REPORT

ASPI

How much information is enough?

The disclosure of defence capability planning information

Prepared by the Australian Strategic Policy Institute under contract to the Australian Department of Defence

December 2009

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Foreword

Apart from military operations, no area of Australian defence activity attracts more attention than the procurement of capability for the defence force. There are good reasons for this. Aside from the billions of taxpayer dollars involved, defence industry is a major enterprise employing around 30,000 Australians. More importantly, Australia's ability to defend itself depends on the timely and affordable delivery of arms and munitions. With so much at stake, it is not surprising that the government's plans for acquiring capability are of considerable interest to both the public and industry.

We have therefore approached the task of reviewing the disclosure of capability planning information with great care. We have consulted widely, canvassed all the relevant issues, and considered competing points of view. Having now completed the review, we are confident that our recommendations are robustly based and firmly in Australia's interest.

The review could not have been accomplished without the cooperation and assistance of a great many people. First and foremost, our thanks go to those in industry, unions, government, academe and elsewhere who gave freely of their time and expertise. Many of the ideas in this report come from those to whom we have spoken. Of course, any errors or omissions are ours alone.

Finally, thanks go to the administrative and publication staff at ASPI, without whose assistance this report could not have been completed.

Leigh Purnell Mark Thomson

24 December 2009

Executive summary

In essence, the review was asked a simple question: how much should the government disclose about its plans for equipping Australia's defence force? Our answer, set out in this report, is that there are tangible benefits to increasing the current level of disclosure, and that the risks in doing so are manageable.

In forming this view, we have looked closely at past and present disclosure of capability planning information in Australia, we have examined how other countries disclose their capability plans, and we have consulted widely with industry, unions, academe, media, defence commentators, state governments, the Department of Defence, other Australian Government departments, and individuals with extensive experience in defence procurement.

From early in our investigation, it was clear that despite a discernable decline in capability planning transparency over recent years, Australia is still more open about its capability plans than most other countries, and recent changes have expanded the avenues of communication. Our recommendations, therefore, are about strengthening the existing framework rather than creating a new one.

Any supportable policy on disclosure has to balance the benefits and risks of disclosing defence capability planning information. The case for greater disclosure is twofold. First, as a monopsony customer, the more that Defence tells the market about its plans, the more likely that its needs will be met efficiently. Second, the more that the public knows about defence planning, the more likely is an informed public discussion of those plans, and the more readily Defence can be held to account for delivering them.

The principal risks of greater disclosure are that the Commonwealth could be disadvantaged commercially, and also that Defence and ultimately the government could be unreasonably held to account for changes to plans, which are inherently volatile. Our view is that both risks can be managed by taking care with how and when information is disclosed.

At first glance, increased disclosure of capability planning information might also appear to affect Australia's national security. That is not the case. The sorts of information considered here—costs, schedules and budgets—are of no strategic consequence compared with the explicit long-term plans for Australia's defence forces already disclosed routinely in Defence White Papers.

Our detailed recommendations are given overleaf. The ten recommendations fall into four categories: increasing the range and precision of information, enhancing the flow of information between Defence and industry, improving the reliability of information, and providing more useful information about industry priorities. The rationale behind each recommendation and the detailed arguments are set out in the report. Key points about the four areas are discussed briefly below.

Increase the range and precision of information

The precision of publicly available defence capability planning information has declined steadily since a high point of the 2001 Defence Capability Plan. We recommend a return to that higher level of disclosure, including going back to a ten-year planning horizon, but with two key differences: tighter cost bands and explicit schedule milestones with acknowledged uncertainties. To further assist industry with its planning, we recommend expanding the range of information provided in the Defence Capability Plan. Specifically, for each project there should be disclosed a percentage annual spend spread, a definition of initial operating capability, and the estimated cost and duration of the in-service phase of the capability sought. Because this information is already held by Defence, no additional work is required.

At the aggregate level, the Defence Capability Plan should provide a clear picture of estimated acquisition and sustainment spending over the next decade, including both foreign and domestic expenditure. And the pressures likely to affect the affordability of the plan should be canvassed in a risk analysis, taking account of factors external and internal to Defence.

Because there are more elements to defence capability than major capital equipment, we further recommend that forward plans for the Minor Capital Equipment and Capital Facilities programs be made public, as was the case in the past.

Enhance the flow of information between Defence and industry

If information is worth disclosing, it is important to make it readily available. Defence currently does a good job in producing and distributing the public version of the Defence Capability Plan, and we support the recent decision to update the document electronically every six months. However, having seen the utility of the hard-copy version of the plan to industry, we believe that a hard-copy version should be published every one rather than every two years. Furthermore, it is clear to us that much greater use could be made of the web to provide comprehensive and up-to-date information on individual projects. More generally, the Defence Capability Plan is but one avenue of communication between Defence and industry. While several avenues of communication exist, we believe that improvement is both possible and worthwhile to the broader relationship and we have made recommendations accordingly.

Improve the reliability of information

Industry understands that capability plans are subject to ongoing review and revision, and adapts accordingly. But while it is accepted that changes will arise because of external factors, there is significant frustration with delays and deferrals due to poor planning and execution. There is also no doubt that delays and volatility in the plan add costs to industry and ultimately the taxpayer. These considerations add an imperative to the reforms stemming from the Mortimer Review of defence procurement, particularly in the areas cited by industry as a concern: accountability, delegation and commercial behaviour. We also conclude that defence capability

planning information should be used to drive performance through routine monitoring and reporting.

Provide more useful information about industry priorities

The quality of information about the government's priorities for Australian defence industry reached a peak in 2000 and then fell. Repeated attempts to correct the situation over the past nine years have lacked consistency and concrete implementation. The forthcoming Defence Industry Policy statement should be used to clarify the government's policy and to let industry know what the government wants and what it plans to do.

Recommendations

Increase the range and precision of information

Recommendation 1: Restructure the public Defence Capability Plan (DCP) to provide better information by adjusting and expanding existing information as follows:

- a ten-year time horizon based on years of decision (second pass)
- specific years for first pass, year-of-decision, initial operating capability (IOC) and full operating capability (FOC) for all projects in the plan, including the assessed uncertainty in each (this might be done through a single table giving the indicative uncertainty for each year of the plan)
- cost bands with an uncertainty of +/–10% (i.e. cost bands equal to ~20% of project value)
- a year-by-year percentage spend profile for each project
- dates for market solicitation (requests for proposals, requests for information, requests for tenders) for the first 24 months of the plan, by month for the first six months and by quarter thereafter
- a table disclosing changes to project names, numbers and phases, including those resulting from consolidating and splitting projects and phases.

Recommendation 2: Include further information in the DCP on the in-service phase of planned capabilities as follows:

- a definition of IOC for each project
- the expected life-of-type for the capability sought by each project
- the estimated annual personnel and operating costs for the capability sought by each project.

Recommendation 3: Improve the program-level information in the public DCP to provide better information on aggregate demand and overall risks as follows:

- graph in total and by industry sector
    - estimated overall sustainment spending over the next ten years
    - estimated local sustainment spending over the next ten years
    - estimated overall acquisition spending over the next ten years
    - estimated local acquisition spending over the next ten years
- an introductory chapter on the affordability of the DCP, containing
    - a graph of estimated approved and unapproved major capital spending for the decade
    - assumptions about foreign exchange for the Euro and the US dollar
    - the price basis for the plan
    - the percentage of overprogramming
    - an analysis of the risks to the affordability of the capital equipment program.

Recommendation 4: Reinstate previous disclosure of ‘Minors’ and facilities plans, specifically:

- publish every six months an electronic ‘Yellow Book’ of minor capital projects, with a two-year time horizon
- publish every six months an electronic ‘Green Book’ of capital facilities projects, with a two-year time horizon.

Enhance the flow of information between Defence and industry

Recommendation 5: Ensure the ready availability of the information in the DCP by:

- publishing a hard-copy DCP every year (pending a review in two years)
- publishing a PDF update at the intermediate six-month point
- providing an interactive web-based facility with a web-page for each DCP project containing
    - links to the latest and all previous public DCP entries (so that a baseline for tracking change is available)
    - advice on forthcoming industry solicitations
    - a link to any project website held elsewhere in the Defence Materiel Organisation (DMO) or Capability Development Group
    - links to related approved and unapproved projects
    - links to relevant ministerial and departmental media releases and speeches
    - contact details for each project.

Recommendation 6: Improve the flow of information between industry and Defence by:

- holding regular meetings of the Capability Development Advisory Forum
- creating an Infrastructure Advisory Forum to facilitate communication between the construction industry and Defence
- regularly engaging with peak bodies such as the Australian Industry Group Defence Council and the Australian Constructors Association
- appointing a representative from the Australian Industry and Defence Network to the DMO CEO consultative forum on the Strategic Reform Program so that small to medium enterprise (SME) views can be heard
- holding the two-yearly Defence+Industry conference in Canberra so that working-level capability development and DMO staff can interact with industry participants, or committing to bring those personnel to an interstate venue if the conference is held interstate
- using the successful Land Environment Working Group as an archetype for how the Maritime and Aerospace working groups can engage industry, especially in regard to linking prime contractors with SMEs.

Improve the reliability of information

Recommendation 7: Improve the timely execution of defence capability plans by:

- implementing the recommendations of the Mortimer Review as a matter of priority, particularly those concerning accountability, delegation and commercial orientation
- monitoring the in-year delivery of DCP milestones for first- and second-pass approval and major industry solicitations, and reporting the performance in the Defence annual report
- introducing a policy of continuous disclosure of revised deadlines for industry solicitation; once it is known that a milestone will slip, industry should be advised within one week.

Recommendation 8: Consider making greater use of the Rapid Prototyping Development and Evaluation Program to engage industry at the earliest possible stages of selected DCP projects to help refine options, scope and costs.

Recommendation 9: Consider adopting a system of assigning priorities to projects in the DCP.

Provide more useful information about industry priorities

Recommendation 10: The forthcoming Defence Industry Policy statement should:

- provide a comprehensive overview of the government's priorities for local defence industry across all sectors, not just the limited subset currently designated as Priority Industry Capabilities
- commit to providing a regular and more detailed disclosure to industry of Defence's long-term industry priorities, along the lines previously contained in the *Defence needs of Australian industry* publication
- include a clear implementation strategy for all policy objectives.

Chapter 1: Introduction

In May 2009, the Australian Government outlined its long-term plans for Australia's defence in the Defence White Paper, *Defending Australia in the Asia Pacific century: Force 2030*. Further details of the planned cost and timing of specific acquisitions were subsequently released in July via the latest public version of the Defence Capability Plan (DCP), *Defence Capability Plan 2009* (for simplicity, we refer to the public version of the document as 'the DCP' and Defence's classified internal version as 'the classified DCP').

The DCP advises on forthcoming opportunities and helps industry to plan investment, research and development, innovation, infrastructure, commercial partnering and workforce development. From a public perspective, the DCP discloses how the Australian Defence Force (ADF) will be developed and how billions of taxpayers' dollars will be spent. Without doubt, the DCP is the single most important source of defence capability planning information available to industry, the media, academe and the public at large—not to mention the Parliament of Australia and the men and women of our defence force.

The question naturally arises as to how much information should be disclosed in the DCP and through other official means or, conversely, how much of the government's plan for the ADF should remain secret. Broadly, this report attempts to answer that question. More particularly, it responds to the terms of reference (Annex 1) from the Minister for Defence for a review of defence capability planning information.

In a literal sense, 'capability planning' refers to a great many activities within Defence. The clear understanding, however, is that this review should concern itself with procurement projects that are pending government approval. We have interpreted this to include both specialist military equipment and facilities construction. The terms of reference also specifically refer to information about the government's priorities for local industry, and that is covered as well. Questions about the appropriate level of capability prescription in Defence White Papers have been judged to be beyond the terms of reference of the review.

The review approached the issue of capability planning disclosure from several directions. Past and present approaches to disclosure in Australia were analysed in detail. International practice was explored by looking at capability planning disclosure in countries similar to Australia. And, most importantly, extensive consultations were undertaken with industry, unions, media, defence commentators, academe, state governments, Defence, other Australian Government agencies, and individuals with extensive experience in defence procurement (Annex 2 lists consultations undertaken by the review). The working assumption throughout the review was that a balance had to be found between the benefits of disclosure and the risks posed by disclosure, including to the Commonwealth's commercial position.

The report comprises eight chapters:

- Chapter 1—*Introduction* outlines how the government and its Department of Defence (Defence) plan and develop the capabilities of the ADF. An

understanding of these processes is necessary before turning to the disclosure of information about them.

- Chapter 2—*Disclosure past and present* describes the information currently included in the DCP and other official sources and compares it with what used to be available.

- Chapter 3—*What do other countries do?* compares Australian practice with that of New Zealand, the United Kingdom and the United States.

- Chapter 4—*The arguments for and against disclosure* reviews the issues surrounding the disclosure of defence capability planning information.

- Chapter 5—*Disclosure and value for money* explores the impact that the disclosure of information might have on the Commonwealth's commercial position.

- Chapter 6—*Local industry priorities* addresses the specific question of what the government should disclose about its priorities for local industry.

- Chapter 7—*Increasing transparency* sets out our recommendations.

Capability planning and development

The planning and development of the ADF is a continuous process. At present, there are around 210 major capital equipment projects (that is, projects valued above $20 million) under contract and around 110 nascent projects disclosed as being prepared for government approval. These include the acquisition of new military equipment and the upgrade of existing equipment. In recent years, between 6 and 14 new projects have been given final approval and allowed to proceed to contract each year. There are also currently around 96 minor projects (valued below $20 million) underway and another 89 being prepared.

Quite apart from equipment, there is also the capital facilities investment program. Currently, 48 major and 23 minor capital facilities projects are underway, and 6 and 19 have been disclosed as being prepared for approval in those categories, respectively.

Key information about the four investment categories and about the processes used in the four investment programs is set out below.

Table 1.1: Overview of Defence capability investment circa 2009

	Approved		Unapproved (disclosed)		Approved per year (approx)
	Number (approx)	Value ($ million)	Number (approx)	Value ($ million)	
Major Capital Investment	210	76,600	112	60,000	8 -15
Minor Capital Equipment	96	undisclosed	89	undisclosed	?
Major Capital Facilities	48	3,921	6	undisclosed	5
Medium Capital Facilities	23	142	19	undisclosed	19
Total	377	–	226	–	–

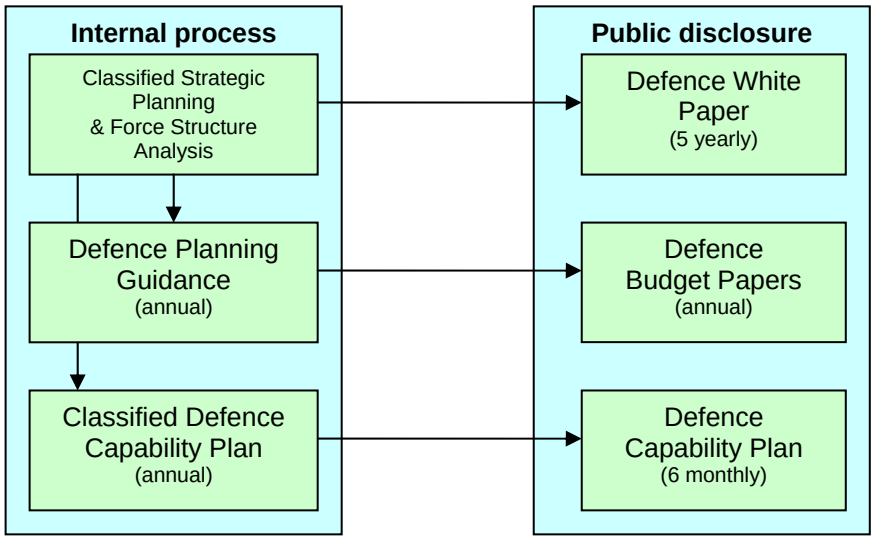
Major Capital Investment Program

The Major Capital Investment Program is divided into two parts. Those projects that have received final approval from government make up the *Approved Major Capital Investment Program*, while those that are being prepared for final approval make up the *Unapproved Major Capital Investment Program.* In the past, the approved and unapproved programs were called the *White Book* and *Pink Book*, respectively. Today, the unapproved program is known as the *Defence Capability Plan.* Like any investment program, the unapproved and approved programs each have a limited budget within which the portfolio of projects is managed.

Details of the approved and unapproved programs are classified, but since at least as far back as the late 1980s, a public version of the unapproved program has been released, first as the *Unclassified Pink Book* (formally called *Defence major capital equipment proposals*), and since 2001 as the *Defence Capability Plan—Public Version*. A good deal of information about the approved program can be found in Defence annual reports, the Budget Papers, and various Australian National Audit Office (ANAO) reports.

The major capital investment program is an integral part of Defence's broader strategic planning and budgetary process. In May 2009, the Government announced a new strategic planning cycle involving a strategic assessment, force structure review and budget audit every five years, followed in the next year by the release of a Defence White Paper. In intermediate years, a classified *Defence Planning Guidance* will be produced for Government endorsement. The classified DCP is an essential component of this high-level strategic planning regime, as outlined in Figure 1.1.

Figure 1.1: High-level strategic defence capability planning



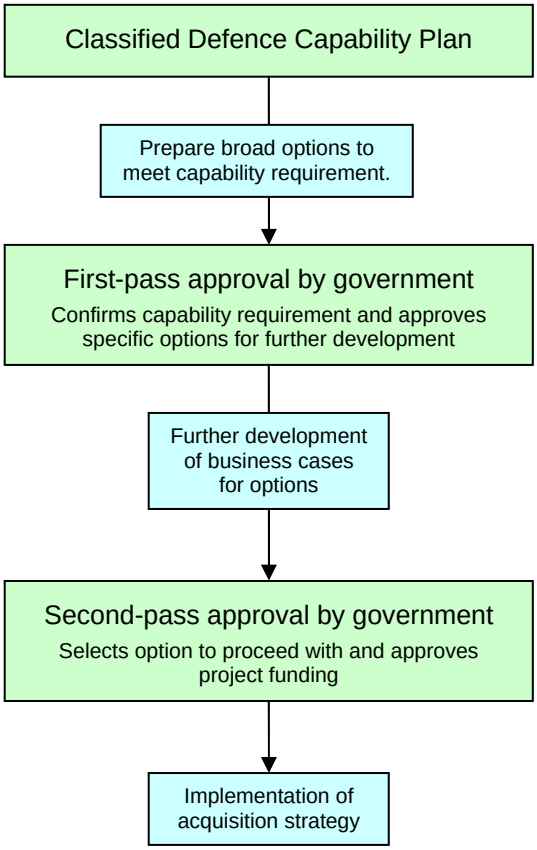
In the 1990s, the Unclassified Pink Book was published annually. In recent times, the DCP has been published every two or three years. Currently, the intention is to publish a hard-copy DCP every two years and to issue an electronic update every six months. Because the government only considers the classified DCP once a year, the six-monthly updates will only be amended to reflect decisions made on specific projects in the interim. To understand the information disclosed (or not) in the DCP, some understanding of the process for approval and delivery of major projects is necessary.

Following an external review of defence procurement in 2003 (the Kinnaird Review), the process for approving major capital investment projects was changed so that the government now examines each proposal for a major capital acquisition at least twice ('first pass' and 'second pass'), as outlined in Figure 1.2.

At first pass, the government confirms the capability requirement and selects a range of options to be further developed for second-pass consideration. At second pass, the government selects an option and approves funding for the subsequent acquisition. Although the actual acquisition follows second pass, substantial funds are sometimes expended between first and second pass to gather reliable information on cost, schedule and scope, and to understand and retire risk before second pass.

In practice, a degree of flexibility is exercised in using the two-pass process. For rapid acquisitions, the two steps are sometimes effectively coalesced into one. Conversely, for particularly complex projects, government consideration can extend over multiple meetings that successively refine the capability goal and acquisition strategy. The air warfare destroyer, for example, was considered by the government on multiple occasions.

Figure 1.2: The two-pass approval process



Despite the variable application of the two-pass process, first- and second-pass approvals are well-defined milestones in the capability development process. The financial year in which second-pass approval occurs is usually referred to as the 'year of decision'.

Two other important milestones are initial operating capability (IOC) and full operating capability (FOC). IOC is the date at which the first subset of a capability system is proven suitable and effective for operational employment. This includes not just capital equipment, but all the other inputs—organisation, personnel, training, supplies, facilities, support, doctrine and command—that constitute a usable military capability. In practice, the quantity of capability delivered at IOC is a fraction of the total sought—for example, a single vessel or squadron of aircraft. FOC is the date at which the entire quantity of capability is proven suitable and effective.

