and makes it easier to compare with historical data.

Even then some care must be taken. Inflation changes the value of money from year to year so that historical comparisons become difficult. The usual way around this is to convert all the dollar values to those of a single year using a measure of the relative buying power of the dollar over





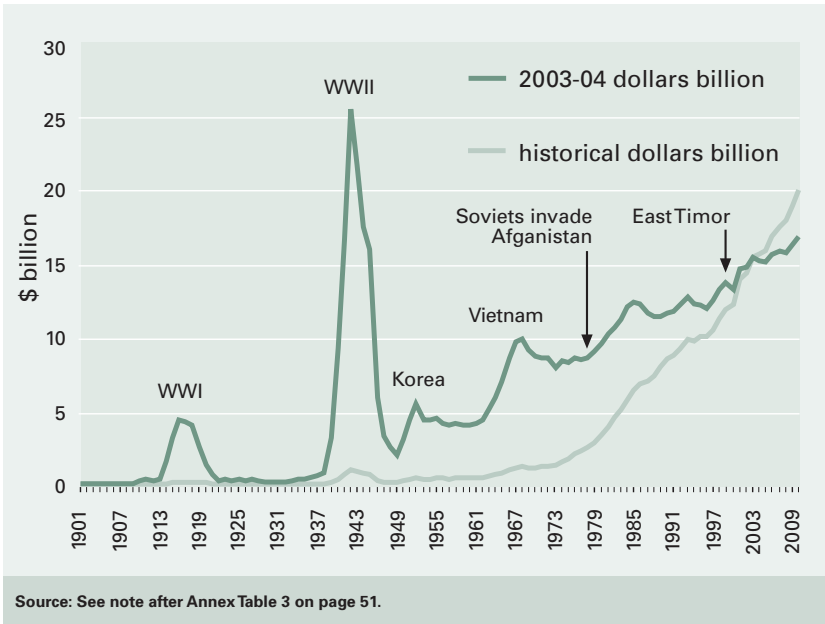
An F-18 fighter pilot checks behind during his preparations for operations in the Middle East in 2003 © Defence Dept.

time—usually the Consumer Price Index (CPI). This allows a comparison to be made in so-called ‘real terms’. Annex Figure 1 shows Australia’s real defence spending since Federation in terms of 2003–04 dollars along with the historical dollar amount. The two plots cross over in 2003–04 because that’s the point where real and historical dollars are of equal value.

## The problem is that Defence is not your average consumer.

But even this sort of comparison has limitations. The CPI measures the relative buying power of the dollar based on a basket of retail goods and services that are representative of the buying patterns of an Australian consumer. So a comparison of historical defence spending in real terms shows how much buying power in terms of consumer spending has been allocated to Defence. In a sense, this measures the opportunity cost of what might have been acquired by a consumer had the money stayed in his or her pocket.

The problem is that Defence is not your average consumer. The changing buying power of the dollar relative to the basket of goods and services consumed by Defence is very different from that represented by the CPI. For example, historical studies have shown that the price of new military equipment has consistently risen faster than inflation, as have wages and salaries which make up around 40% of the Defence budget.

**Annex Figure 1: Historical and Real Defence Spending 1901–2010.**

The compounding of small differences between the rising cost of defence inputs (personnel, equipment and maintenance) and the CPI can significantly skew comparisons over long time periods. For example, consider the paradoxical situation in Annex Figure 1 which implies that the real cost of maintaining the current force is on the same scale as that during WWII when around a million Australians were under arms. This clearly demonstrates the danger of comparing real defence spending over anything more than short time periods.

What's needed is a 'defence deflator' or 'defence price index' that takes proper account of the changing price of the inputs purchased by Defence. On the basis of what we have seen, this would almost certainly grow more quickly than the CPI. Curiously, within the annual budget process Defence's non-personnel funding is indexed by the implicit non-farm GDP deflator that tends to grow more slowly than the CPI. It's possible that inadequate indexation of the defence budget contributes to the seemingly inevitable periodic defence budget crises.