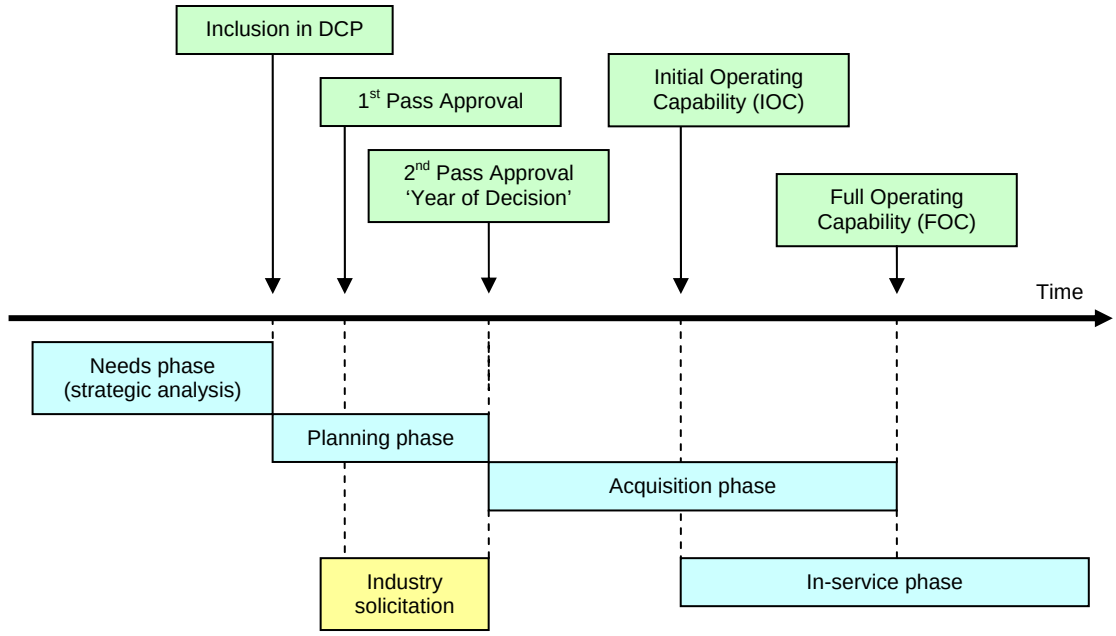
From an industry perspective, there are also a number of important formal acquisition milestones. They include the dates at which the Defence Materiel Organisation (DMO) solicits the market through requests for information, requests for proposals and requests for tenders (the legal distinction between these various activities is not important in the present context). Depending on the acquisition strategy adopted, one or more market solicitations can occur anytime from prior to first-pass up until second-pass approval.

For the purposes of discussion, it is useful to divide the force development process into four phases: needs, planning, acquisition and in-service. These are depicted schematically in Figure 1.3 along with the key milestones. Note that the overlap between the acquisition and in-service phases is bounded by IOC and FOC.

Once a project is approved, additional project-related milestones arise for things like design reviews, test and evaluation, and acceptance into service. Because these

milestones are not usually known before project approval, we shall not consider them further.

Figure 1.3: Phases and milestones in the capability development process



Further refinement of the processes for planning and acquiring major capital equipment is ongoing following the 2008 review of defence procurement (the Mortimer Review) and the 2009 Strategic Reform Program. Nonetheless, the basic principles in Figure 1.3 will remain true.

The classified Defence Capability Plan

In essence, the classified DCP is a ten-year portfolio of planned major capital investment. (While the 2009 White Paper had a 21-year horizon, annual planning focuses on a ten-year rolling program.) Formally, the classified DCP is a spreadsheet listing the financial provisions for each project. Further details are contained in *Agreed capability scope summaries* covering all the projects in the portfolio.

It is worth noting that the classified DCP has been refined considerably in recent years. The advent of scope summaries is relatively recent, as is the focus on clearly documented cost and schedule estimates. As a result, the individual projects in the plan are better defined than in the past.

The spreadsheet includes a year-by-year provision for each project, including separate contingency and cost escalation lines. For any given year, however, the cost of the total program exceeds the available budget. This is deliberate. On the assumption that the development of at least some of the projects will be delayed, the available budget is less than the arithmetical total of the prospective costs. In practice, this ensures that sufficient projects are available to make use of available funds. The level of what is called 'overprogramming' is not disclosed, but on past experience it is probably around 15%. The overprogramming of the approved capital equipment program is routinely disclosed in the PBS and is currently 19%.

Individual scope summaries are presented in a set format spanning several pages. Each summary includes:

- a description of the capability sought
- the financial provision for the project
- a cost exemplar and any assumptions used in developing the financial provision
- the anticipated year of decision
- the anticipated year of initial operating capability (IOC)
- a description of what constitutes IOC
- the anticipated year of full operating capability (FOC)
- the estimated mature net personnel and operating costs (NPOC)
- a statement of the assumptions underpinning the NPOC estimate
- the estimated life-of-type of the capability.

Minor Capital Investment Program

The Minor Capital Investment Program, usually referred to as the 'Minors', is made up of projects valued below $20 million. In practice, the Minors are conceived by the three services and Joint Logistic Command, and are delivered by DMO. Because the value of minor projects is below that demanding formal two-pass government approval, they are largely progressed through Defence's internal processes.

Capital Facilities Program

The Major and Medium Capital Facilities programs are administered by the Infrastructure Division of the Defence Support Group. Facilities projects include the ongoing modernisation of Defence facilities and specific projects in support of (and funded by) the Major Capital Investment Program. In the latter category, examples of the types of expenditures would be hangars for new aircraft and maintenance facilities for vehicles. The amount spent each year varies substantially. In 2009, around $1.3 billion will be spent on capital facilities, whereas spending of about half that is more typical.

Facilities projects are subject to a two-pass process that is separate from but no less rigorous than that applied to capital equipment projects. Proposals valued at over $15 million (Major Capital Facilities) are referred to the Parliamentary Standing Committee on Public Works, where they receive close scrutiny.

Further reading

Chapters 1 and 13 of the *2009 Defence White Paper* outline the government's approach to defence planning. A more complete but somewhat less current discussion appears in the *Strategy Planning Framework Handbook 2006*.

The latest official description of the capability development process is the *Defence Capability Development Manual 2006.* Recent and ongoing reforms of the capability development process were the result of the Defence Procurement Review 2003 (the Kinnaird Review) and the more recent Defence

Procurement and Sustainment Review 2008 (the Mortimer Review). The latter should be read in tandem with the government's *Response to the Report of the Defence Procurement and Sustainment Review 2009.* A comprehensive and up-to-date explanation of the development and approval of capital facilities projects can be found on the Infrastructure Management web-page on the Defence website (www.defence.gov.au/im/).

The Strategic Reform Program was announced in Chapter 13 of the 2009 *Defence White Paper* and detailed in the booklet *The Strategic Reform Program: Delivering Force 2030*.

Updated versions of the *Strategy Planning Framework Handbook* and *Defence Capability Development Manual* are expected in early 2010.

Copies of these publications are available at www.aspi.org.au/dcp_review_reading/.

Chapter 2: Disclosure past and present

Since 1976, Australian governments have set out their defence policy in official White Papers. Appearing every six to ten years, Defence White Papers explain the why, what and how of Australian defence, including an outline of plans for developing the capabilities of the ADF. For at least the past twenty years, further detail of capability plans has been disclosed separately: in the 1990s, through the annual Unclassified Pink Book, and since 2000 through the public DCP published every two or three years. Further disclosure has occurred and continues to occur through other avenues, including press releases and industry conferences and via the web.

This chapter examines the past and present disclosure of defence capability planning information. It begins by analysing the 2009 DCP and comparing it with its predecessors. Other official sources of information about unapproved major projects are then surveyed. The chapter concludes by looking at information disclosed about the Capital Facilities and Minor Capital Equipment programs.

Defence Capability Plan 2009 (public version)

The 226 pages of the 2009 DCP detail 111 separate projects or phases of projects valued collectively at around $60 billion. The document is structured as follows:

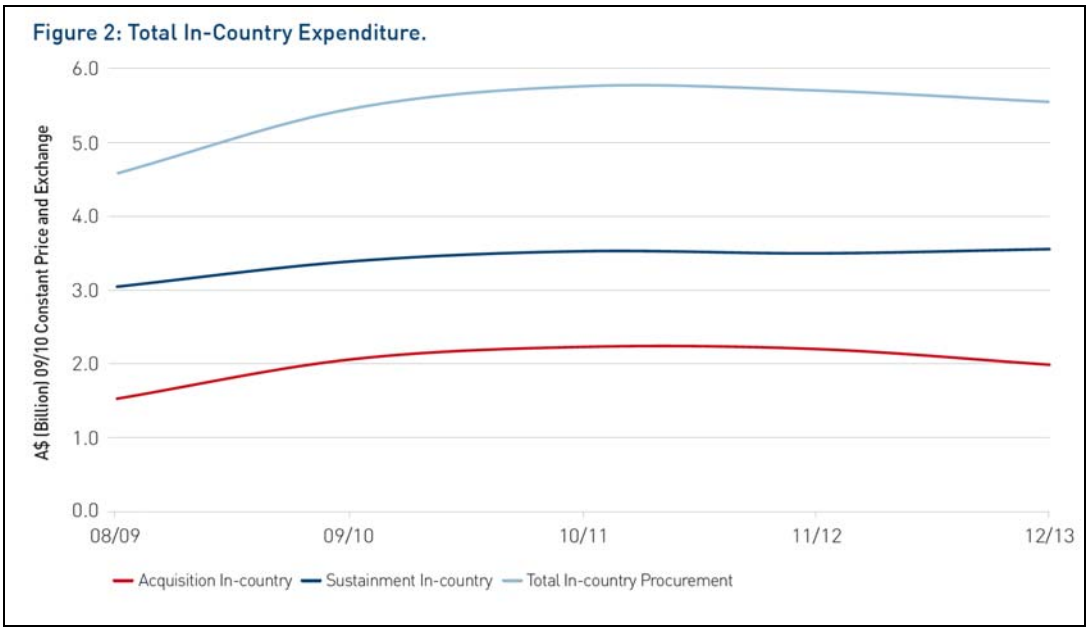
- 1-page ministerial foreword
- 3-page introduction
- 6-page explanation of the information contained in the project summaries
- 6-page projection of in-country spending by sector*
- 3-page outline of capability development plans beyond 2013*
- 1-page list of projects approved from the 2006 DCP
- 2-page list of projects in alphabetical order
- 180 pages of proposal summaries*
- 3-page list of projects by acquisition category
- 3-page list of projects by year of decision
- 6-page matrix of proposals and Australian industry opportunities
- 6-page list of project contact details.

Setting aside the explanatory sections and tabulations of information (all of which are useful), the essential information in the 2009 DCP is in the three sections marked with an asterisk (*) in the above list. We now turn to examine the information in those three sections. At this point, our aim is entirely explanatory—judgments and commentary on the adequacy of the information are deferred to later chapters of this report.

Industry sector implications

The 2009 DCP presents seven charts of expected DMO acquisition and sustainment expenditure for the five-year period from 2008–09 to 2012–13. This includes a chart of total in-country expenditure (reproduced in Figure 2.1) and five corresponding charts for the 'aerospace', 'maritime', 'vehicles and land', 'weapons and munitions' and 'electronics' sectors. The final chart presents an estimate of the size of the Australian defence industry workforce for the same period.

Figure 2.1: Figure 2 from the 2009 DCP



The information disclosed in the 2009 DCP differs from that in previous DCPs in five ways. First, the time horizon has fallen from ten to four years. Second, the 2009 DCP shows total acquisition spending (approved plus unapproved), while earlier versions only looked at the unapproved program. Third, unlike earlier DCPs, the 2009 version focuses on in-country rather than total (foreign plus in-country) expenditure. Fourth, the 2009 DCP includes both acquisition and sustainment spending, whereas its predecessors only had acquisition spending. Fifth, the 2009 DCP includes, for the first time, an estimate of the size of the in-country workforce.

Table 2.1: Changing disclosure of industry implications

	2001 DCP	2004 DCP	2006 DCP	2009 DCP
Time horizon	10 years	10 years	10 years	4 years
Acquisition				
Total expenditure by sector	yes[a]	yes[a]	yes[a]	no
In-country expenditure by sector	no	no	no	yes
In-country workforce	no	no	no	yes
Sustainment				
Total expenditure by sector	no	no	no	no
In-country expenditure by sector	no	no	no	yes
In-country workforce	no	no	no	yes

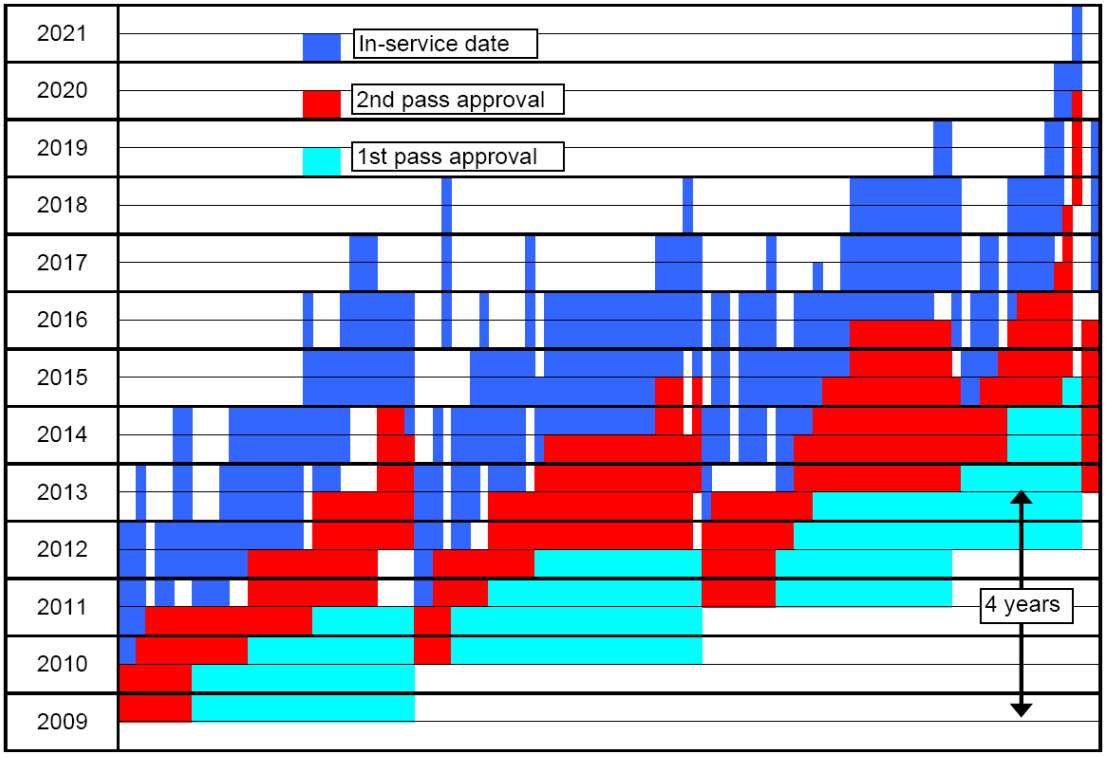
a Included only unapproved projects.

Proposal summaries

The core of the 2009 DCP is the 83 proposal summaries covering the 111 projects and phases of projects in the plan. For reference, the proposal summary for Project Air 7000 Phase 2B appears overleaf in Figure 2.3.

The 2009 DCP lists all projects planned for either first or second pass in the four years from 2009–10 to 2012–13. Although earlier DCPs had a ten-year rather than four-year time horizon, the actual difference is less than might be expected. The 2001 to 2006 DCPs included all projects planned for approval (that is, second-pass approval) over the forthcoming decade—the notion of first pass having yet to be implemented. And although the 2009 DCP has only a four-year time horizon, the inclusion of projects undergoing first pass in that period inevitably captures a large number of projects undergoing second pass in subsequent years. Figure 2.2 depicts this flow-over effect.

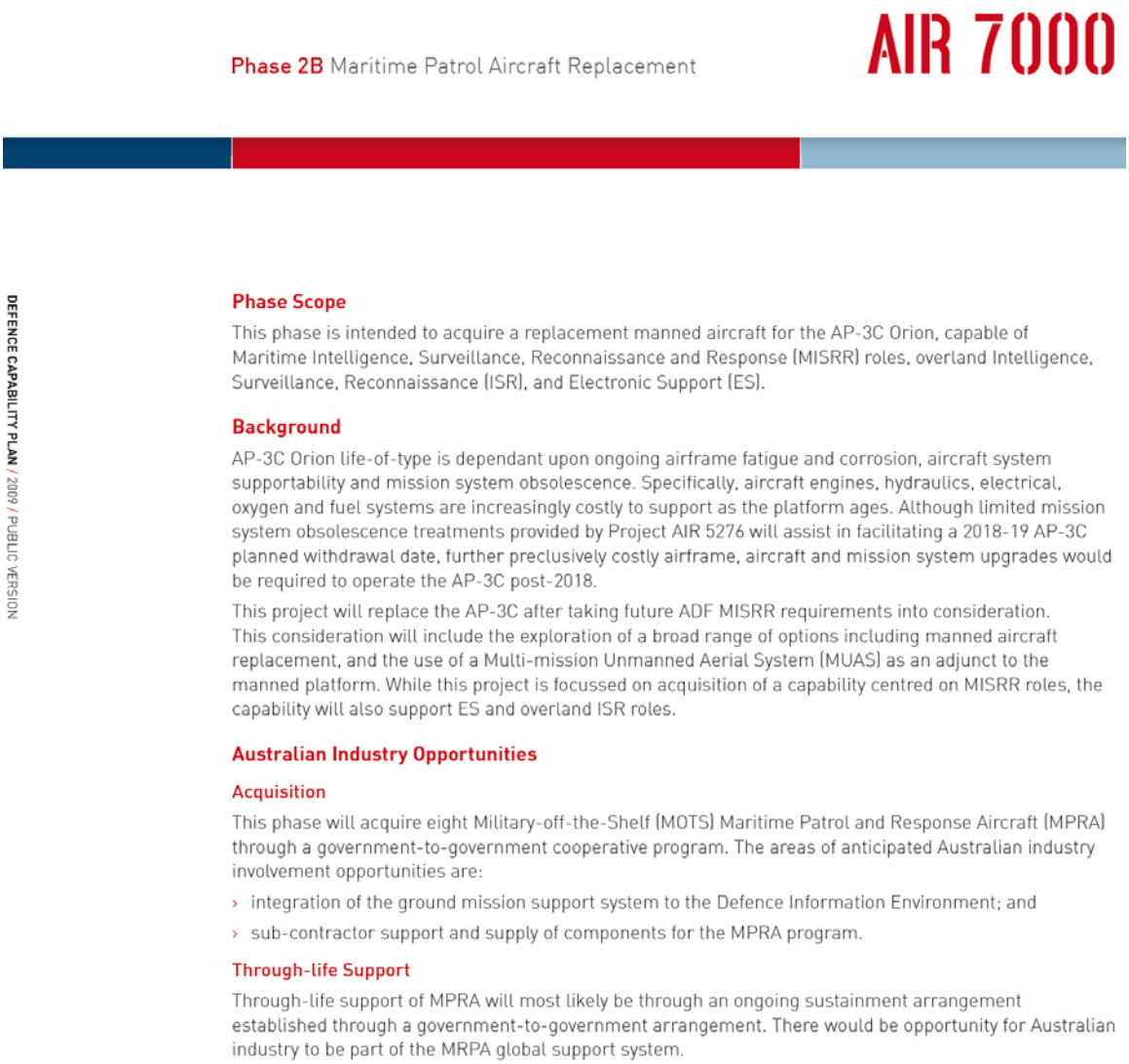
Figure 2.2: Schedule milestones in the 2009 DCP for 111 projects



Note: Where successive bands for a project overlap, the difference has been split equally between the two.

Nonetheless, the use of a four-year time horizon reduces the information that would otherwise have been available. Defence advises that another fifty projects would have been included had the 2009 DCP used a ten-year time horizon. Roughly speaking, this represents a 31% reduction, or an effective time-horizon of seven years.

Figure 2.3: A proposal summary from the 2009 DCP



Phase 2B Maritime Patrol Aircraft Replacement

AIR 7000

DEFENCE CAPABILITY PLAN / 2009 / PUBLIC VERSION

Phase Scope

This phase is intended to acquire a replacement manned aircraft for the AP-3C Orion, capable of Maritime Intelligence, Surveillance, Reconnaissance and Response (MISRR) roles, overland Intelligence, Surveillance, Reconnaissance (ISR), and Electronic Support (ES).

Background

AP-3C Orion life-of-type is dependant upon ongoing airframe fatigue and corrosion, aircraft system supportability and mission system obsolescence. Specifically, aircraft engines, hydraulics, electrical, oxygen and fuel systems are increasingly costly to support as the platform ages. Although limited mission system obsolescence treatments provided by Project AIR 5276 will assist in facilitating a 2018-19 AP-3C planned withdrawal date, further preclusively costly airframe, aircraft and mission system upgrades would be required to operate the AP-3C post-2018.

This project will replace the AP-3C after taking future ADF MISRR requirements into consideration. This consideration will include the exploration of a broad range of options including manned aircraft replacement, and the use of a Multi-mission Unmanned Aerial System (MUAS) as an adjunct to the manned platform. While this project is focussed on acquisition of a capability centred on MISRR roles, the capability will also support ES and overland ISR roles.

Australian Industry Opportunities

Acquisition

This phase will acquire eight Military-off-the-Shelf (MOTS) Maritime Patrol and Response Aircraft (MPRA) through a government-to-government cooperative program. The areas of anticipated Australian industry involvement opportunities are:

- integration of the ground mission support system to the Defence Information Environment; and
- sub-contractor support and supply of components for the MPRA program.

Through-life Support

Through-life support of MPRA will most likely be through an ongoing sustainment arrangement established through a government-to-government arrangement. There would be opportunity for Australian industry to be part of the MRPA global support system.

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Industry Capabilities and Activities

Capabilities and related activities that may provide opportunities for Australian industry in this phase include:

Activity	Capability							
	Acoustic Technologies & Systems	Composite & Exotic Materials	Electronic Warfare	Rotary & Fixed Wing Aircraft	Support of Mission & Safety Critical Software	System Assurance Capabilities (H'ware & S'ware)	Systems Integration (High End, System of Systems)	Facilities & Infrastructure
Assemble / Install	O	O	O	O			D	D
Design	O	D	O	O			D	D
Education / Training							D	
In-Service / Through-life Support	O	D	D	D	O	O	D	
Logistics Support		D	D	D	O	O	D	
Manufacture / Construct	D	D	O	O			D	D
Modelling / Simulation	D			D			D	
Project Manage			O		O		D	
Refurbish / Upgrade	D	D	D	D	O	O	D	D
Repair and Maintain	D	D	D	D	O	O	D	D
Research and Development		O	O					
Software Development / Support	O		D	D	O	O	D	
Systems Definition / Development	O						D	
Systems Integration			D	D	O	O	D	
Test and Evaluate			D	D	O	O	D	

Acquisition Category (ACAT)

ACAT Attribute	Complexity Level Assessment
Acquisition Cost	Level 1 Very High >$1500m
Project Management Complexity	Level 2 High
Schedule	Level 1 Very High
Technical Difficulty	Level 2 High
Operation and Support	Level 2 High
Commercial	Level 2 High

The ACAT Level assessed for this Phase is ACAT II.

Planned Schedule Highlights

First Pass Approval	Complete
Year-of-Decision	FY 2013-14 to FY 2015-16
Initial Operating Capability	2017 to 2019

Points of Contact

Capability Staff:
Deputy Director Maritime Patrol and Response
(02) 6265 3852

Defence Materiel Organisation:
Project Manager AIR 7000 Phase 2B
(02) 6265 1628

Project Website:
www.defence.gov.au/dmo/asd/air7000/air7000.cfm

Each proposal summary includes a standard package of information, an explanation of which appears in the first and second sections of the document. Briefly, the items included are:

Project Phase—a short one-paragraph (sometimes one-sentence) description of what is to be acquired.

Background—one to several paragraphs providing a context for the project or phase, often including a recounting of prior phases of a project.

Australian industry opportunities—a short but usually clear statement of the likely extent of local industry involvement in the acquisition and through-life support of the capability. More detailed information on opportunities for local industry is provided in a matrix that maps expected activities against industry capabilities as being either 'desirable' or 'optional' to be performed in-country.

Acquisition categorisation—Since 2004, DMO has been using an acquisition categorisation (ACAT) scheme to rate its projects. Based on a basket of six factors (cost; management complexity; schedule; technical difficulty; operation and support; and commercial), projects are rated on a scale of I to IV. ACAT-I projects are the most demanding and complex, and ACAT-IV projects the least. The ACAT rating against each of the six factors is included in the DCP.

Planned schedule highlights—Three schedule milestones are used in the 2009 DCP:

- first-pass approval
- year of decision (second-pass approval)
- initial operating capability (IOC).

Points of contact—The titles and phone numbers of contact officers in DMO and/or Capability Development Group are listed. Where available, the URL for the project website is given.

Disclosure of planned project costs

As Table 2.2 shows, the 2009 DCP discloses less information on planned project costs than any of its predecessors produced in the past ten years. Not only does any meaningful information cease beyond $1.5 billion, but the precision below that level is less than that in the 2001 to 2006 DCPs. This is consistent with the recommendation of the Mortimer Review to replace cost bands with an ACAT rating. However, in response to industry concerns, Defence subdivided the bands into upper, lower and mid-ranges—although with unspecified boundaries. Even taking the threefold subdivision into account, current cost bands are less precise than in the past.

Before examining the reduced disclosure of planned project costs, it is worth noting that some confusion about their meaning has arisen in industry. Some people understand (correctly) that the cost bands bracket a single undisclosed figure for planned costs; others conclude (incorrectly) that the cost bands represent the range over which Defence is willing to explore different solutions. Similarly, some readers

have noticed that the bands are subdivided ranges, and deduced a corresponding arithmetical subdivision; others have not done so.

The easiest way to quantify the reduced disclosure of costs is to plot the indicative uncertainty associated with each of the cost bands. For example, a cost band of $90 to $110 has an uncertainty of plus or minus $10, or 10%. Performing this calculation for the cost bands in the 2006 and 2009 DCPs yields Figures 2.2 and 2.3 respectively, where we have assumed that it is correct to divide the 2009 cost bands equally into three. Note that, for the cost band bounded by zero in the figures below, a 100% uncertainty is unavoidable.

Table 2.2: The disclosure of planned project costs 1992 to 2009

$ million	Unclassified Pink Book 1992–1996 to 1995–1999	Unclassified Pink Book 1996–2000 to 1998–2003	Unclassified Pink Book 1998–2003 (version 2)	Defence Capability Plans 2001, 2002 & 2004	Defence Capability Plan 2006	Defence Capability Plan 2009
0 to 2	0 to 2	0 to 20	0 to 20	0 to 10	0 to 20	0 to 100[a]
2 to10	2 to 20					
10 to 20				10 to 20		
20 to 30	20 to 60	20 to 200	20 to 200	20 to 30	20 to 30	
30 to 50				30 to 50	30 to 50	
50 to 60				50 to 75	50 to 75	
60 to 75	60 to 200					
75 to 100				75 to 100	75 to 100	
100 to 150				100 to 150	100 to 150	100 to 500[a]
150 to 200				150 to 200	150 to 200	
200 to 250	over 200	200 to 500	200 to 500	200 to 250	200 to 250	
250 to 350				250 to 350	250 to 350	
350 to 450				350 to 450	350 to 450	
450 to 500				450 to 600	450 to 600	
500 to 600		500 to 1000	500 to 1000			500 to 1500[a]
600 to 750				600 to 750	600 to 750	
750 to 1000				750 to 1000	750 to 1000	
1000 to 1500		over 1000	1000 to 2000	1000 to 1500	1000 to 1500	
1500 to 2000				1500 to 2000	1500 to 2000	over 1500
2000 to 2500			over 2000	2000 to 2500	2000 to 2500	
2500 to 3500				2500 to 3500	2500 to 3500	
3500 to 4500				3500 to 4500	3500 to 4500	
4500 to 6000				4500 to 6000	4500 to 6000	
6000 +				6000+	6000+	

a Costs are described as being ‘towards the lower end of the range’, ‘towards the middle of the range’ and ‘towards the upper end of the range’.

Note: the 5-year Unclassified Pink Book was in operation at least as far back as 1987.

Two things are immediately clear. First, the uncertainty in several of the cost bands in the 2009 DCP is substantially larger (by up to a factor of two) than that in its predecessors. Second, the uncertainty in the cost bands in the 2009 DCP is more variable than that in its predecessors. While it appears that a conscious effort was made in the earlier DCPs to have a consistent level of uncertainty in the range of 10% to 20%, the 2009 DCP has employed cost bands that are nothing more than an artefact of subdividing the ACAT bands.

There is an important observation to make. The minimum uncertainty in the 2009 DCP (roughly plus or minus 12% for the upper $500 million to $1500 million band) is less than or close to all of the uncertainties in earlier DCPs. So, if precision at this level is tolerable for one of the cost bands in the 2009 DCP, presumably it is tolerable for the rest.

With this in mind, we have produced a cost-band framework in which the indicative uncertainty is in the 10% to 11% range—close to the minimum uncertainty in the 2006 DCP. This is shown in Figure 2.6 and detailed in Table 2.3. Note that to extend the framework to values above $11 billion simply requires multiplying the entries for $1.1 billion to $11 billion by a factor of 10.

Figure 2.4: Indicative cost uncertainties in the 2001 to 2006 DCPs

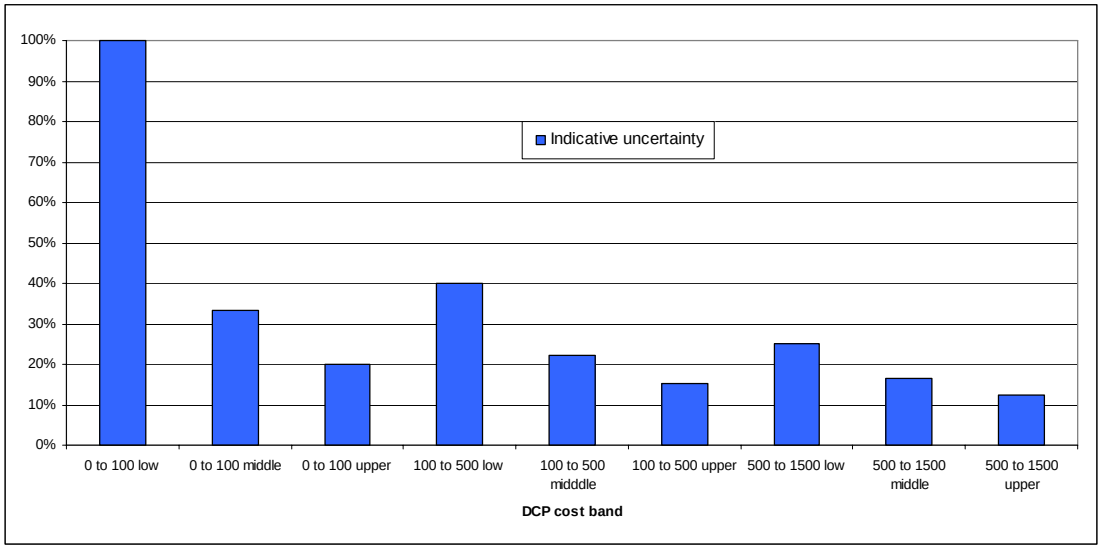


Figure 2.5: Indicative cost uncertainties in the 2009 DCP

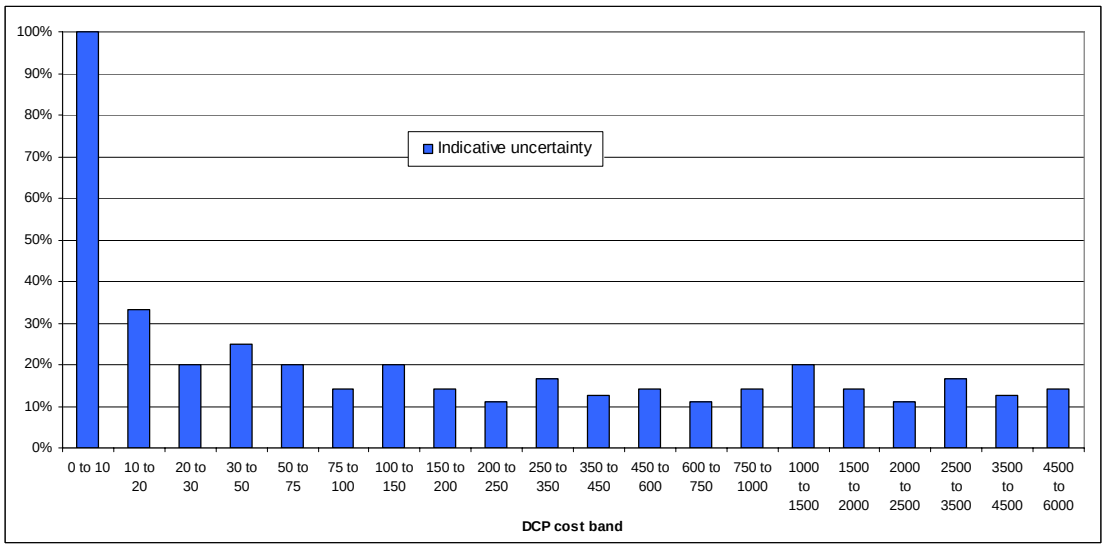


Figure 2.6: Indicative cost uncertainties in a consistent 10% cost band model

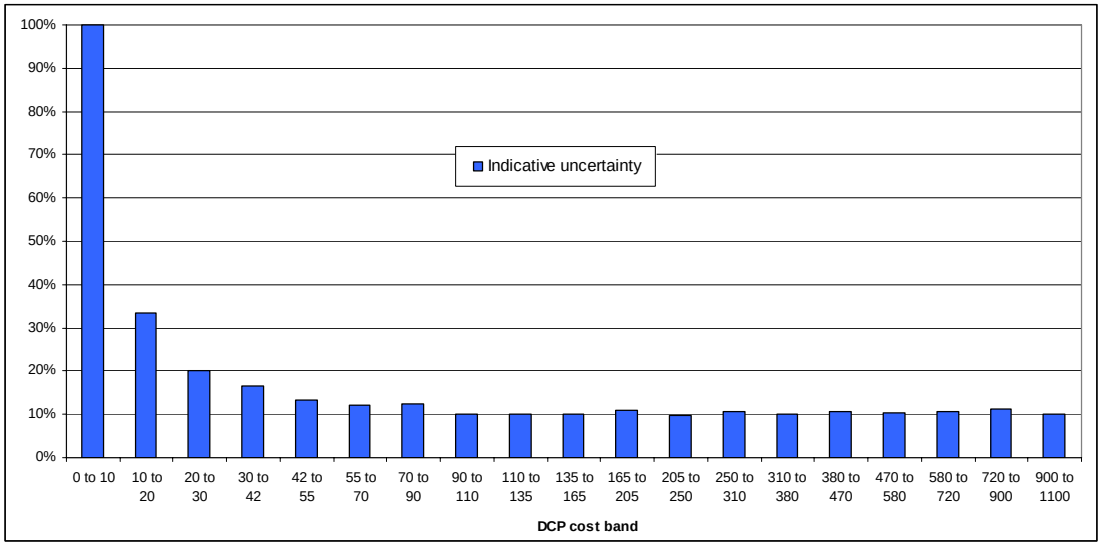
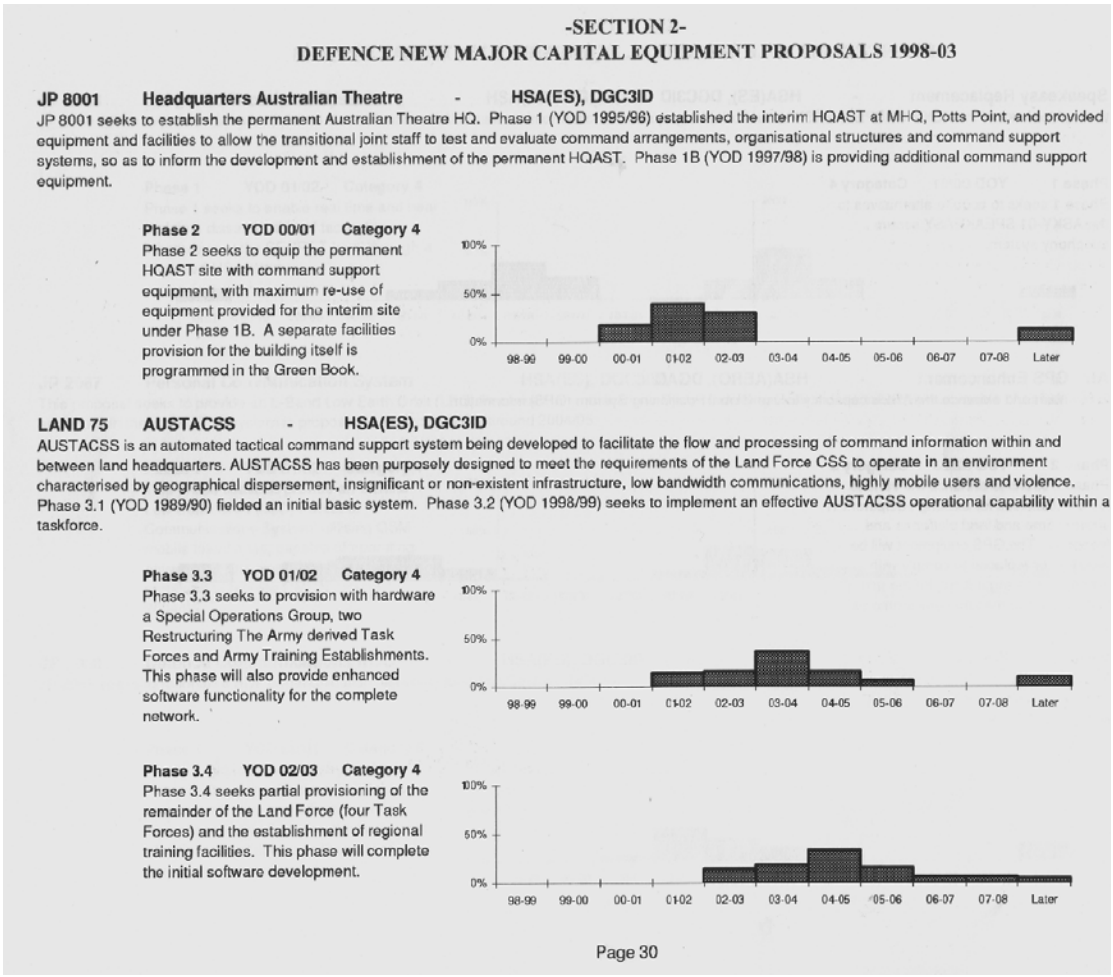


Table 2.3: An indicative 10% uncertainty cost band framework

Cost band ($m)	Indicative uncertainty	Cost band ($m)	Indicative uncertainty	Cost band ($m)	Indicative uncertainty
0 to 10	100.0%	110 to 135	10.2%	1100 to 1350	10.2%
10 to 20	33.3%	135 to 165	10.0%	1350 to 1650	10.0%
20 to 30	20.0%	165 to 205	10.8%	1650 to 2050	10.8%
30 to 42	16.7%	205 to 250	9.9%	2050 to 2500	9.9%
42 to 55	13.4%	250 to 310	10.7%	2500 to 3100	10.7%
55 to 70	12.0%	310 to 380	10.1%	3100 to 3800	10.1%
70 to 90	12.5%	380 to 470	10.6%	3800 to 4700	10.6%
90 to 110	10.0%	470 to 580	10.5%	4700 to 5800	10.5%
		580 to 720	10.8%	5800 to 7200	10.8%
		720 to 900	11.1%	7200 to 9000	11.1%
		900 to 1100	10.0%	9000 to 11000	10.0%

Before leaving the question of cost, there is an important aspect of past disclosure to consider. Although the Unclassified Pink Books of the 1990s provided relatively limited information, they did include a multi-year spending profile for each project, which is of some interest (see Figure 2.7). Presumably, the intent was to guide industry towards making offers with a payment schedule that Defence could accommodate.

Figure 2.7: Project entries from the 1998–2002 Unclassified Pink Book



-SECTION 2-
DEFENCE NEW MAJOR CAPITAL EQUIPMENT PROPOSALS 1998-03

JP 8001 Headquarters Australian Theatre - HSA(ES), DGC3ID

JP 8001 seeks to establish the permanent Australian Theatre HQ. Phase 1 (YOD 1995/96) established the interim HQAST at MHQ, Potts Point, and provided equipment and facilities to allow the transitional joint staff to test and evaluate command arrangements, organisational structures and command support systems, so as to inform the development and establishment of the permanent HQAST. Phase 1B (YOD 1997/98) is providing additional command support equipment.

Phase 2 YOD 00/01 Category 4

Phase 2 seeks to equip the permanent HQAST site with command support equipment, with maximum re-use of equipment provided for the interim site under Phase 1B. A separate facilities provision for the building itself is programmed in the Green Book.

LAND 75 AUSTACSS - HSA(ES), DGC3ID

AUSTACSS is an automated tactical command support system being developed to facilitate the flow and processing of command information within and between land headquarters. AUSTACSS has been purposely designed to meet the requirements of the Land Force CSS to operate in an environment characterised by geographical dispersement, insignificant or non-existent infrastructure, low bandwidth communications, highly mobile users and violence. Phase 3.1 (YOD 1989/90) fielded an initial basic system. Phase 3.2 (YOD 1998/99) seeks to implement an effective AUSTACSS operational capability within a taskforce.

Phase 3.3 YOD 01/02 Category 4

Phase 3.3 seeks to provision with hardware a Special Operations Group, two Restructuring The Army derived Task Forces and Army Training Establishments. This phase will also provide enhanced software functionality for the complete network.

Phase 3.4 YOD 02/03 Category 4

Phase 3.4 seeks partial provisioning of the remainder of the Land Force (four Task Forces) and the establishment of regional training facilities. This phase will complete the initial software development.