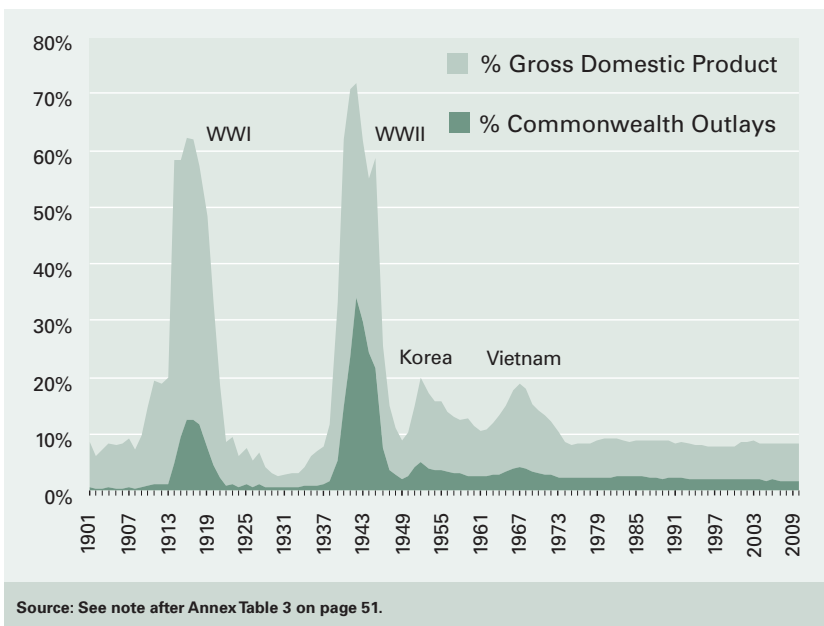
### Counting the economic burden

Perhaps the most common way to express defence spending is as a percentage of GDP. Annex Figure 2 shows Australia's Defence appropriations as a percentage of GDP from 1901 through to 2010—the latest year for which estimates are available. As an absolute measure of defence spending GDP share is a very poor choice because it is equally sensitive to changes in the size of the economy. For example, Defence's GDP share has dropped steadily since the mid-1980s because the average annual growth in GDP has outstripped the growth in Defence spending by around 1.3% per annum.

It makes no sense to lament a reduction in the GDP share if the drop comes about because economic growth happens to outpace increases to the defence budget, just as it has in recent years in Australia. Similarly, a prolonged recession that saw the defence GDP share rise while spending remained static would not be a sign that the nation was better defended.

Ultimately, GDP share is at best a measure of the affordability, rather than the adequacy, of defence spending. Any nation that devotes too great a share of its national wealth on defence is unavoidably diverting money from investment in the infrastructure needed for future economic growth. For nations like North Korea this has had dire consequences.

**Annex Figure 2: Defence Appropriations as a Percentage of Commonwealth Sector Outlays and GDP 1901–2010.**



### Counting the fiscal burden

Currently, Defence accounts for 8.4% of the money that the Government spends each year. The historical share of Commonwealth outlays received by Defence is charted in Annex Figure 2 from 1901 onwards (years beyond 2006 are extrapolated).

Measuring defence spending as a percentage of overall government outlays suffers from the same shortcoming as GDP share: it is a relative measure. As such, it can go up or down, even if defence appropriations remain static, provided that spending in another area changes. The real fiscal question boils down to how much pressure there is to limit defence spending in the face of competing spending priorities and projected government revenues. The percentage of outlays allocated to Defence tells us nothing of the sort.

In the longer term, the fiscal burden of maintaining defence will become more challenging as Australia's ageing population pushes up spending on health and welfare at the same time as the growth in government revenues slows. This emerging 'fiscal gap' was highlighted in Treasury's 2002 *Intergenerational Report*.

### Keeping up with the Joneses

So far we've surveyed the various measures used to quantify defence spending and uncovered a number of complications that limit the usefulness of any single one. When it comes to comparing with another nation's defence spending things get even more difficult. Annex Table 1 lists defence spending for nineteen different nations for the year 2002 as estimated by the International Institute of Strategic Studies. To aid comparison, the defence budgets have all been converted into US dollars. However, this does not in general guarantee an apples with apples comparison because the prevailing exchange rate will not always accurately reflect the relative purchasing power of the currencies.

**Annex Table 1: Selected International Defence Spending 2002.**

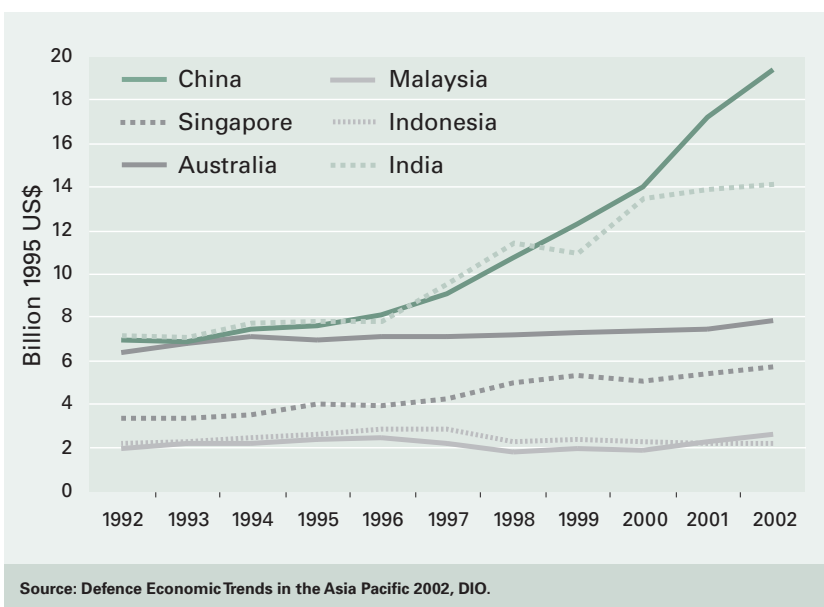
	% GDP	Defence Spending US 2000 \$ m
Australia	2.0	7,549
China	4.1	48,380
France	2.5	38,005
India	2.7	13,073
Indonesia	3.7	6,245
Japan	1.0	37,070
Malaysia	3.6	3,260
North Korea	25	4,728
New Zealand	1.2	630
Pakistan	3.9	2,541
Russia	4.8	48,040
South Korea	2.8	12,615
Vietnam	7.1	2,286
Philippines	2.1	1,511
Singapore	5.2	4,334
Taiwan	2.7	7,479
Thailand	1.5	1,730
United Kingdom	2.4	35,249
United States	3.3	329,616

Source: International Institute Strategic Studies, *The Military Balance 2003/2004*

Notwithstanding the problem of relative purchasing power, it is still possible to compare the relative trends in defence spending between nations over time. A sophisticated approach to this problem has been developed by the Defence Intelligence Organisation (DIO) in its annual *Defence Economic Trends in the Asia Pacific*. DIO use Proxy Defence Deflators (PDD) to compensate for the changing cost of various components of defence expenditure within a country on the basis of historical budgetary data and macroeconomic statistics (Annex Table 2). The strength of this methodology is that it more accurately reflects trends over time within a nation. Its shortcoming is that it still does not account for the relative purchasing power of different currencies. Annex Figure 3 charts PDD adjusted defence spending over the last decade for selected countries. What's most startling is the very strong growth in the defence spending of both China and India compared with our own.