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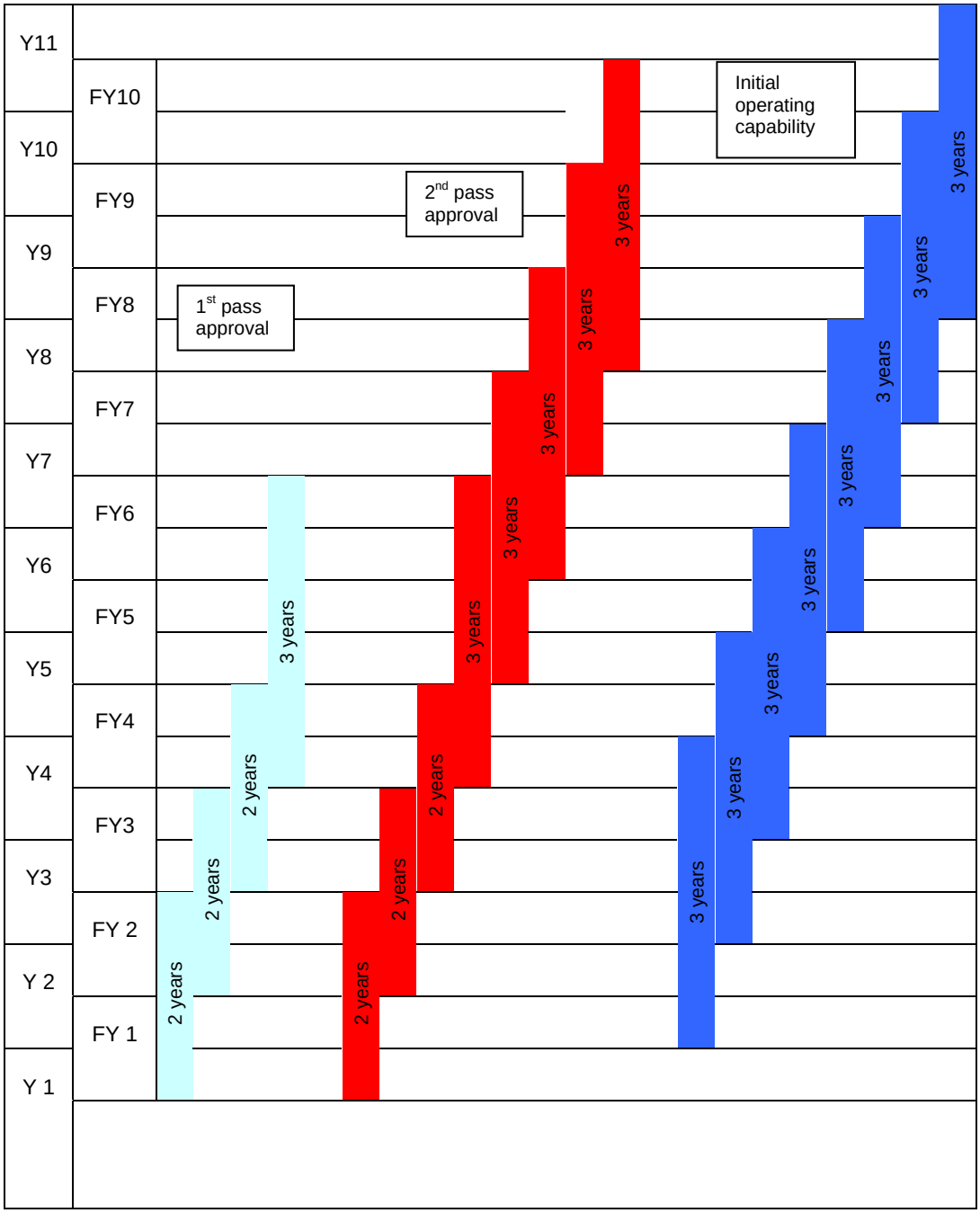
Disclosure of planned project schedule

The 2009 DCP does not give specific years for planned schedule milestones. Instead, a system of overlapping two- and three-year schedule bands has been used. These are shown in Figure 2.8. Earlier DCPs were more precise about when project milestones were planned to occur. Figure 2.9 shows the progressive reduction in disclosure over time using the year of decision (second-pass) as an example.

Note that, in the days of the four-year Unclassified Pink Book, Defence's own internal planning was limited to a four-year horizon. Unlike some of its predecessors, the 2009 DCP does not disclose the planned dates of industry solicitation events.

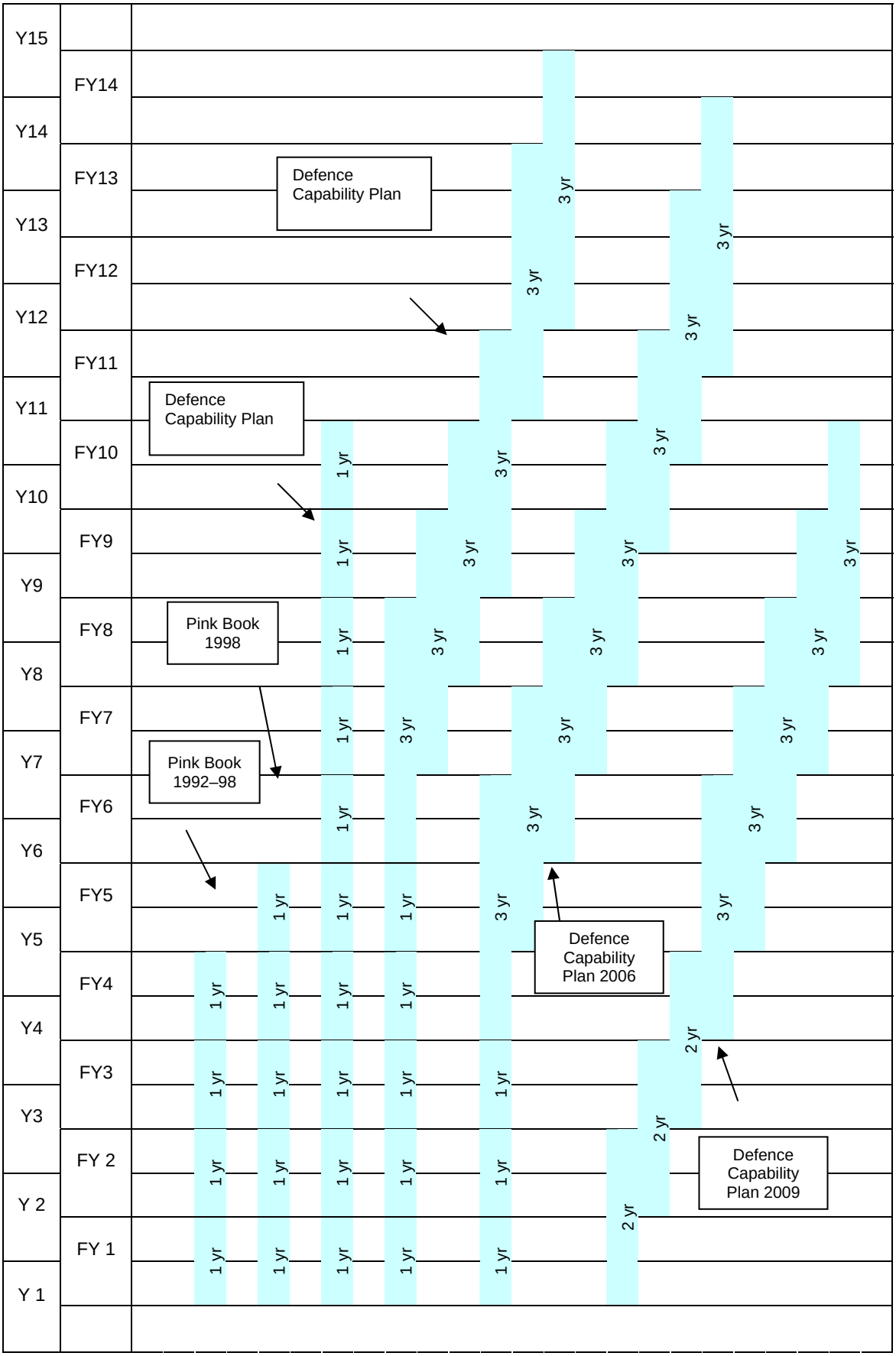
Figure 2.8: Schedule bands used in the 2009 DCP



Reliability of the DCP

In the previous two sections, we examined the *precision* with which cost and schedule information is disclosed in the DCP. We now turn to the *reliability* of the information in the DCP. The distinction between precision and reliability is important. Precision refers to the degree of exactness with which a figure is given. Reliability, on the other hand, refers to the closeness of a figure to what it purports to measure. In the case of the DCP, reliability depends on the Major Capital Investment Program being delivered on schedule and as budgeted.

Figure 2.9: Schedule bands used in successive DCPs (year of decision)



It is difficult to assess the reliability of the 2001, 2004 and 2006 DCPs. Defence neither monitors nor analyses its performance against its public and classified plans, and time has prevented the review from undertaking a detailed statistical analysis of past data. The best we have are snapshots by external analysts of how the public plan has evolved through successive editions.

The 2001 DCP was based on the investment program developed for the 2000 Defence White Paper. In total, it contained 165 projects or phases of projects, valued at around $47 billion. However, by late 2002 it was clear that the White Paper and its DCP were significantly over budget, so the government undertook a Defence Capability Review in 2003 to align plans with available resources. The subsequent 2004 DCP, which was released at the start of 2004, outlined 64 projects with 116 phases valued at around $49 billion.

It is difficult to track the evolution of the program because of the amalgamation, splitting and changing designation of projects, and undisclosed price and exchange assumptions further frustrate attempts to compare plans and performance. With these caveats, the Australian Strategic Policy Institute (ASPI) assessed that some 65 project phases valued at $38 billion had been carried forward from the 2001 DCP and that 44 new phases had been added (excluding new phases generated by renaming or subdividing prior entries). At the same time, some 34 phases valued at $3.2 billion were either abandoned or deferred to beyond the end of the plan in 2013–14. The 65 phases carried forward were delayed on average by between 9 and 15 months (not counting the projects shifted to beyond the end of the plan). There was an aggregate 20% cost increase in these projects compared with the 2001 DCP.

However, the delays and cost increases need to be seen in the context of actual performance from mid-2001 to the end of 2003. Over that period, ASPI assessed that Defence ‘more or less kept to its planned schedule of project approvals’. In fact, not only were 65 projects worth $10.8 billion from the 2001 DCP approved, but a significant number of previously unplanned projects were also initiated as a consequence of post-9/11 initiatives.

In contrast to the early success with the 2001 version of the plan, Defence struggled to deliver the initial years of the 2004 DCP. ASPI assessed that, of the 56 projects scheduled for approval in the first three financial years of the 2004 DCP, only 33 gained approval within that period. Of the 81 projects/phases that remained in the 2004 plan, 76 were carried forward to the 2006 version and 5 relatively small projects were dropped. For the 76 projects carried forward, the average delay was 11.4 months and the aggregate cost increase was a modest 1.7%. The latter figure needs to be treated with some caution, given the substantial increases that ensued—such as the collective $2.5 billion cost increase to the air warfare destroyer and amphibious vessels projects disclosed in mid-2007. More generally, the cost increases recorded from one edition of the DCP to the next do not capture the full extent of cost growth because projects often jump in cost at the point of second-pass approval, when they leave the DCP.

An analysis of the 2009 DCP reveals 54 projects carried forward from the 2006 plan with an aggregate cost increase of 69% and an average delay of 23 months. Given the

truncation of the plan's time horizon, there is no point looking at the number of projects deferred or abandoned in the move to the newer plan.

Table 2.4 shows the average delays and aggregate cost growth in projects carried forward from one DCP to the next. Note that the estimated delays, like costs, represent a minimum figure because projects that have been deferred or deleted from the plan are not counted.

Table 2.4: Evolution of costs and schedules in successive DCPs

	Phases carried forward from previous version of plan		Phases abandoned or deferred from previous version of plan
	Aggregate cost increase	Average delay[a] (months)	
2001 DCP			
2004 DCP	20%	9 to 15	34
2006 DCP	1.7%	11.4	5
2009 DCP	69%	23	n.a.

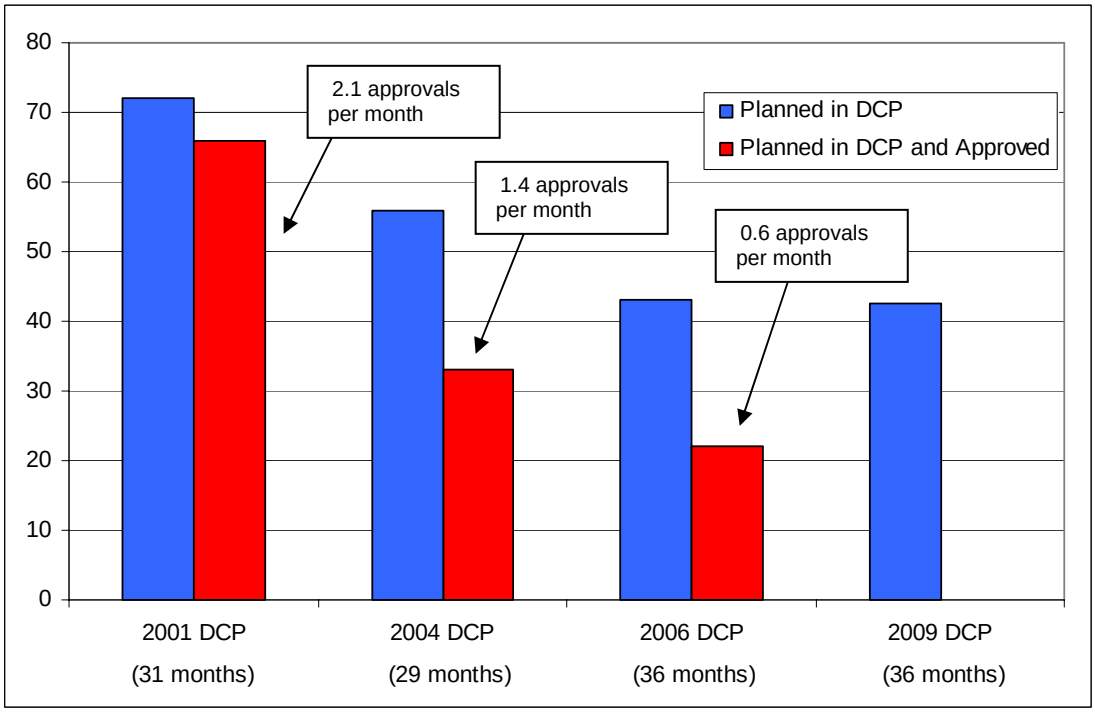
a Does not include the impact of projects deferred beyond the end of the DCP.

One area of DCP performance that is easy to track is the achievement of planned approvals. Figure 2.10 compares the number of projects planned for second-pass approval in successive versions of the DCP with what was actually approved. Only those projects planned and/or approved while the document was current are included (typically, the first three financial years). Note that, in each instance, additional unplanned projects were approved during that period. For comparison, the estimated number of projects planned for approval in the first three years of the 2009 plan is also shown. Unless the recent trend is reversed, the planned approvals in the 2009 DCP will not be delivered.

Although the foregoing analysis is less than comprehensive, the general trend is clear: *costs rise and schedules slip*. This is broadly consistent with the financial deferrals of the overall (approved plus unapproved) Major Capital Equipment Program over the same period. Between 2001 and 2009, around $4.4 billion of planned major capital investment spending was deferred. The extent of deferrals in planned future spending is undisclosed, but could be as high as $8 billion following the reprogramming of funding in the 2009–10 Budget. Two observations can be made:

- the later years of the plan have tended to change substantially with each successive edition
- increasingly, the early years of the plan have not been adhered to.

Figure 2.10: Projects 'planned' and 'planned and approved' while DCPs were current



The unreliability of the DCP is the result of several factors. First, changes often occur because new information becomes available. This can involve new technologies, better commercial opportunities, revised military doctrine and changed strategic circumstances. As a result, projects can be delayed, accelerated, cancelled or replaced with alternatives.

Next, some hazards are common to all defence organisations and other entities grappling with complex projects. Most pervasive is a systematic bias that results in underestimated costs and overoptimistic schedules. In part, this is an inherent bias—ambitious projects are rarely planned by cautious individuals—but project proponents also know that they can improve the chance of their proposals being included in the DCP by downplaying costs and risks. Even though the 'needs phase' of capability development gives priority to strategic factors, planning still has to take account of funding constraints so that relatively more affordable proposals have a better chance of inclusion in the DCP. And, once a project has gained a place in the DCP, ongoing increases in project scope can then drive the cost higher still. Irrespective of the cause, the need to accommodate increased costs within a fixed funding envelope then further exacerbates the effect of the initial overoptimistic schedule by forcing delays in the program.

A particular problem in recent years (and arguably reflected in Figure 2.10 is that expanding processes within Defence and government have prevented the timely approval and contracting of projects. The introduction of the two-pass process has placed substantial new demands on a system already hampered by slow decision making and strict adherence to bureaucratic process.

The DCP is often under pressure because it is perceived as the most flexible and discretionary part of Defence spending. When pressures on the overall Defence

budget emerge, it is always easier to delay the approval of new projects than to reduce recurrent spending or cut personnel numbers. Whether this is good policy is another question—what is easiest to manage is not necessarily what is strategically prudent. In any case, with both external and internal budget pressures likely to be substantially heightened over the next several years, this is a particular area of emerging risk.

Finally, it would be remiss of this review not to convey the dismay expressed by many industry participants at the apparent lack of accountability for performance in Defence. As one industry member put it, 'Defence suffers from a culture of missed deadlines.' In fairness, it should be stated that industry itself has also been responsible for delays to approved projects. Defence procurement is complex and risky for both customer and supplier. In any case, this adds to the impetus for the reforms planned under the Mortimer Review and the more general Strategic Reform Program, particularly those intended to improve commercial orientation and accountability.

Other avenues of disclosure—unapproved major projects

The DCP is not the only public source of information on the unapproved major capital investment program. Many alternative sources exist, as outlined in Figure 2.11 and discussed below.

Web-based information

In addition to the DCP being available on the web, further project-specific capability planning information is available on the DMO website. A total of sixty-five projects are separately detailed on the site, including fifteen projects or phases of projects covered by the current DCP (the remaining fifty describe approved projects).

The amount and quality of information vary considerably. Some phases of projects are allocated a single paragraph while others are covered extensively. At 8 November 2009, of the fifteen unapproved projects or phases of projects on the DMO site, nine appeared to be up to date and six appeared to be out of date, having been superseded by the 2009 DCP. Of the nine apparently up-to-date projects or phases of projects, five disclosed more precise information on project timings than the DCP. However, of those five, three gave dates that were inconsistent with the ranges in the DCP.

Thus, while the DMO website provides some information on unapproved projects beyond that in the DCP, the information is incomplete and unreliable. The Capability Development Group website has several links under the heading of 'Projects', but the links go nowhere.

In addition to the public Defence/DMO website, DMO maintains a separate site for industry users: the Defence+Industry ePortal. While the portal does not give any extra information on unapproved projects, it provides links to key planning documents (including the DCP) and a useful bulletin board of media releases and tender announcements. The portal also contains an extensive database of Australian defence suppliers. In 2010 Defence plans to include DCP projects on the ePortal website. The intention is to allow defence companies to register as a prime contractor, major second-tier subcontractor, or third-tier provider of goods and services. Defence is to be commended for this initiative.

Media releases and other ministerial/departmental disclosures

In the three months from August to October 2009, five ministerial media releases were related to projects in the 2009 DCP. In each case, they reported either progress in particular projects or specific government decisions. Further information is routinely disclosed by ministers in speeches, interviews and parliamentary proceedings. Similarly, departmental officials disclose information at conferences, media interviews and industry briefings and in testimony to parliamentary committees.

Conferences and trade shows

Communication between Defence/DMO and industry (and within industry) also occurs through conferences and trade shows. These include the two-yearly Defence and Industry Conference organised by DMO and the two-yearly Australian International Air Show funded in part by Defence. Also held every two years are the Land Warfare Conference and International Maritime Exhibition. In addition, around a dozen defence-related conferences are held for profit each year in Australia by the private sector. Ministers and Defence/DMO officials routinely speak at government and private-sector conferences, sometimes disclosing information about unapproved defence projects in the process.

Specialist defence publications and the mainstream media

In principle, the ad hoc disclosure of information about defence projects (approved and unapproved) by ministers and departmental officials provides up-to-date information to the public and industry. In practice, however, it is difficult for industry, let alone the public, to form a clear picture using so many different sources.

To fill the gap for industry and others with a close interest in defence, several local 'trade' publications cover the Australian defence sector in depth, including the *Australian Defence Magazine*, *Australian Defence Business Review*, *Defence Industry & Aerospace Report* and *Defence Intelligencer*. In addition, a number of international defence publications have resident Australian correspondents, including the *Asia–Pacific Defence Reporter*, *Defense News*, and the *Jane's* family of publications.

For the general public, the main source of information about defence capability planning is the media. However, the range of reporting is limited to newsworthy items, such as very large projects and those experiencing difficulties. As is to be expected, the mainstream and specialist media make use of official sources, private enquiries and, on occasion, unauthorised disclosures (leaks). In this way, the media does not just collate and convey the various sources of official disclosure; it also precipitates further authorised and unauthorised disclosure.

Information facilitation agents

A number of private- and public-sector entities exist to, among other things, facilitate the flow of information about opportunities in defence projects, including opportunities directly available from Defence and opportunities between defence industry firms. The Australian Industry Group (AiGroup) Defence Council, Australian Business Limited and the Australian Industry and Defence Network (AIDN) are active in the private sector.

At the federal government level are the Defence component of the Enterprise Connect program (funded by Defence and administered by the Department of Innovation, Industry, Science and Research), and the Defence-run business access offices and environmental working groups.

At the state government level, there are several defence industry agencies and the more broadly based Industry Capability Network. As a general rule, these various entities do not have privileged access to information but instead collate and disseminate information from official sources. They also perform the important role of bringing together smaller firms and defence prime contractors.