But even if the technical problem of exchange rates and relative buying power can be overcome, comparing the absolute levels of defence spending between two nations ignores what is trying to be achieved. Consider Singapore and Australia. In raw dollar terms we spend about 74% more than Singapore. But the island city state of Singapore has the job of defending an area of less than 1/10,000 that of Australia. On the other hand their prospective adversaries are much closer and their geography has fewer natural defences. Thus, their task is of an entirely different scale and character from ours. Moreover, in terms of buying power, they have the advantage of a conscripted armed force that is very much cheaper to maintain than our well paid volunteers. To compare national defence spending out of the context of these sorts of factors can be very misleading.

**Annex Figure 3: Selected Regional Spending (PDD adjusted)**



The comparison of GDP share between two nations is less problematic. For any nation, the GDP share allocated to defence gives a rough measure of their economic capacity to devote more resources to the task without skewing their economy. Nevertheless, structural differences between different national economies can cloud this picture.

### Counting what really counts

All of the measures of defence spending we have discussed so far tell us something about the economic or fiscal scale of defence spending. And with some manageable limitations they can be used to compare defence spending from one point in time to another, and with some care, even between different nations. This is fine, so long as it is kept in mind that all these measures of defence spending are simply that—measures of defence spending and not of military capability. Unfortunately, it is sometimes asserted that a particular level of GDP share or dollar value is, in and of itself, an absolute measure of whether defence spending is adequate or otherwise. In particular, the frequent claim that Australia's defence spending is inadequate *because* it represents a smaller proportion of GDP than it did in the past, or compared with another nation, adds very little to the debate. Whether we are spending too little or too much on defence has nothing to do with GDP share.

...the frequent claim that Australia's defence spending is inadequate because it represents a smaller proportion of GDP than it did in the past, or compared with another nation, adds very little to the debate.

What really matter are the capabilities you get for the money and the military tasks that those capabilities can achieve. No set of accounting and economic figures can possibly capture all that.

Annex Table 2: Official Defence Budgets as measured in 1995 US\$

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Australia	6.4	6.8	7.1	7	7.1	7.1	7.2	7.3	7.4	7.5	7.9
Canada	8.4	8.3	8.4	7.8	7.1	6	6.1	6	6.6	6.2	6.5
China	7	6.9	7.5	7.6	8.1	9.1	10.7	12.3	14	16.4	19.3
India	7.2	7.1	7.8	7.9	7.9	9.6	11.5	11	13.5	13.9	14.2
Indonesia	2.2	2.3	2.5	2.6	2.9	2.9	2.3	2.4	2.3	2.2	2.2
Japan	49.8	50.8	50.7	50.3	51	51.2	51.9	51.9	51.4	52	53.5
Malaysia	2	2.2	2.2	2.4	2.5	2.2	1.8	2	1.9	2.3	2.6
New Zealand	0.78	0.71	0.69	0.66	0.65	0.63	0.66	0.65	0.66	0.67	0.67
Pakistan	3.9	3.6	3.7	3.8	3.7	3.5	3.4	3.4	2.9	2.7	3
Philippines	0.8	0.9	1	1.1	1.1	1	0.9	0.9	1.2	1.2	1.4
Singapore	3.4	3.4	3.5	4	3.9	4.3	5	5.3	5.1	5.4	5.7
South Korea	14.4	15	14.7	14.4	15.6	16.3	16.4	15.2	14.9	15.8	16.1
Taiwan	9.9	12.3	11.7	10.9	11.2	11.1	11.1	12.2	10.7	9.3	9.3
Thailand	3.4	3.4	3.7	3.8	3.9	3.6	2.9	2.6	2.7	2.6	2.7
United States	314.5	279.8	262.8	255.7	246.6	240.9	234.6	248	249	264.9	277
Vietnam	1.2	1	1.6	1.4	1.9	2	1.6	1.7	2.1	2.2	2.6

Source: *Defence Economic Trends in the Asia Pacific 2002*, Defence Intelligence Organisation, Department of Defence.

**Annex Table 3: Actual and Projected Defence Appropriations 1901–2010**

Year	Historical \$ million	2003–04 \$million	% GDP	% Outlays	Year	Historical \$ million	2003–04 \$million	% GDP	% Outlays
1901	1.9	100	0.4	8.4	1956	377	4,243	3.2	13.8
1902	1.5	74	0.4	6.2	1957	370	4,102	3.1	13
1903	1.7	86	0.4	7.3	1958	379	4,163	2.9	12.5
1904	1.9	102	0.4	8.3	1959	387	4,131	2.6	12.8
1905	1.9	98	0.4	8	1960	396	4,078	2.5	11.5
1906	2.1	108	0.4	8.2	1961	406	4,150	2.5	10.7
1907	2.7	139	0.5	9	1962	428	4,373	2.4	10.7
1908	2.1	102	0.4	7.3	1963	515	5,190	2.6	11.9
1909	3.1	150	0.5	9.7	1964	602	5,861	2.8	12.9
1910	6.0	285	0.9	14.7	1965	740	6,971	3.3	14.1
1911	8.2	382	1.1	19.3	1966	942	8,644	3.8	16.2
1912	8.7	364	1.1	18.8	1967	1,100	9,717	4.1	17.1
1913	9.5	398	1.1	19.9	1968	1,153	9,943	3.8	16.6
1914	38.5	1,560	4.6	58.3	1969	1,088	9,113	3.2	14.2
1915	92.1	3,247	9.5	58.1	1970	1,089	8,717	2.9	13.5
1916	127.8	4,443	12.5	62.1	1971	1,155	8,622	2.8	12.8
1917	131.7	4,335	12.4	61.8	1972	1,222	8,632	2.6	12.1
1918	132.8	4,099	11.6	57.1	1973	1,270	7,922	2.3	10.4
1919	94.0	2,550	7.5	48.2	1974	1,558	8,346	2.3	8.7
1920	59.4	1,425	4.3	33.2	1975	1,750	8,294	2.2	8
1921	28.9	794	2.1	18.5	1976	2,064	8,594	2.3	8.5
1922	12.1	343	0.8	8.6	1977	2,241	8,517	2.3	8.4
1923	15.7	435	1.0	9.4	1978	2,456	8,628	2.2	8.4
1924	10.5	295	0.6	6	1979	2,840	9,051	2.2	8.9
1925	16.3	457	1.0	7.5	1980	3,293	9,603	2.3	9.2
1926	11.4	313	0.7	5.2	1981	3,890	10,263	2.3	9.4
1927	17.1	474	1.0	6.7	1982	4,503	10,652	2.5	9.1
1928	10.5	291	0.6	4.2	1983	5,057	11,207	2.5	8.8
1929	9.5	258	0.6	2.9	1984	5,657	12,019	2.5	8.7
1930	8.0	227	0.6	2.4	1985	6,334	12,414	2.5	8.9
1931	6.9	218	0.6	2.9	1986	6,822	12,223	2.5	9
1932	6.9	230	0.5	2.9	1987	6,966	11,628	2.2	8.8
1933	8.2	285	0.6	2.9	1988	7,294	11,347	2.1	8.8
1934	11.4	386	0.8	4.2	1989	7,914	11,401	2.1	9
1935	14.4	480	0.9	6.1	1990	8,481	11,602	2.1	8.8
1936	16	527	0.9	6.9	1991	8,732	11,723	2.1	8.5
1937	20	620	1.1	7.9	1992	9,158	12,170	2.1	8.9
1938	29	889	1.5	11.5	1993	9,746	12,717	2.0	8.5
1939	109	3,279	5.3	33	1994	9,731	12,307	2.1	8
1940	319	9,266	14.7	61.7	1995	10,011	12,149	2.0	7.9
1941	597	16,557	23.4	70.6	1996	9,999	11,973	1.9	7.8
1942	999	25,424	34.0	71.6	1997	10,415	12,477	1.8	7.7
1943	886	21,662	29.7	61.6	1998	11,183	13,226	1.9	7.9
1944	705	17,400	24.2	54.8	1999	11,808	13,641	1.9	7.7
1945	644	15,908	21.4	58.5	2000	12,142	13,231	1.8	7.8
1946	243	5,887	7.5	25.3	2001	13,847	14,667	1.9	8.5
1947	143	3,336	3.6	15	2002	14,307	14,700	1.9	8.4
1948	122	2,577	2.7	10.9	2003	15,418	15,418	1.9	8.7
1949	109	2,084	2.0	8.7	2004	15,595	15,215	1.9	8.4
1950	182	3,084	2.6	10.2	2005	15,848	15,084	1.8	8.2
1951	319	4,417	4.2	14.9	2006	16,808	15,608	1.8	8.4
1952	431	5,489	5.0	19.9	2007	17,400	15,763	1.8	8.4
1953	356	4,415	3.8	17.2	2008	17,800	15,733	1.7	8.4
1954	355	4,372	3.5	15.7	2009	18,800	16,211	1.7	8.4
1955	381	4,541	3.5	15.8	2010	19,900	16,741	1.7	8.4