Rapid Prototyping Development and Evaluation Program

Industry sometimes gains insight into forthcoming projects through the Rapid Prototyping Development and Evaluation (RPDE) Program, which brings together Defence and industry personnel to solve problems. With more than 189 members, the RPDE Program can harness the research and development capability of all the major Australian defence prime contractors and a very large number of defence-relevant smaller firms and universities.

On occasion, the RPDE Program has looked at specific DCP projects. From Defence's perspective, the program allows industry to be engaged early in a project to help refine the project cost, scope and schedule. This can help to improve the reliability of the DCP and lead to better outcomes for the ADF in the long term. From industry's perspective, the RPDE Program can provide early insight into what Defence seeks.

Consultative forums and peak business bodies

Several high-level consultative forums bring together industry and Defence officials. Most prominent is the Capability Development Advisory Forum, the members of which include the heads of Capability Development Group (CDG) and DMO and senior industry representatives. The most recent meeting of the forum was held in early 2009. A more recent addition is the CEO consultative forum for the Strategic Reform Program, convened by DMO.

Senior Defence leaders, including ministers, regularly meet with the AiGroup Defence Council, the members of which include the CEOs of all the major Australian defence prime contractors, key second- and third-tier suppliers, and representatives of small to medium enterprises (SMEs) including AIDN.

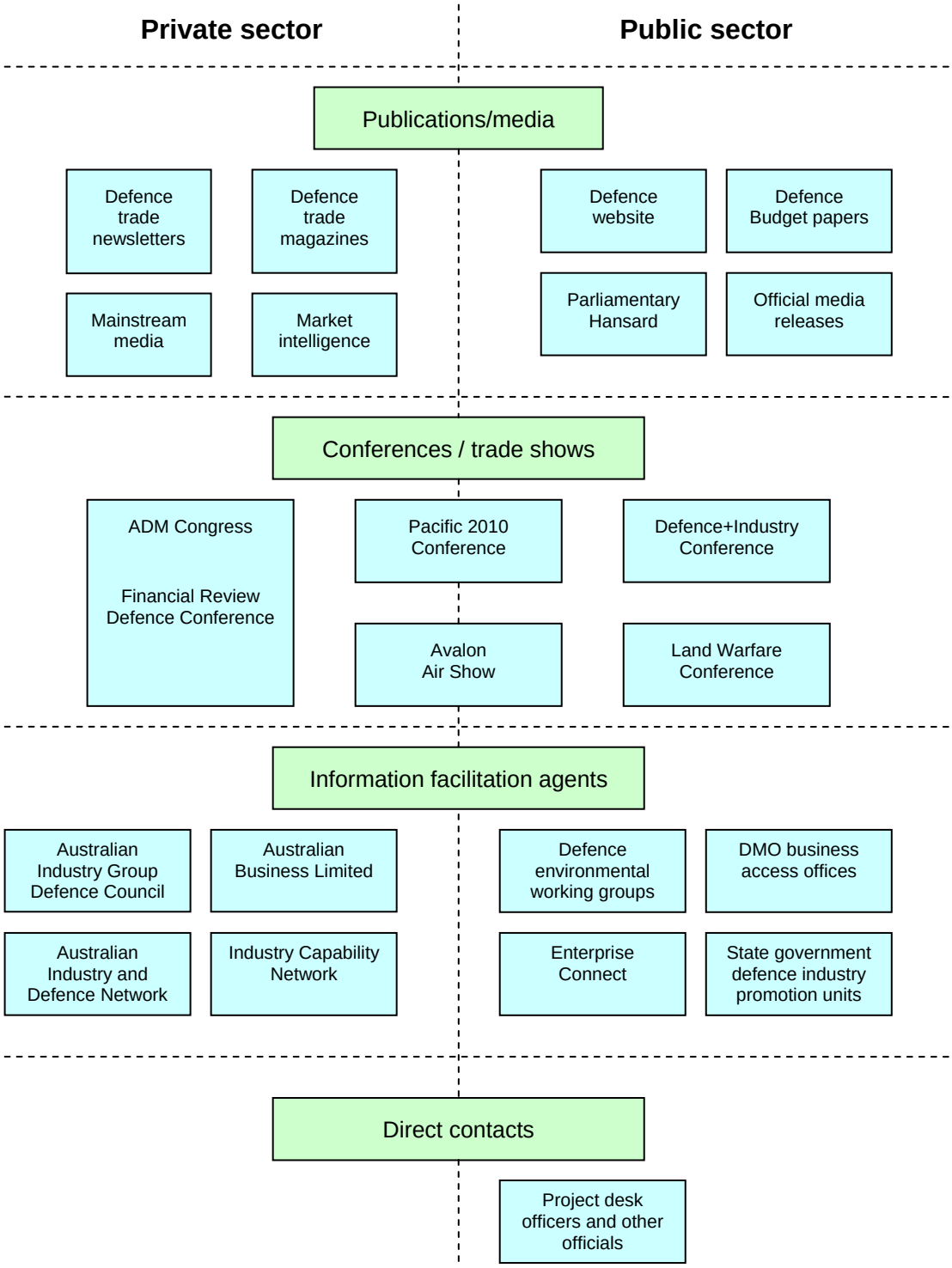
Direct contacts

The final source of information, principally to industry, is through direct contact with Defence officials in general and project desk officers in particular. Here the situation appears to be uneven in two ways. First, industry has stated that the willingness of desk officers and officials to release information varies greatly from project to project. Some project offices are open and helpful, others less so. The review was told that the flow of information can change radically with a change of personnel.

Second, there is a common belief in industry that personal connections can be critical to gaining information. It is impossible for the review to judge the extent, if any, of

asymmetric access to information by industry caused by this. What is clear, however, is that any such problem is exacerbated by nondisclosure. Conversely, the surest way to level the playing field is to make as much information publicly available as possible.

Figure 2.11: Alternative sources of information on unapproved projects



Minor Capital Equipment Program

Details of three of the six minor capital equipment programs are disclosed through a set of PDF documents on the DMO website. Table 2.5 lists the number of approved and unapproved minor projects in each program. In general, resource and capacity constraints limit the progress of minor projects. This has not been helped by the funding cuts in the 2008 Budget. So, while individual projects usually take only one to three years to deliver, it is possible for a project to languish in the planning stage for a decade. The decision not to disclose some emerging projects reflects the holding back of projects that are either classified, too immature, or unlikely to progress in the next couple of years.

Table 2.5: The Approved and Unapproved Minor Capital Equipment Program

	Approved	Unapproved	
	Active projects	Emerging projects under development	Emerging projects disclosed
Navy Minors	18	8	8
Army Minors	47	53	36
Air Force Minors	25	18	18
Chief Information Officer Minors	3	?	?
Joint Logistics Minors	3	10[a]	0

a A further four projects are 'on stand by'.

As a general rule, Minors projects proceed flexibly as resources become available and in response to customer priorities. The exception is Joint Logistics, which runs a four-year program with pre-planned approval, in-service and project closure dates.

In the past, the Minors programs were more systematically disclosed through the *Defence Forward Procurement Plans—Minor Capital Equipment*, otherwise known as the *Yellow Book*. The last Yellow Book was published in mid-2003. Although the document was nominally a five-year plan, years of decision beyond the first couple of years were not specified. Table 2.6 compares the information provided in the Yellow Book with that available in 2009. The cost-bands for Australian projects in the Yellow Book were under $500,000, $500,000 to $2.5 million, $2.5 million to $10 million and $10 million to $20 million.

Table 2.6: Disclosure of the Minor Capital Equipment Program

	Scope	Contact details	Time horizon	Year of decision	Project cost	Industry sector
Yellow Books up to 2003–2008	Unapproved and yet-to-contract Australian and New Zealand minor projects	yes	five years	for first couple of years	yes	yes
Project Lists 2009	Unapproved and yet-to-contract Australian minor projects[a]	yes	none given	no	no	no

a For only three of the five Minors programs.

Capital Facilities Program

For the past six years, the capital facilities program has been disclosed in the annual *Portfolio Budget Statements* (PBS) and updated through the mid-year *Portfolio Additional Estimates Statements*. Approved and unapproved projects are disclosed in the PBS. From at least as early as 1998 and until 2002, a more extensive disclosure occurred through the annual *Capital Facilities Investment Plan*, which was known as the *Green Book*. Table 2.7 compares the information disclosed in the Green Book with that now available in the PBS. Note that the disclosure of planned costs in the Green Book was to the nearest million dollars. However, in contrast to capital equipment projects, estimated facilities project costs are routinely disclosed prior to market solicitation through the Public Works Committee of the Australian Parliament.

Table 2.7: Disclosure of the Capital Facilities Program

	Scope	Time horizon	Year of decision	Project cost	Contact	Project duration	Year of design
Green Books* 1995–2000 to 1998–2002	Approved Major and Medium Projects	n/a	yes	yes	yes	yes	yes
	Unapproved Major and Medium Projects	48 months	yes	yes	yes	yes	yes
Green Books[a] 2001–2004 to 2002–2005	Approved Major and Medium Projects	n/a	yes	yes	yes	yes	no
	Unapproved Major and Medium Projects	48 months	yes	yes	yes	yes	no
Portfolio Budget Statements 2003–04 to 2009–10	Approved Major and Medium Projects	n/a	yes	yes	no	no	no
	Unapproved Major and Medium Projects	48 months	yes	no	no	no	no

a Green Books were published between 1998 and 2001, but details are unavailable.

The Infrastructure Division within the Defence Support Group manages the Capital Facilities Program. The division engages with the public and industry in several ways. It is a member of Infrastructure Australia, and senior executives have regular interactions with industry, including by addressing industry groups. For consulting and environmental work, engagement is facilitated by a series of panels that are periodically re-tendered. For specific projects, community consultations are held.

Further reading

Analyses of changes to the DCP can be found in the ASPI reports *Reviewing the Defence Capability Plan 2004–2014*, and *Your defence dollar: The 2006–07 Defence budget*. A thorough analysis of the 2009 DCP appeared in the *Australian Defence Business Review*, vol. 28, no. 3, 2009.

Material relevant to the reliability of the DCP can be found in the 2003 report of the Senate Foreign Affairs and Trade Committee, *Inquiry into materiel acquisitions and management in Defence*; Chapter 7 of the *2008–09 ASPI Budget Brief*; chapters 1 to 3 of the *2008 Mortimer Review*; and *Planning and approval of Defence Major Capital Equipment Projects,* ANAO Report No. 48, 2008–09. A detailed examination of Army Minors can be found in *Management of Army Minor Capital Equipment Procurement Projects*, ANAO Report No. 3, 2006–07.

Copies of these publications are available at www.aspi.org.au/dcp_review_reading/ along with past and present copies of the DCP and the Unclassified Pink Book, Yellow Book and Green Book.

Capability Development Group projects website: http://www.defence.gov.au/capability/MajorProjects/

DMO projects web-page: www.defence.gov.au/lasp/index.cfm

DMO minor projects web-page: www.defence.gov.au/dmo/id/minors/index.cfm

Defence+Industry ePortal: www.dplusi.defence.gov.au/

Chapter 3: What do other countries do?

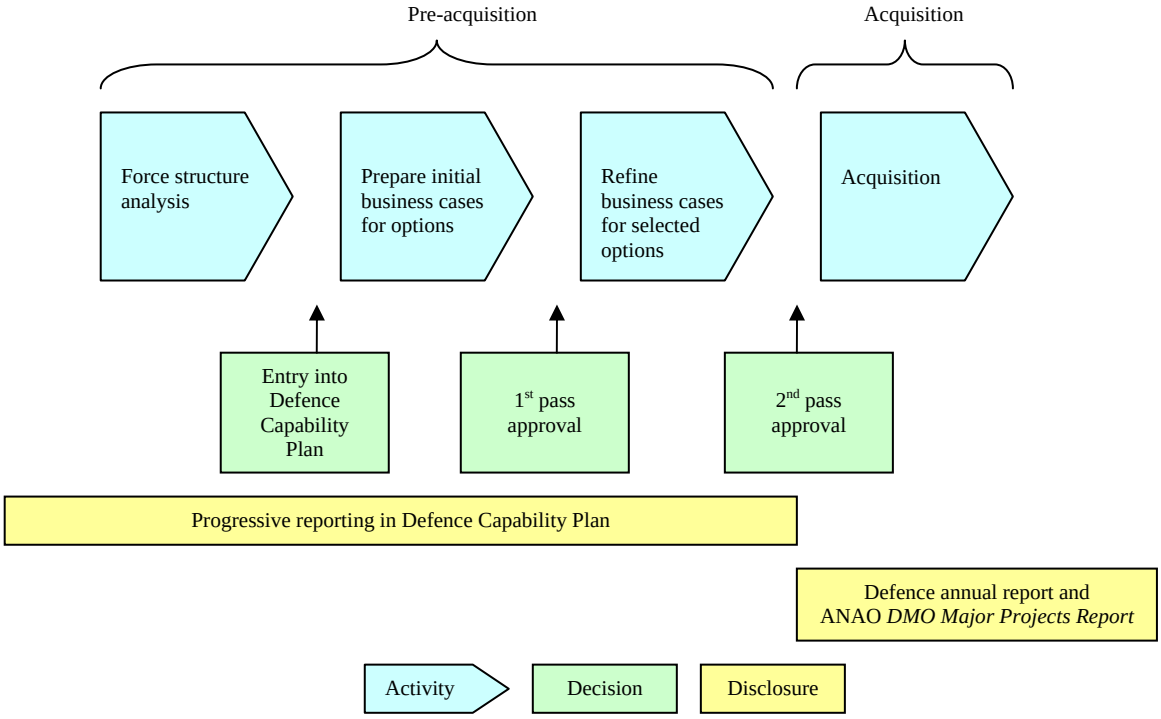
This chapter compares the disclosure of defence capability information in Australia with that in New Zealand, the United States and the United Kingdom. The comparisons are complicated by the varying approaches taken to capability planning, procurement and industry policy in the different countries. For this reason, it is necessary to view the level and means of disclosure in its full local context. Accordingly, each country's approach to capability development is outlined in tandem with a description of its patterns of disclosure.

Because the distinction between pre- and post-approval varies from country to country, comparisons extend from the point of project conception to the conclusion of the acquisition phase.

As a baseline for comparison, Australia's capability development process and reporting regime are summarised in Figure 3.1. Consistent with what follows, only the principal sources of disclosure are included in the diagram.

Note that, while the ANAO *DMO Major Projects Report* deals primarily with approved projects, there is no in-principle reason why a project that spends a substantial amount of money prior to second pass could not be included in the report.

Figure 3.1: Australia's force development process



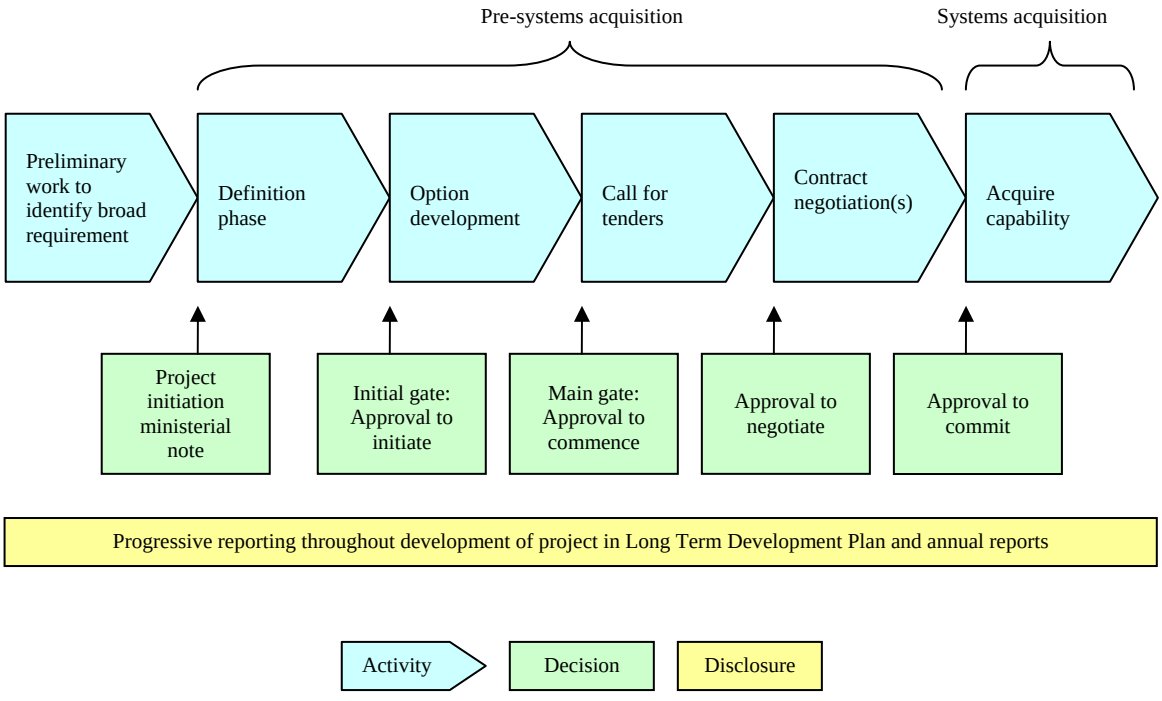
New Zealand

In some ways, New Zealand's approach to capability planning and disclosure is close to that of Australia. The essential difference is that, instead of a rolling program, New Zealand is focused on delivering a ten-year plan conceived in 2002. Government approval of defence projects in New Zealand follows a similar pattern to that in Australia, with first pass replaced by 'initial gate approval' and second pass replaced by 'main-gate approval'.

Building on its June 2000 *Defence Policy Framework*, in May 2001 the then New Zealand Government released a Government Defence Statement (in essence, a White Paper) titled *A modern, sustainable defence force matched to New Zealand's needs* that detailed the capability requirements of the New Zealand Defence Force. This formed the basis for a *Long-Term Development Plan* (LTDP) released in 2002. Subsequent editions of the LTDP—essentially New Zealand's DCP—were released in 2003, 2004, 2006 and 2008. This will certainly change now, because the recently elected New Zealand Government has promised a new Defence White Paper in early 2010.

While each LTDP is nominally the next iteration in a rolling program, the reality is that all of the LTDPs cover the period from 2002 to 2012. Consistent with a focus on a fixed time period, the LTDP blends advance notice of forthcoming projects with reporting on the delivery of past projects.

Figure 3.2: New Zealand's force development process



The 2008 LTDP lists forty-two projects, including seven that have been delivered, fourteen that are approved and underway, five that are approved in principle, ten that are yet to be approved, and six that have been transferred to the minor capital

program. Roughly speaking, projects that are 'approved in principle' have received what we would term first-pass approval.

The New Zealand LTDP is resource capped. The amount of money to be spent over the decade is set at around NZ$4 billion. Given the persistent trend towards underestimating the cost of defence acquisitions, it is unlikely that all the projects in the LTDP can be afforded. It is probably for this reason that the projects in the LTDP are divided into the following priority categories:

- 'critical to avoid the failure of policy'
- 'essential to avoid the failure of policy'
- 'necessary to avoid the failure of policy'
- 'have benefit but are less critical to achieving policy objectives'.

There are currently two projects in each of the first two categories and three in the last two categories. Assigning explicit priorities to projects has two benefits. First, it provides an indication to industry about where to focus its efforts. Rather than have to guess which projects are more likely to be delayed if and when resources become scarce, industry is able to see where the government's priorities lie. Second, it provides a clear framework for the New Zealand Ministry of Defence to focus its effort.

Although New Zealand's LTDP is more concise than Australia's DCP, a couple of pages are devoted to each project. Information includes a description of the project, a statement of policy value, links to other capabilities, a statement of the capability gap to be resolved, and an overview of current status, timing and costs.

The precision with which timing and costs are disclosed varies greatly. As a general observation, it appears that as much schedule information as is available is disclosed. No set cost bands are employed but bands are instead specific to each project. Examples include $30–40 million, $35–55 million, $40–60 million, $70–80 million and $100–150 million.

Three pieces of information that are absent from the Australian DCP are included in the New Zealand LTDP:

- The LTDP discusses the overall affordability of the program and outlines the financial risk of foreign exchange movements and inflation. The assumed foreign exchange rates with the US dollar and the Euro are explicitly given for each year of the program.
- Where available, through-life cost estimates are provided in addition to project costs.
- Major facilities projects are listed.

New Zealand's LTDP contains considerably less industry-specific information than Australia's DCP. This probably reflects the lesser demands of New Zealand's much smaller domestic defence industry sector. In any case, the main emphasis of the LTDP appears to be on public transparency.

United Kingdom

Ostensibly, the information available to both industry and the public on the United Kingdom's future capability planning is relatively sparse. The last complete British Government review of defence occurred in 1998, and although the resulting *Strategic Defence Review* was prescriptive about the shape of the force, it avoided discussion of specific schedules, costs or projects. The subsequent 2002 update, *A New Chapter*, was similarly imprecise. There is no analogue of the DCP in the United Kingdom, and the budget papers and annual report for the UK Ministry of Defence (MoD) are not helpful.