## Note on sources

The basic data in Annex Table 3 has been taken from the Australian Bureau of Statistics (ABS) *Year Book Australia 2001*, 'Special Article—Defence expenditure over the century'. However, that data has been adjusted for the period 1914–1923 to remove inconsistency between quoted Defence outlays and GDP share using 'Special Article—History of national accounts in Australia', also from the ABS *Year Book Australia 2001*. A similar adjustment has been made to the figures for GDP share and spending for the period of the Vietnam war using figures from the Defence annual reports for those years.

All real dollar amounts are expressed in 2003–04 dollars converted using the ABS *Year Book Australia 2002*, 'Prices CPI—Long-term price trends', which combines Consumer Price Indices (CPI) from the period post-1949 with earlier Retail Price Indices (RPI).

Recent and projected Defence appropriations are taken from Defence annual reports and the 2003–04 Portfolio Budget Statement.

Future CPI and Gross Domestic Product (GDP) figures come from the 2003–04 Budget Overview for 2003–04 to 2006–07, and from 2002–03 Budget Paper Number 5 for subsequent years. This assumes that the CPI and GDP deflator will be at the target rate of 2.5% for period 2007–08 to 2010–11 and that real GDP growth will be 3% for that same period.

## Acronyms and abbreviations

ADF	Australian Defence Force
AEW&C	Airborne Early Warning and Control
ANZAC	ANZAC Class Frigate
BMD	Ballistic Missile Defence
CPI	Consumer Price Index
DCP	Defence Capability Plan
DIO	Defence Intelligence Organisation
FFG	Adelaide Class Frigate
GDP	Gross Domestic Product
JSF	Joint Strike Fighter
PDD	Proxy Defence Deflator
RAN	Royal Australian Navy
RAAF	Royal Australian Air Force
TBMD	Theatre Ballistic Missile Defence
US	United States



# About ASPI

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A much reduced force in all areas which would nonetheless provide a range of options for coalition operations and a credible capacity to defend Australia's approaches over the next several years. But as regional capabilities developed our relative edge would degrade.

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This option significantly trades off our current strength in air and maritime capabilities in order to boost the size and capability of Army. Implicit in this is a greater reliance on the US in exchange for more substantial coalition contributions. We do not know what they would make of such a deal.

#### **Option Three—Current Plans (Budget in 2010–11: \$16.7b, 1.7% GDP)**

Under current plans the ADF will see most of its key capabilities replaced or upgraded over the next fifteen years. This will maintain our ability to control our maritime approaches but our land force capabilities would remain limited by their size.

#### **Option Four—Stepping Up (Budget in 2010–11: \$20.3b, 2.1% GDP)**

Option Four builds on Current Plans by building up our key sea, air and land capabilities. This will give us a greater assurance for regional operations and an enhanced capacity to contribute land forces to coalition operations.

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