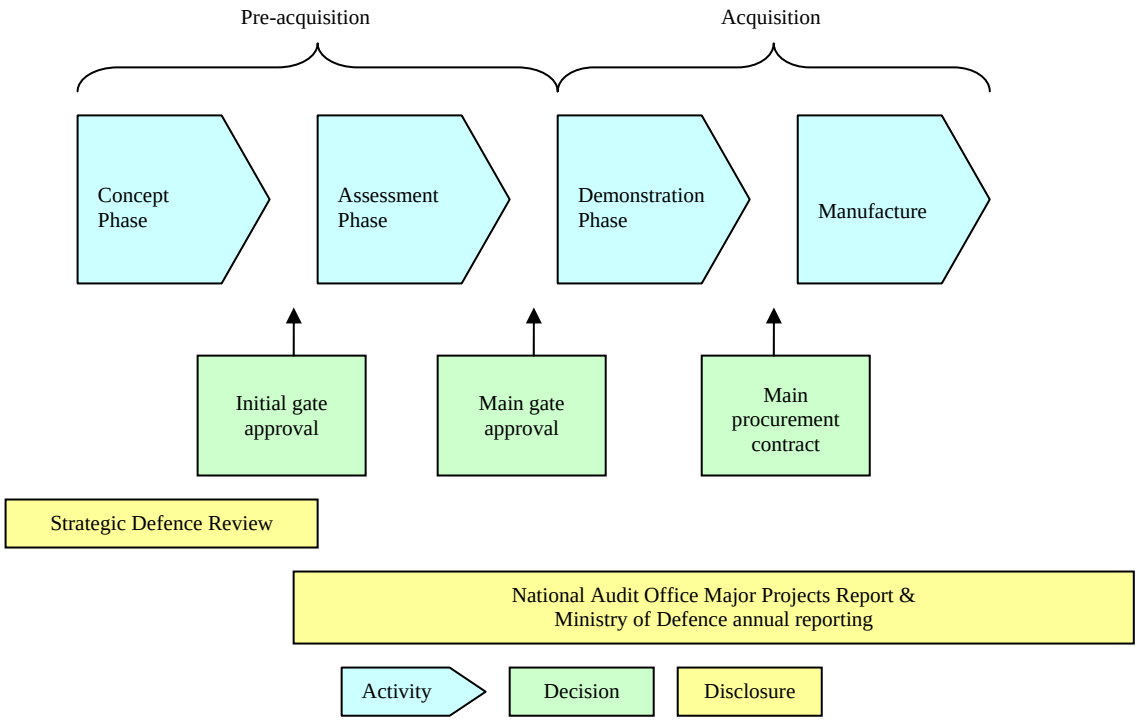
However, the advice given to this review by those familiar with the UK system was that communication between industry and the MoD is healthy. Mechanisms include annual formal briefings to industry from the service boards and capability areas on current, new and emerging capability requirements. Conferences involving MoD and industry personnel are also held, sometimes at a classified level.

Official public disclosure is relatively limited. The UK National Audit Office reports annually on only ten pre-main-gate (unapproved) projects and twenty past-main-gate (approved) projects. Nonetheless, an active specialist defence media ensures that the public is at least aware of the larger projects being planned.

The United Kingdom may substantially increase its disclosure of future capability planning. The 2009 Gray Review of UK defence acquisition recommends publishing a twenty-year defence equipment program to parliament, including detailed costs. The British Government appears to have accepted this recommendation, but for a ten-year horizon.

More generally, defence industry in the United Kingdom is reasonably well informed about the government's long-term priorities for industry capabilities. Specifically, the 2005 *Defence Industrial Strategy* published by the MoD is surprisingly prescriptive about what it expects from local industry.

Figure 3.3: The United Kingdom's force development process



United States

Like the United Kingdom, the United States does not produce a public document detailing its forward capability plans. And the closest thing to a Defence White Paper produced by the United States—the *Quadrennial Defence Review*—lacks any real detail on force structure, let alone costs and schedules.

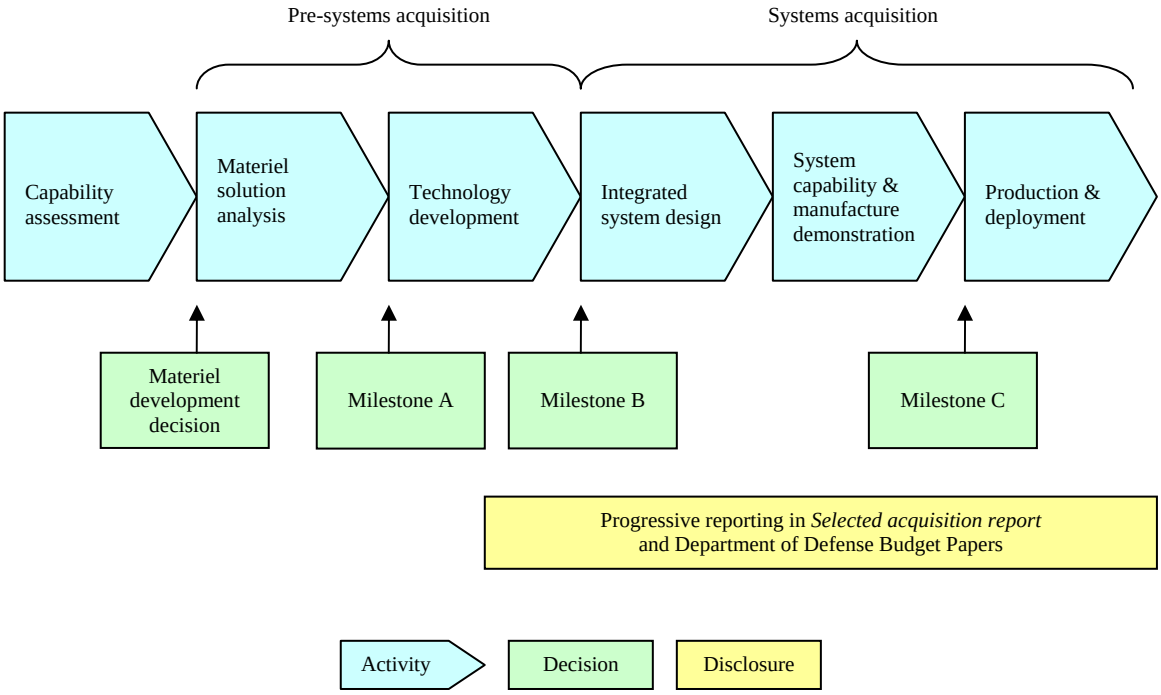
However, the literally tens of thousands of pages that make up the US Department of Defense (DoD) budget contain details of equipment procurement and research and development for the next several years (out to five years in some cases). The sheer bulk and complexity of the budget reduces its utility for public disclosure, although there is certainly valuable information there for industry. That said, and again as in the United Kingdom, industry remains apprised of DoD plans through close and ongoing engagement. Indeed, because the vast majority of US equipment is designed, developed and manufactured in-country, potential suppliers are engaged at the very earliest stages of planning.

Moreover, the US Congress (and thereby the public and media) have access to many details of DoD planning through the Congress's direct involvement in the budget process and the powerful congressional committee system. In practice, a good deal of information about the cost, scope and schedule of defence projects is disclosed through testimony to committees by officials.

In addition, mandated reporting from the DoD to the Congress via *Selected acquisition reports* and independent assessments in the General Accountability Office's *Assessment of selected weapons programs* report provide details on around ninety of the larger US defence programs, including a number yet to reach

'Milestone B' (which is analogous to but not the same as second-pass approval in the Australian system; see Figure 3.4). The selected acquisition reports are a particularly valuable resource for tracking the performance of projects and understanding the causes of cost increases and scope changes.

Figure 3.4: The United States' force development process



Conclusion

It is important to note that much of the US and UK reporting mentioned in this chapter is focused mainly, but not exclusively, on approved projects. When it comes to unapproved projects, Australia's routine public disclosure is more complete and detailed than that in New Zealand, the United Kingdom or the United States—even given the dilution of content in the 2009 DCP. This might change if the United Kingdom implements the recommendation of the recent Gray Report into defence acquisition.

However, public disclosure is not the same as the information provided to industry. Setting aside New Zealand, it is difficult to judge the level of disclosure to industry occurring in Australia compared with that in the United States and the United Kingdom. The difficulty is that the United States and the United Kingdom undertake many more projects that involve ab initio design than Australia does. For that reason, the US DoD and UK MoD tend to work very closely with industry from the earliest stages of projects.

Therefore, while published information is relatively more available in Australia, it is likely that ongoing communication between industry and the UK MoD and/or the US DoD gives defence firms a clearer picture of future plans than Australian firms receive.

Further reading

The New Zealand force development process is outlined in the 2008 *Long-Term Development Plan*, and the United Kingdom's approach is explored in detail in the 2009 *Review of acquisition for the Secretary of State for Defence* (the Gray Report) along with that of the United States. The Gray Report should be read in conjunction with the *Written Ministerial Statement on the Independent Review of Defence Acquisition*. The United Kingdom's *Defence Industrial Strategy* was published by the British Government in 2005.

Key reporting documents in the United States are the quarterly *Selected acquisition report summaries* and the General Accountability Office's *Assessment of selected weapons programs.* For the United Kingdom, the National Audit Office's *Major Projects Report* is the only consolidated report. The corresponding publication in Australia is the ANAO's *DMO Major Projects Report*.

Copies of these publications are available at www.aspi.org.au/dcp_review_reading/.

Chapter 4: The arguments for and against disclosure

This chapter examines the arguments for and against disclosing defence capability planning information. It does so from four perspectives: national security, public interest, defence industry and Defence/government. The specific and somewhat technical question of how disclosure might affect the price paid by Defence for goods is discussed in the next chapter.

The 2009 Defence White Paper had this to say about transparency of defence planning:

> *Taxpayers and their elected representatives should have a clear idea of where their defence dollars are going and how the Government plans to manage strategic risks in the years ahead. Businesses with an interest in defence activities are entitled to sufficient information to guide their own investment and business planning decisions.*
>
> *Defending Australia in the Asia Pacific century: Force 2030*

National security

Some projects in the Major Capital Equipment Program are kept secret. The extent of undeclared projects in the 2009 DCP is unknown, but previous DCPs withheld sensitive projects worth around 1%–2% of the total value of the program. Such secrecy is common in other countries. The undeclared 'black' programs in the US defence budget are valued at US$35.8 billion for 2010—far in excess of the entire Australian defence budget.

Classified projects are kept secret to prevent potential adversaries from developing countermeasures or emulating the capability being developed. For much the same reasons, the technical details of all but the most mundane defence capabilities are also kept secret.

Nonetheless, beyond the small number of classified projects that are kept secret, Australia is very open about its long-term capability development plans. The 2009 Defence White Paper set out the key steps to be taken over the next twenty years to create Force 2030. Properly done, such disclosure instils confidence about Australia's intentions and builds trust with our neighbours. In any case, given that the government's long-term plans for the ADF are already public in broad terms, further disclosure about specific costs and schedules in the DCP is of no strategic consequence.

Public interest

Knowledge of the government's plans for Australia's defence is a necessary prerequisite for informed public and parliamentary debate about defence policy. The question remains: how much information is enough?

The level of detail about overall strategy currently available from the White Paper and other sources is arguably sufficient. Certainly, there was no shortage of strategic debate following the release of the White Paper in May 2009. But the devil is in the detail when it comes to defence policy, and greater detail is warranted in a number of areas.

The clearest instance is the prospective cost of major acquisitions. No defence capability is worth having at any cost. Every dollar spent on a particular piece of military equipment has an opportunity cost, not just in alternative defence spending (guns versus aircraft) but in alternative public goods (guns versus hospitals) and alternative private consumption (guns versus tax cuts). Taxpayers in a democracy should have the information necessary to make these fundamental judgments.

In general, this is not possible today because information on the planned cost of projects above $1.5 billion in value is not disclosed. This means that the public cannot even begin to judge whether planned acquisitions, such as the next-generation submarines or future frigates, represent value for money.

Recent experience shows that this is far from an academic question. Although there was some debate following the White Paper about the merit of Australia building twelve submarines, it was not until after an independent estimate of the cost that the debate heated up and the strategic value of the investment was questioned in earnest. Two points can be made about the recent experience with the submarine project. First, the nature of the public debate shifted once a cost estimate for the project became available. Second, in the absence of an official figure, we have no way of knowing whether the debate is well informed. For better or worse, information of uncertain veracity will fill the vacuum in the absence of an official figure.

All parties involved in defence procurement—the government, Defence and industry—have an interest in the early disclosure of accurate information. Inaccurate information can skew public perceptions and result in unwarranted public criticism if project costs exceed initial estimates.

The public also has an interest in monitoring the efficiency and effectiveness with which defence acquisitions occur—not just after the approval of projects (which, to an extent, is covered by routine reporting and the ANAO *Major Projects Report*), but also in the planning stage when cost increases and delays have been common in the past. In practice, such monitoring is done by the media and specialist commentators, who then convey the results to the public. Without such monitoring, the public can neither judge Defence's performance nor hold the government of the day to account for that performance. Given that there have been two major reviews of defence procurement in the past six years after a string of serious problems that began at the planning stage, it is especially important that the public knows whether or not the resulting reforms are being effective.

Finally, a culture of secrecy about capability planning (other than that dictated by national security or commercial considerations) is likely to have a corrosive effect on public perceptions by:

- eroding public confidence in Defence and in the government's management of Defence, and thereby potentially undermining public support for defence spending
- unnecessarily calling into question the government's willingness to fund Defence in line with its promises.

Defence industry

By providing timely information about its capability plans, the government can help defence industry make decisions about:

- business strategies and commercial partnering
- research and development
- investment in infrastructure and technology
- workforce planning.

Doing so is not a matter of giving industry a 'fair go'. Because the market for defence materiel is highly imperfect, it is also in Defence's interest. Defence is a monopsony customer for many of the products supplied by the local defence industry. As a result, many local defence firms have no choice but to wait for Defence to say what it wants. Their ability to meet Defence's needs depends on whether adequate forewarning is provided. On the other side of the relationship, Defence usually has only a handful of suppliers to choose from. It therefore has a strong interest in providing timely information to increase the quality of competition. More generally, a well-informed market will also deliver better results by:

- allowing firms more time to develop more effective supply chains
- providing greater opportunities for innovation
- reducing costs by avoiding futile effort
- giving firms the opportunity to develop local alternatives to offshore procurement
- allowing firms to provide timely advice to Defence about the realism of schedule and cost estimates.

For all these reasons, a well-informed market is more likely to generate competitively priced proposals that meet Defence's needs.

How much information does industry need to ensure that Defence receives effective competition for the supply of goods and services? While most business planning only extends out four to five years, it can take a sizable portion of a decade to develop a new product or to build a specialist workforce. In general, the larger the firm and the more complex the projects it performs, the longer its strategic business planning horizon. So, while planning might only extend a year into the future for a third-tier supplier, a major prime contractor will be making strategic decisions (including on mergers and acquisitions) in anticipation of work up to a decade ahead.

Moreover, to compete for resources from their parent companies, local subsidiaries of foreign firms have to demonstrate medium- to long-term opportunities in Australia. This is particularly relevant now that all of Australia's defence prime contractors are foreign subsidiaries, apart from the publicly owned ASC Pty Ltd.

Industry can probably make effective use of specific information about projects four to five years into the future for routine business planning, but for strategic business planning in the five- to ten-year timeframe the demand for detail is reduced. Detailed information, particularly about the timing of market solicitation, is probably of most value over the first twenty-four months of the plan. It is very costly to industry (and ultimately to Defence) to create and maintain the expert teams needed to bid for defence projects. Uncertainty and delays in market solicitation schedules are a major frustration to industry for this reason.

Disclosing the approximate cost of a project can also work to Defence's advantage (although there are some risks, which we explore at length in the next chapter). Not only is the prospective cost of projects an important factor in industry planning, but an approximate cost helps industry gauge the scope of the forthcoming project—few defence acquisitions are defined well enough to make cost a completely dependent variable. This is a critical point: in many cases, the cost, schedule, risk and scope of a project can be traded off against each other. Given the complexity and incomplete definition of many defence projects, in the absence of at least an indicative cost estimate, suppliers have to guess at the customer's preference among the trade-offs. The risk is that Defence will receive offers with an undesired mix of cost, schedule, risk and scope, including offers that are unaffordable.

In the past, industry was also advised of the expected spend spread in projects (see Figure 2.7) so that it could structure offers that could be accommodated within the funding provision available. Once again, by providing more information, Defence is more likely to receive offers that suit its purposes.

Finally, the amount of information that Defence discloses to industry also sends a message about their relationship. Industry desires a partnership with Defence in which information is shared as early as possible. By keeping its plans secret, Defence signals a less trusting and more arm's-length approach.

The foregoing discussion draws heavily on what this review heard from industry. Key messages are summarised in the box at the end of this chapter.

Defence/government

Four arguments are routinely used to justify keeping details of the government's capability plans secret:

- retaining Defence's budget flexibility
- not locking the government prematurely into a course of action
- protecting the reputation of Defence and the government if plans are not met
- not misleading the public and industry by releasing plans that are subject to ongoing revision.

These arguments are examined below.

Retaining Defence's budget flexibility

The disclosure of capability plans has the potential to reduce flexibility in the Defence budget. Specifically, if project milestones or estimated costs are made public it could be less easy to delay projects or divert funding to accommodate higher spending in other areas.

While the Government oversights and ultimately endorses the Defence budget, the myriad details of the budget are managed in practice by Defence. To appreciate the difficulties faced by Defence in managing its budget, it is necessary to understand the changing constraints which have been imposed over time.

From the mid-1980s through to around 2000, the Defence Budget was relatively simple. Apart from supplementation for deployments, the defence budget was more-or-less kept constant in real terms. Each year, Defence received what it got for the previous year adjusted for inflation and foreign exchange movements. Defence was then able to allocate the cash it got (subject to government endorsement) to cover the costs of personnel, operating and capital investment. Because of the degree of flexibility afforded Defence, the arrangement was termed the 'one-line budget'.

The turn of the century saw two fundamental changes to Defence funding. First, the 2000 Defence White Paper put the defence budget on a decade-long 3% annual real growth trajectory. Second, accrual accounting was introduced to Defence and other government agencies. As a result of the latter initiative, the Defence budget was effectively divided into two parts; capital investment and recurrent expenses. No longer could Defence reallocate funds from investment to expenses or vice versa—the flexibility of the one-line budget was lost.

In another respect, however, a new flexibility was introduced into the management of the Defence Budget. Within the government's overall funding commitment, spending could be accelerated or deferred by reallocating funds from one year to another provided that investment and expense funds remained separate. Although a sizable quantity of unspent recurrent expenses was deferred, this flexibility was mainly exercised when Defence was unable to achieve planned investments, including more than $4.4 billion in reprogrammed major capital equipment.

The loss of flexibility after the introduction of accrual accounting in 2000 was softened by the 3% growth in the Defence Budget and, more importantly, by the government's willingness to fund emerging budget pressures. Between 2002 and 2007 around $1 billion of additional funding was built into the Defence budget baseline to cover previously unanticipated personnel, logistics and estate expenses. Whatever difficulty Defence might have experienced by the quarantining of investment and recurrent expenses, this was more than compensated by the continuing growth in funding.

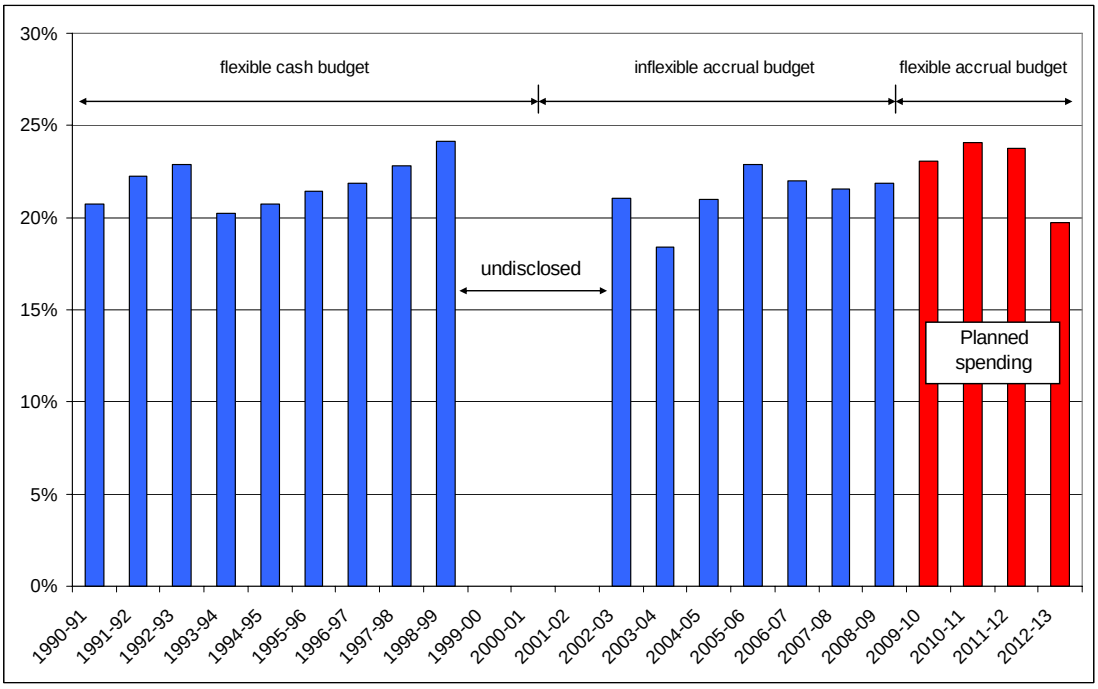
A new Defence funding model was introduced in the 2009 Defence White Paper and the Budget that followed. In principle, it combines the internal flexibilities of the old one-line budget with the temporal flexibilities of the more recent accrual budget. Funds can be shifted between years and between recurrent expenses and investment.

In practice, however, while spending can readily be deferred into the future (such as the $8.8 billion reprogrammed in May 2009) the government is unlikely to accede to a request from Defence to bring funding forward in time—at least until the overall fiscal situation improves. Moreover, further deferrals by the government over the next several years as part of a broader fiscal strategy cannot be discounted. The reality, for at least the next half decade, is that currently planned Defence funding represents a ceiling that is unlikely to rise but could fall. To be clear; the risk is not that overall long-term Defence spending will be cut, rather, it is that currently planned increases to the budget will occur more slowly than anticipated.

With the possibility of additional funding removed, the attraction of internal budget flexibility is clear: cost pressures arising from recurrent expenses (personnel and operating expenses) can be accommodated by delaying projects. Such adjustments are not necessarily undesirable. Currently, as a result of strong recruitment and high retention rates, Defence has around 2,000 more military personnel than planned. Given the difficulties that Defence has had in recent years achieving its personnel strength targets, it is not surprising that it wants to defer investment to capitalise on the opportunity to accelerate the growth of the ADF. Conversely, it would be undesirable to allow Defence to sacrifice capital investment to accommodate undelivered SRP savings or to otherwise relax constraints on recurrent spending.

On the basis of past experience, it is not inevitable that budget flexibility will adversely skew the balance between investment and recurrent spending if pressures emerge. Although Defence was under chronic budget pressure throughout the 1990s, investment was not cut to accommodate recurrent spending. In fact, as Figure 4.1 shows, investment in major capital equipment grew as a percentage of the overall budget for six consecutive years reaching a level yet to be surpassed this decade. How much this reflects the priority accorded to capital investment by Defence or the government respectively is hard to say a decade later.

Figure 4.1: Major capital equipment program as a share of the Defence Budget



The question is: would greater disclosure of capability planning information constrain Defence's budget flexibility more tightly than is desirable? Three points are worth making:

First, while the disclosure of explicit project milestones can make the impact of deferred investment more tangible (especially for firms hoping to win work) the shifting of funds from investment to recurrent spending cannot be concealed in the PBS. Whatever internal budget flexibility is gained by obfuscating capability plans is eroded by the inevitable biannual disclosure of the four-year capital investment budget.

Second, a degree of budget flexibility can be accommodated within the inherent volatility of the capital investment program and government imposed changes. For example, the annual cost of 2,000 additional uniformed personnel is $260 million. In comparison, over the past six years, the major capital equipment program has been under budget by as much as 25% ($677 million) and over budget by up to 12% ($409 million). And the government itself recently deferred $8.8 billion of Defence funding. Thus, up to a point, project delays due to the internal management of the Defence budget can be subsumed into the broader turbulence buffeting the investment program. Of course, there is no guarantee that this will always be the case—there may be circumstances where such changes to the investment program stand out.

Third, the absolute flexibility to delay projects in favour of recurrent spending is undesirable. Just because the capital investment program is the easiest thing to cut, it should not be forced to accommodate all emerging budget pressures. While it is hard to rein in recurrent spending or reduce personnel numbers, these are valid options that should be exercised where appropriate. The notion that the unapproved investment program is inherently more 'discretionary' than other parts of the Defence budget must be rejected.

Moreover, because almost all of the SRP efficiencies come from reductions to recurrent spending, delaying projects to accommodate higher recurrent spending potentially undermines the integrity of the savings program. The exception would be where higher spending delivers extra capability that is needed. In general, to preserve the integrity of the White Paper funding model, the management flexibility to delay projects to boost recurrent spending should be limited in scale and duration. For this reason, significant and sustained delays to the delivery of capability should not be obscured.

Nonetheless, with a ceiling set on its funding, Defence still needs the flexibility to manage its budget year-to-year. Greater disclosure could reduce Defence's ability to do so (though by how much is unclear given that aggregate investment figures will be available anyway). In any case, if the government decides to be more transparent about its capability plans, it still needs to allow Defence the flexibility to make prudent budget adjustments.

Keeping the government's options open

The least compelling argument for not disclosing the details of capability plans is that disclosure would somehow prematurely lock the government into a particular course of action. The counter-arguments are threefold.

First, it is widely appreciated that plans are subject to ongoing and continuous review and revision. The whole two-pass decision process is designed to collect information so that the scope, cost and schedule of projects can be progressively refined. This is understood by industry, academic commentators and most of the media.

Second, the possibility of being 'locked in' is strongly contradicted by past experience. As we saw in Chapter 2, the plans set out in the 2002, 2004 and 2006 DCPs were at best only adhered to over the first couple of years. As new opportunities, demands, pressures and constraints emerged, the plans were revised accordingly. More recently, the deferral of $8.8 billion of funding in the 2009 Budget demonstrates that the government can and will exercise its prerogative to alter plans in light of changed circumstances, in this case the fiscal pressures brought on by the Global Financial Crisis.

Third, nationally significant commitments that the government might have difficulty stepping back from are announced in the White Paper rather than the DCP. The public commitment to build twelve submarines, for example, is qualitatively different from the disclosure of a particular year-of-decision or cost estimate.

Protecting the reputation of Defence and the government

Closely related to the questions of maintaining budget flexibility and keeping the government's options open is the issue of reputation. It is hard to dismiss the possibility that the reputation of Defence and the Australian Government could be harmed by releasing a plan and then failing to deliver it, but that risk needs to be kept in perspective and balanced against the public interest.

If the government's plan for the ADF changes due to shifting strategic priorities, emerging commercial opportunities or even competing demands on the national budget, any potential damage can be mitigated by explaining why things have changed.

Alternatively, if Defence's plans suffer from systemic delays, poor execution, faulty financial planning or technical overreach (all of which have plagued Defence capital investment in recent decades), then there is no escaping the damage to Defence's reputation and potentially to the government's also. Such is the nature of accountability in a democracy. The proposition that information should be concealed to protect the reputation of either Defence or the government in the case of poor performance is unsustainable.

Of course, once information is made available there is no guarantee that it will be used to accurately assess Defence's performance, and it is easy to find examples of inaccurate reporting about defence projects. But the solution is not to pull down the shutters. Instead, proactive disclosure is needed to give confidence to industry, the media and the public that the risks and complexities of capability planning are being managed.

False precision

Given the past volatility of the DCP, it has been argued that precise milestones and narrow cost bands represent 'false precision', which would mislead industry and

cannot reasonably be used to measure performance. While this point has some merit, it is a poor justification for nondisclosure.

If nothing else, there is little danger in misleading industry with false precision. The consistent message from industry is that it understands that plans are subject to constant review and revision. This is as true for its own plans as it is for the government's. And anyone with even a passing knowledge of Defence's past performance would not 'bet the bank' on a specific date in the DCP.

When holding Defence to account for the quality of its planning and its subsequent execution of plans, the risk of false precision is more serious. Depending on how a measure of performance is constructed, it can be possible to misconstrue reasonable volatility, and the inevitable impact of over-programming, as poor performance. Unfortunately, although the current level of disclosure precludes such mischief, it also prevents reasonable measures of performance from being applied.

The solution to this problem is not to supply less information, but more. The key is to replace obfuscation with a concrete measure of uncertainty. Consider the question of how to convey a specific year-of-decision in the public DCP. Three options are presented in Table 4.1.

Table 4.1: Options for giving schedule milestones in the DCP

	Option 1	**Option 2**	**Option 3**
	False precision	**Obfuscation**	**Declared uncertainty**
	Quote the year appearing in the classified DCP	Give a multi-year band	Quote the year appearing in the classified DCP and give a ± estimate of uncertainty
Example 1: a project currently in a two-year band	2010–11	2009–10 to 2010–11	2010–11 (± 6 months)
Example 2: a project currently in a three-year band	2010–11	2009–10 to 2011–12	2010–11 (± 12 months)

The advantage of Option 3 in Table 4.1 is that it discloses Defence's planning date but still gives a measure of the expected uncertainty in achieving that date. In this way, Defence's performance can be assessed, and industry can plan with the best information available, cognisant of the expected uncertainty.

Of course, one could argue that the information conveyed in Option 2 and Option 3 is the same, but they are arguably different in at least two respects. First, Option 2 cannot unambiguously translate the single dates from the classified DCP into two-year bands in the DCP. Second, Option 3 removes the possibility of obfuscating the delay in a project by leaving it within its original multi-year band over successive DCPs even as it slips. Of course, if the information is identical, there is no reason not to move to the more explicit formulation of Option 3 and thereby settle the matter.

Note that, if the uncertainty in a planned milestone is asymmetric (for example, the milestone is more likely to be delayed than brought forward), that can be dealt with by Option 3 with only a little modification—for example: 2010–11 (–6 months to +12 months).

Conclusion

By a clear margin, the arguments for greater disclosure prevail over those for continuing with the current regime or reducing disclosure further, at least in the case of schedule milestones. As will be seen in the next chapter, the same is true for planned costs.

Further reading

The 2009 Defence White Paper discusses transparency in defence planning in Chapter 1. Details of the government's plans for the ADF appear in chapters 8 and 9.

The prospective cost of twelve next-generation Australian submarines was canvassed in *How to buy a submarine: Defining and building Australia's future fleet*, an ASPI report by Andrew Davies.

A survey of US classified project funding appears in *Classified funding in the FY 2010 Defense Budget Request*, by Todd Harrison from the Center for Strategic and Budgetary Assessments in the United States.

Copies of these publications are available at www.aspi.org.au/dcp_review_reading/.

The message from the defence industry

The review engaged widely with Australian industry and its representative peak bodies (see Annex 2). Throughout the process, industry showed a great deal of interest in the review and engaged robustly with us. While there were some minor differences between the views of smaller and larger firms, there was marked agreement on the key aspects of defence capability information.

As a general rule, industry values the DCP and uses it to inform all aspects of its business. While this is especially true for larger firms, smaller firms also make use of the plan. Industry said that an indicative timeframe for routine business planning is five years, but that information on projects a decade hence is needed for strategic planning and workforce development. A number of firms stressed the importance of being able to demonstrate the scale and nature of future demand in Australia when bidding for resources from their parent companies. To do so, industry found the information about specific projects useful, as well as the charts of projected aggregate demand.

In many ways, the 2009 DCP exceeded industry's expectations. Not only did it extend further into the future than the quoted four-year horizon might have implied, but the cost bands were better than a strict interpretation of the Mortimer Review's recommendation suggested. Nonetheless, industry firmly believed that the amount and precision of information was inadequate for its purposes. The clear consensus was that a ten-year program is necessary, along with more precise costs and schedule dates.

Many industry players wanted to see the DCP include information about the prospective operating costs of capabilities, partly so that they could understand the prospects of future sustainment work and partly to raise the prominence of whole-of-life costs in capability decision-making—the assumption being that local firms will be more competitive on such a basis.

Regarding the reliability of the DCP, industry was clear on two points. First, it understands that the DCP is subject to revision for a variety of good reasons and will plan accordingly if given more information (that is, it is not necessary to withhold information from industry 'for its own good'). Second, industry is frustrated at delays to projects caused by poor planning and tardy project approvals. Delays in solicitation activities are particularly a concern because of the very high cost of keeping bid teams together for extended periods. Anything that can be done to improve the timely execution of the DCP would be of great value to industry.

In the eyes of many in industry, delays are inextricably linked to the absence in Defence of effective delegation and clear accountability. It was also felt that Defence did not really appreciate the commercial realities under which firms operate.

It was strongly put to the review that Defence could benefit if it engaged industry earlier in the capability development process, including at the point of entry into the DCP. Industry wants the opportunity to work with Defence to refine the specification of projects in the DCP as soon after entry as possible.

A number of industry members expressed concern that the lack of communication of defence capability planning information unfairly advantaged those with stronger connections in Defence. More generally, smaller firms thought that larger firms tended to have better access to information because they could more easily access Defence executives.

A valuable point made by industry for Defence's own thinking about capability planning was that a lot more could be done to build architectures and operational concepts that link together the disparate parts of current and planned capabilities. There was a general feeling that in some areas Defence's plans, at least as disclosed, lack coherence. More positively, industry was generally happy with the higher level strategic justifications for specific capabilities and found the ACAT and 'Australian industry opportunities' sections of the DCP useful.

Although smaller firms were less concerned about the details in the DCP, they raised several concerns about capability planning information. High on the list was a request for greater transparency in the Minor Capital Equipment Program so that they could increase their chances to win work in their own right (rather than as subcontractors to larger firms). Even more important for smaller firms was the opportunity to network with potential prime contractors in order to demonstrate their capabilities. SMEs also strongly endorsed the Joint Strike Fighter 'Team Australia' approach as an excellent way to help SMEs secure offshore work.

Chapter 5: Disclosure and value for money

In Chapter 4, we argued that the disclosure of capability planning information can lead to a more effective market for Defence as a customer. Commercially, however, the disclosure of too much financial information by a customer is potentially disadvantageous. For example, if a sole supplier is aware of the price a customer is able to pay prior to negotiations, then ostensibly the supplier holds an advantage.

This chapter examines the impact of Defence disclosing its cost estimate for a project. Economists would call the pre-emptive disclosure of a price by a customer a 'posted bid'. Unfortunately, academic work has been focused on the complementary 'posted offer' rather than 'posted bid' problem. In any case, defence procurement differs from the idealised markets considered in research in several ways, including the following:

- Defence is a monopsony buyer of some goods.
- There are monopoly sellers of some of the goods that Defence buys.
- Defence goods are often incompletely specified, pending R&D.
- There are variable solicitation and acquisition strategies.
- A heterogeneous range of options exists for a single acquisition (defence goods are not commodities).

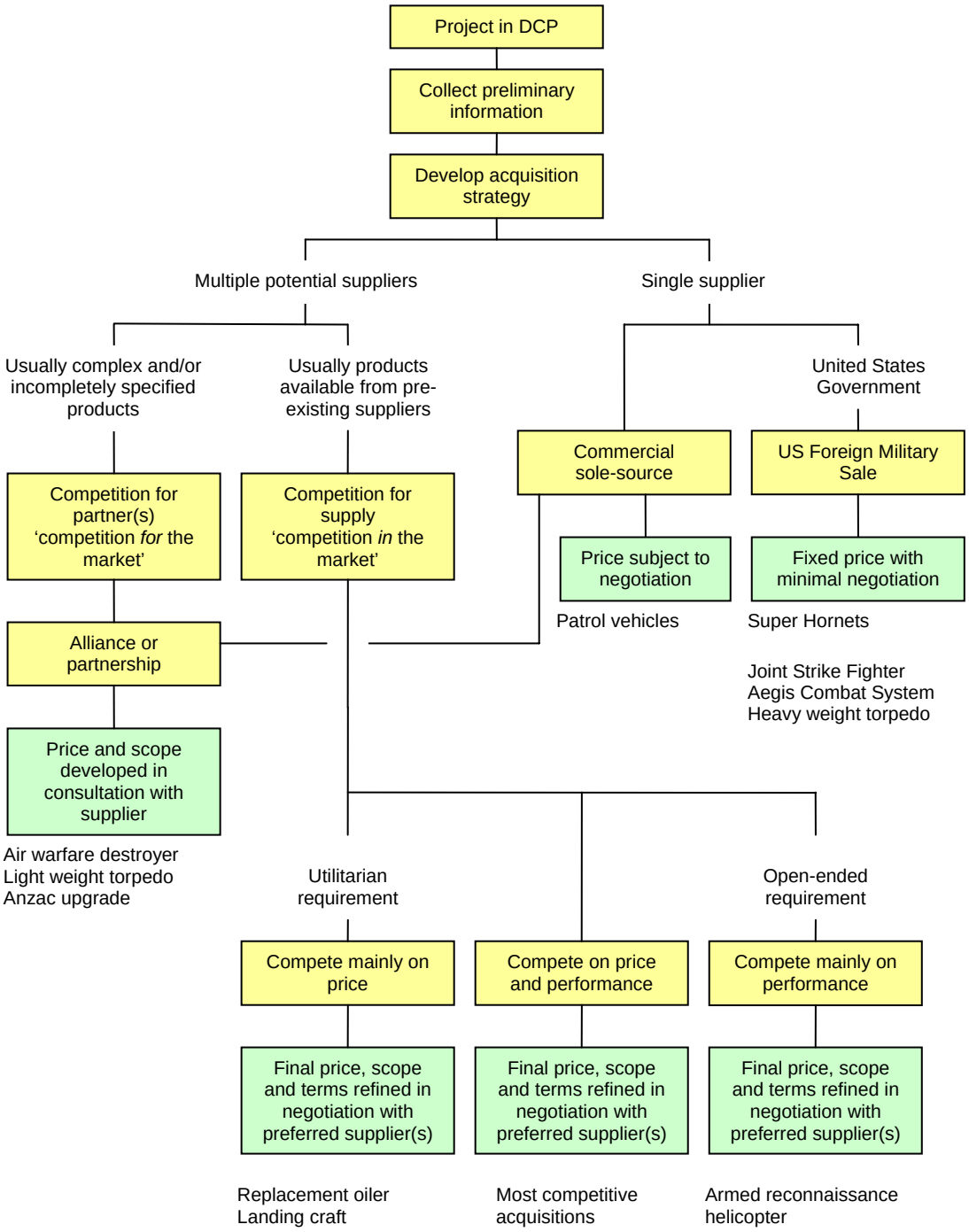
Given these complications and the absence of directly relevant research, we have worked through the consequences of an initial posted bid in defence acquisitions from first principles.

The first step is to understand and classify the types of acquisitions undertaken by DMO. Figure 5.1 outlines the generic acquisition strategies employed by the organisation. While every acquisition is unique in some way, there are only a handful of possible outcomes. An estimate of the prevalence of each in the 'top-30'projects from the 2009-10 PBS is given in Table 5.1 based on the dominant price setting mechanism.

Table 5.1: How prices were set in the 'top-30' projects from the 2009–10 PBS

Principal price setting mechanism	Number of projects	% of sample	Total value of projects ($m)	% of total sample cost
Negotiation with sole-supplier	1	3.3%	450	1.1%
FMS and allied cooperation	6	20.0%	5,491	12.9%
Competition between suppliers	21	70%	28,272	66.5%
Alliance partnership	2	6.7%	8,292	19.5%

Figure 5.1: Alternative acquisition strategies employed by Defence



Defence equipment procurement

Defence procurement occurs within the context of the government's *Commonwealth Procurement Guidelines*. For the most part, the guidelines are high-level, being more concerned with principles than prescription. Two things are nonetheless made clear. First, the overriding goal of procurement is to achieve value for money rather than to

simply minimise price. Second, non-discriminatory competition is the preferred means of selecting suppliers where practicable.

In practice, DMO uses a variety of approaches to achieve value for money, some competitive and some not. These are explored below, together with a discussion on the impact of disclosing the funds available for a purchase. For simplicity, we have focused on the disclosure of a single cost figure, which we will call the estimated price. The extension to a cost band is straightforward.

The standard economic analysis of monopsonist transactions is unlikely to be relevant to defence procurement, at least for the sorts of goods covered by the DCP. The possible role of estimated prices is likely to differ depending on the acquisition strategy employed. Announcing an estimated price can have somewhat offsetting effects. On the one hand, it can increase the efficiency of the bidding and negotiating process by providing suppliers with useful information. On the other hand, it may produce a worse outcome for either the customer or the seller. For example, announcing a price could force suppliers to reduce their offers by acting as a credible commitment to walk away if the offered price exceeds the announced estimate. Alternatively, it is also possible that announcing a price will set a floor to offers and encourage suppliers to bunch their offers around that price.

The US Foreign Military Sales Program

In recent years, Australia has purchased a range of equipment directly from the United States through the US Foreign Military Sales (FMS) Program. Specific acquisitions in the past five years include the Abrams tanks ($579 million), F/A-18 Super Hornets ($4.2 billion), C-17 transport aircraft ($1 billion), WGS satellite ($1.1 billion) and the Aegis radar and combat system for the air warfare destroyer ($1.3 billion). In each case, the price was set by the US policy, which specifies full recovery of marginal costs incurred by the US Government plus an administrative fee of 3.8%.

While it is also possible to purchase defence materiel directly from US firms on a commercial basis, Australia tends to use the FMS Program. Over the past ten years, Australia entered into FMS agreements valued at US$8.8 billion, while only US$2 billion worth of commercial export licences were granted to US firms exporting to Australia over the period.

Because FMS purchases are subject to minimal negotiation or bargaining, the prior disclosure of the estimated price by DMO is irrelevant. And, although the forthcoming F-35 Joint Strike Fighter is not technically an FMS purchase, the rules governing the program effectively put it into the same category.

Sole-source commercial purchases

DMO sometimes negotiates purchases with a commercial sole supplier. Intuitively, prior disclosure of the estimated price cannot improve the customer's bargaining position in such a situation, although the nature of the risk depends on several other factors.

In some circumstances, a decision to sole-source is taken because it clearly offers better value for money than the alternatives. This would tend to be the case with follow-on work from an existing supplier or when the price paid by foreign customers for the same product is known. If a previously rejected second-best alternative remains available, the customer's bargaining position would be further strengthened.

At the other extreme, there could be a unique product, sought from an exclusive supplier, for which no alternative exists and no historical price information is available. In such a circumstance, disclosing the estimated price can have one of two effects. If the estimate is below the price that would have resulted if no disclosure had been made, the customer has probably gained an advantage. Conversely, if the estimate is above that price, the supplier has probably gained an advantage. Even then, the use of open-book accounting, agreed profit margins and benefit-sharing arrangements can moderate the outcome.

Alliance contracts

An alternative to having potential suppliers compete for the award of a fixed price contract is to choose one or more firms to form an alliance with Defence. This was the approach taken with the air warfare destroyer project. An initial 'beauty contest' was held to select a builder, a systems integrator and a preferred designer based on their broad credentials rather than on concrete offers. The selected parties then worked with DMO in an 'open book' environment to develop the cost and scope of two options, one of which was chosen by the government and is now underway.

Alliances can be useful when a project is incompletely specified and/or when the customer wants to be involved in cost–performance trade-offs during the design process. Contractor performance is encouraged through financial incentives and sanctions based on an agreed benchmark cost estimate, and a partial assurance of value for money is provided by second-tier competition. It is possible that the next-generation submarine will be acquired through an alliance arrangement.

Given that the cost, scope and schedule for an alliance project are developed jointly and transparently by customer and supplier, it is tempting to conclude that the prior disclosure of the estimated price will not affect the final outcome. However, that might not be the case in all circumstances; for example, if the project uses a 'design to cost' strategy (as in the project to build the National Museum of Australia), a posted price estimate is necessary and, it is hoped, decisive to the outcome.

Assuming that the process of cost estimation within the alliance is as thorough and transparent as is usually claimed (thereby precluding 'gaming' by the commercial members of the alliance), the final price will depend on the perceived willingness of the government to make more money available and on the behaviour of Defence within the alliance. The risk is that the Defence representatives in the alliance will agree to increase the capability outcome without due regard to the price that the government has to pay. Or, as an economist would put it, there is a risk that they will succumb to the moral hazards that go with being a principal agent. It is difficult to see how this can be avoided. Irrespective of whether the other members of the alliance are aware of the estimated cost, the Defence representatives will be.

Competition

Where two or more potential suppliers compete, the price is one of the factors used by potential suppliers to distinguish their offers. The potential impact of disclosing the estimated price depends on the role that price plays in the competition. Two limiting cases and the more complex general case are explored below.

Competing on price

If similar products are available from multiple suppliers without preference, as when a product performs a purely utilitarian function, potential suppliers are largely competing on the basis of price. In the absence of collusion, the disclosure of the estimated price is unlikely to change the outcome. The risk is that disclosing the estimated price will lead to tacit collusion, resulting in a clustering of bids around the estimate, but such a strategy would be critically vulnerable to one supplier breaking ranks. Moreover, because defence acquisitions are infrequent, there is limited scope to 'take turns' overcharging, so even overt collusion would not be a viable strategy.

Competing on performance

Sometimes Defence has an open-ended requirement and is willing to purchase as much capability as it can within its available budget. This was the case, for example, in the competition for the armed reconnaissance helicopter (Project Air 87). Potential suppliers were advised of minimum performance requirements and a maximum prime contract price; the successful supplier was then selected on the basis of what they offered in capability, both in terms of quantity and intrinsic capability. Clearly, the prior disclosure of a project's estimated cost price is irrelevant if the maximum payable price is disclosed in market solicitation.

Competing on price and performance

In general, potential suppliers compete on a combination of price and performance to produce an offer that provides value for money. Here, the impact of disclosing a planning provision depends on what potential suppliers think the customer wants. Those perceiving that either performance or cost is more important will behave accordingly; some will tend towards providing as much capability as the provision allows, others will tend towards meeting the scope of the project at minimum costs. In this case, the disclosure of the estimated price has the (beneficial) effect of ensuring that those trying to maximise capability present an affordable offer. However, the risk is that suppliers will see the disclosure of an estimated price as a sign of a 'competition on performance' when that is not what the customer desires.

That risk can be mitigated. In general, unless the customer is interested in considering offers based on disparate perceptions of what they seek, it makes sense to be as clear as possible about what the customer wants when inviting offers. Specifically, the risk of tendered prices clustering around a disclosed price estimate (if that is not wanted) can be mitigated by being explicit about the importance of cost relative to other assessment criteria.

Paying too little

The foregoing examination focuses on the possibility of the Australian Government paying more than it would otherwise have to pay for defence equipment. It was also put to the review that disclosing estimated prices could result in the government paying *too little* by encouraging potential suppliers to underbid in order to match the provision. The argument is that suppliers would do so in the anticipation that post-contract renegotiations and contract change proposals would allow them to recover lost earnings by additional charges or reduced scope.

While there are several clear examples of suppliers successfully renegotiating contracts with DMO to substantially reduce project scope (while leaving price unchanged) and some folklore about extracting monopoly rents through engineering change proposals, the argument is ultimately unconvincing. To start with, the instances of reduced scope all have a more credible and less conspiratorial explanation: the projects had appreciable technical risk that was anticipated by neither customer nor supplier. In any case, if it made economic sense for firms to damage their reputations by underbidding (which is doubtful) and then recouping income later, that would occur even in the absence of a disclosed price through competition.

Defence Capital Facilities—an example of posted bids

Parliamentary scrutiny of public works projects discloses the estimated cost of Defence capital facilities projects before offers are sought from the market. It is the equivalent of providing a dollar-specific cost for projects in the DCP.

Any comparison between capital facilities and defence equipment projects needs to take into account that the civil construction sector is very different from the defence industry. Not only does the construction market generally have more firms competing, but it is not critically dependent on Defence as a customer (Defence accounts for around only 5% of civil construction in Australia).

Nonetheless, it is noteworthy that Defence receives offers for construction work with a healthy spread of prices, even though the overall project cost estimate is known ahead of time.

Do posted bids matter?

Having surveyed the possible impact of disclosing estimated prices in Defence military equipment procurement, it is surprising to see in how few categories and in what limited circumstances it is disadvantageous to the Australian Government (see Table 5.2). Those disadvantages must be weighed against the benefit of having a better informed market that is more likely to make affordable offers.

Table 5.2: The potential impact of posted bids on price paid by Defence

	Impact of 'posted bid'
US Foreign Military Sales purchases	Nil
Sole-source purchases	Potential disadvantage or advantage: prices may rise or fall to posted bid
Alliance contracts	Unavoidable potential disadvantage
Competitive tender (mainly price)	Nil
Competitive tender (price and performance)	Potential disadvantage in the absence of clear solicitation: prices may cluster around posted bid
Competitive tender (mainly performance)	Nil

Posted bids and DCP planning provisions

The potential adverse impact of posted bids can be mitigated by concealing the precise figure within a broad enough range. How large the range needs to be is difficult to judge, but arguably it needs to be at least as large as the level of profit that defence firms typically achieve on a project. Given that no firm could hope to extract a profit as high as 20% on sales, a margin of plus or minus 20% would seem adequate to swamp any attempt at exploitative pricing.

Fortunately, the problem is not as acute as might first appear. The discussion so far has concerned the posting of a bid—the amount that the customer is prepared to pay for a product. The question at hand is quite different—it concerns the disclosure of the planning provision in the DCP. These are not the same thing. The DCP planning provision includes a range of other anticipated costs in addition to the price expected to be paid to the prime contractor. Table 5.3 shows the wide range of components that go into a DCP planning provision.

Table 5.3: Indicative make-up of DCP planning provisions

Provision	Range
Capability development funding, 1st to 2nd pass	~1%
Mission system development and procurement	40% to 70%
Support system development and procurement	14% to 20%
Contractor services	~2%
Personnel and administration costs	~2%
Contingency	15% to 30%

Mission system development and procurement includes the equipment that makes up the capability. Support system development and procurement includes the infrastructure required to support the capability after delivery, including facilities, spares, training, simulators and training aids. The mission system and parts of the support system are likely to be bundled into the prime contract for the acquisition. Even so, the excluded parts of the support system (such as facilities) and the range of possible contingency provisions make it difficult for a potential supplier to estimate the money set aside for the prime contract to better than plus or minus 10%.

Therefore, if DCP planning provisions are presented with bands having a plus or minus 10% range (just under the size of the narrowest bands used in the 2001 to 2006 DCPs), the estimated prime contract price would be difficult to infer beyond plus or minus 20% once the two uncertainties are compounded. Given the expected limited impact of posted bids on the final price, this seems more than sufficient to protect the government's commercial position. In fact, it may unnecessarily withhold information that would deliver a more efficient outcome, although that can be corrected by providing more information in the market solicitation if necessary.

Further reading

The unique characteristics of defence procurement are discussed by Henry Ergas in *Some economic aspects of the weapons systems acquisition process*, consulting paper, 2003.

A detailed and up-to-date discussion of how Defence pursues value for money in procurement is contained in the *Defence Procurement Manual*, October 2009 edition.

Copies of these publications are available at www.aspi.org.au/dcp_review_reading/.

Guidelines for the US Foreign Military Sales program are available at www.dsca.mil/home/foreign_military_sales.htm.

Chapter 6: Local industry priorities

The Australian defence industry is an essential part of the nation's defence self-reliance. For that reason, successive governments have attempted to identify and target key local industry capabilities to ensure their availability, sometimes through direct intervention (as with munitions) and sometimes by mandating in-country manufacture (as with shipbuilding).

To put the current policy into context, we begin by examining how it got to where it is today. In the process, we have tracked carefully what industry was being told about the government's priorities.

Background

Contemporary policy for local defence industry capabilities is built on a framework laid out in the 1987 Defence White Paper:

> *[The government has] set priorities for the use of defence resources for the development of local industry capability. The priority requirements are:*
>
> - *the repair, overhaul and adaptation of military equipment fundamental to Australia's defence in circumstances to which the Government has given priority, and the provision of munitions, spares and other consumable stores for which we could least rely on overseas supply (including stockpiling and other actions for greater assurance of supply); and*
> - *the range of technology and support capabilities (including design, development and manufacture) that meet the longer term needs of the ADF in accord with Government policy and defence guidance as to an acceptable balance of strategic benefits and costs.*
>
> *These priorities, and the assessments underlying them, determine the acceptability of cost, time and performance penalties in achieving higher local content in procurements. Such judgements are necessarily made on a case-by-case basis.*

Put simply, the 1987 Defence White Paper said that there were some things we had to do (repair, overhaul, adapt and provision) and some things we might do, depending on the balance of cost and benefit (design, develop and manufacture). No further details were given on what might fall into either category.

The 1993 Strategic Review defined 'key capabilities for industry support', which were summarised in the 1994 Defence White Paper under the heading 'Industry capabilities most important for Australia's self-reliance' as:

- repair and maintenance of major weapons systems and surveillance platforms
- combat systems software and support
- data management and signal processing, including for intelligence and surveillance
- command, control and communications systems
- systems integration.

In 1997, the government clarified its priorities for local industry in a public document entitled *Defence needs of Australian industry*. Two subsequent editions were

published, the last in 2000. The document reflected Australian industry priorities based on the following criteria:

- the operational importance in conflict of a platform's subsystems or technologies for which support might be sought from Australian industry
- the industry capabilities most likely to be needed to develop, repair, maintain and adapt key future ADF assets, with priority to be given to
    - the development and modification of capabilities to suit our likely operating environment
    - the enhancement of Australian industry's contribution to the research, design and development of systems that increase the ADF's capability edge
- the level of access we have to leading overseas technology and the likelihood of interruption to overseas support (taking into account the cost-effectiveness of stockholding in order to overcome any interruption to that support)
- the potential effect of a local industry support capability on the cost of ownership of defence assets.

Industry priorities for the aerospace, land, maritime and cross-platform/electronics sectors were described separately in the document's 62 pages. The information for each sector came in two parts: first, a chart showing proposed capability upgrades and in-service lives (Figure 6.1 reproduces that for the maritime sector); second, a multi-page table of capability subsystems mapped against local industry capabilities. In each of the 30 pages of tables, industry capabilities were rated as 'strategically important', 'highly desirable' or 'desirable' (Figure 6.2 reproduces one of the pages from the maritime sector).

There are several important differences between the tables in *Defence needs of Australian industry* and the 'Industry capabilities and activities' tables in the most recent public DCP (see Table 6.1). The differences reflect the different roles of the two documents; one is about opportunities in individual projects, the other is about the ADF's long-term practical and strategic needs for support from local industry.

Table 6.1: *Defence needs of Australian industry* (2000) and 2009 DCP

***Defence needs of Australian industry*, 2000**	**'Industry capabilities and activities', 2009 DCP**
• Includes all demand from both acquisition and sustainment over next 10–20 years	• Captures only the demand from individual project phases and subsequent through-life support
• A detailed breakdown to subsystem level, potentially of use to prime contractors and SMEs	• A high-level breakdown to system level, probably only of use to potential prime contractors
• Three-level classification	• Two-level classification

Figure 6.1: Chart taken from *Defence needs of Australian industry* (2000)

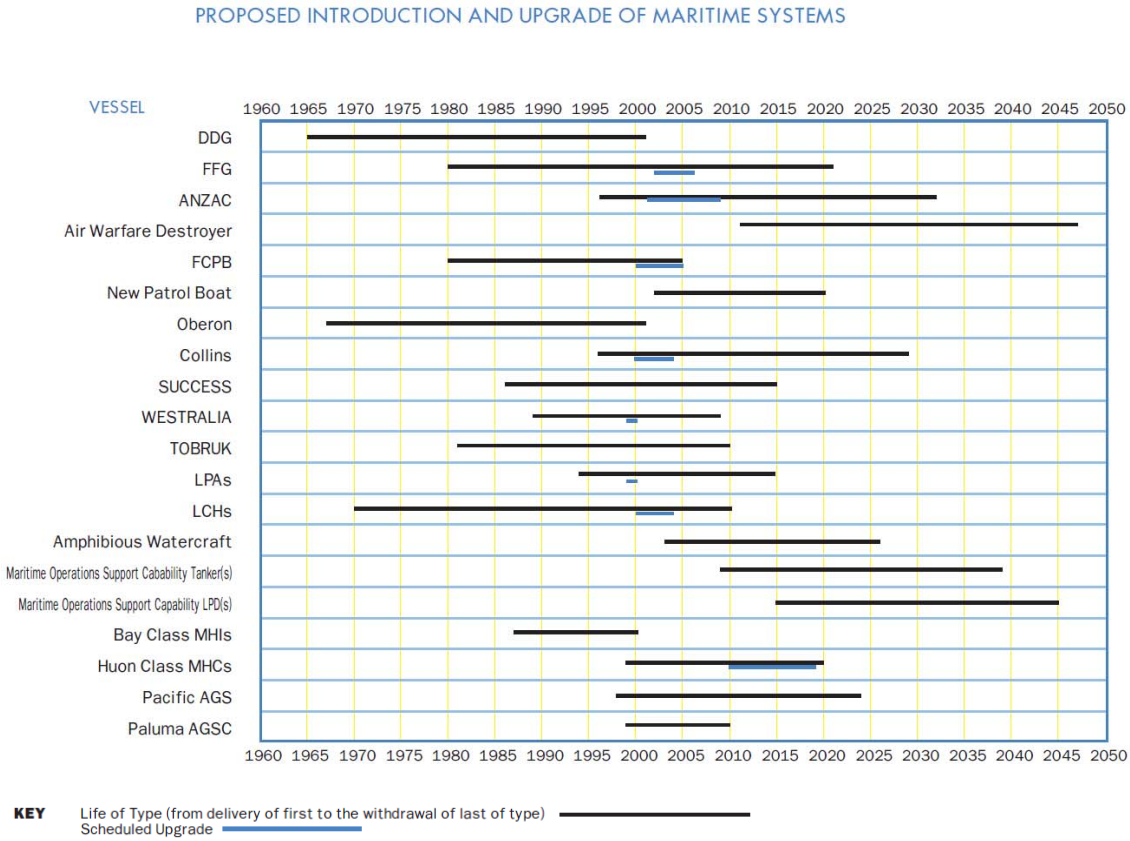


Figure 6.2: Table taken from *Defence needs of Australian industry* (2000)

MARITIME SYSTEMS - SUBMARINES (COLLINS)

Sub-system	Technology/Skills/Products/Logistic Support	Australian Industry Function																				
		R&D Focus	Research	Systems Definition	Design	Develop	Manufacture/Construct	Assemble	Project Manage	Systems Integrate	Supply	Test & Evaluate	Install	Maintain	Repair	Modify	Provide Trained Labour	Technical Support & Services	Perform	Training Systems	Infrastructure Support & Systems	Infrastructure Design & Development
Sonar	Software (including signal processing and algorithms)	S				S				S		H		S		S		D				
	Cylindrical and distributed arrays (hydrophones)	S					H						D	H	S	S						
	Flank arrays (hydrophones/PVDF)	S											S	S	S							
	Algorithms for acoustic signature classification	S												S		S						
	Intercept arrays (hydrophones)	S											D	H	S							
	Mine avoidance (hydrophones)	S											D	H	S							
	Active arrays (transducers)	S											D	H	S							
	Trialing/testing	H																	S			
	Composites (sonar domes)												D	S	S			D				
	Towed array	S		D	S	S	S	S	S	S	S				H	H		D				
Periscope and other Masts	Opto-electric assemblies and optical assemblies	H						S	S				S	S	S	D	S	H		S	S	H
	Masts (communications, radar, electronic and ESM)	H								D		H	D	S	S	S		H			S	
	Communications/interface	H								D			D	S	S							
Environmental Control	Air conditioning		D				H			S			S	S	S	S		S		S		
	Oxygen generators	D	H				H	H		S			S	S	S	S		S		S		
	CO_2 scrubbers	D	H										S	S	S			S		S		
	Emergency CO_2 removal systems	D	H										S	S	S			S		S		
	Chilled water						H	H					S	S	S	S						

KEY **S** - an industry capability that is strategically important, **H** - an industry capability that is highly desirable, **D** - an industry capability that is desirable
NOTE The **R&D Focus** category indicates key longer term areas for capability development in the ADF, likely to impact upon Australian industry in the 10 to 20 year timeframe.

Because of the level of detail provided in the *Defence needs* publication, the 1998 Defence and Industry Strategic Policy Statement made only a high-level statement about industry capabilities:

- *Australia needs critical forms of support (repair, maintenance, adaptation and provisioning) in-country, especially in wartime when support needs to be guaranteed and prompt; it cannot be created overnight. Industry capability in areas such as command support, intelligence, electronic warfare and systems integration will be increasingly important.*
- *And it needs capabilities customised to its unique operating environment, as it is not sufficient to rely on off-the-shelf solutions from overseas markets.*

The last *Defence needs* publication appeared in June 2000. By the time the 2000 Defence White Paper was published in December of that year, the 'areas that attract highest priority for support from Australian defence industry' had reverted to those of the 1994 White Paper plus the 'provision of services to support the peacetime and operational requirements of the ADF'.

Between 2001 and 2004, Defence worked with industry to produce a series of defence industry 'sector plans'. Plans were eventually produced for the naval shipbuilding and repair (2002), aerospace (2003) and electronic systems (2003) sectors. Around the time of the release of the aerospace and electronics sector plans, the government said that the intent was to 'sustain those industry capabilities critical to Australia's national security needs'. The plans sought to do so in various ways, including industry consolidation, long-term contracts and 'a more strategic approach to Defence procurement'.

Following the government's abandonment of the naval shipbuilding and repair sector plan in 2003, the remaining sector plans fell into disuse. No updates were ever produced and no plan was ever published for the land sector.

The next step came with the publication of the Defence and Industry Strategic Industry Policy Statement 2007, in which the sector plans rated no mention. Instead, the statement reiterated the priorities of the 2000 White Paper, adding that 'more refined priorities are necessary so that our resources can be directed towards the most strategically important areas. This demands that the identification of priority Australian industry capabilities be put on a more rigorous footing.'

It went on to say that a 'strategic approach to defence industry begins by identifying what is required to':

- *provision and re-supply ADF activities and operational deployments*
- *operate, maintain, upgrade or modify existing equipment*
- *develop or otherwise secure new equipment*
- *more broadly provide goods and services to Defence*

and then comparing the options, 'taking account of their cost, effectiveness and the risk of being denied access in both peace and war'.

The clear intent of the 2007 policy was to identify *all* the industry capabilities worth having as part of Australia's self-reliant defence posture. These were to be designated as 'priority local industry capabilities', a term later truncated to 'priority industry

capabilities' (PICs). The statement said that the PICs would be developed within a classified Defence Industry Self-Reliance Plan, but that they would be included in the public DCP. No Defence Industry Self-Reliance Plan was ever produced.

The situation in 2009

In May 2009, the government released its new Defence White Paper. While it did not disclose its PICs (arguing that to do so 'would confer an advantage on any adversary seeking to exploit critical strategic vulnerabilities' and 'compromise commercial leverage'), it listed a range of industry capabilities to be monitored.

By July 2009, the decision to keep the PICs secret had been reversed and a four-page *Priority Industry Capabilities Fact Sheet* was released. It listed 12 PICs along with a paragraph of explanation for each. The PICs are a subset of the monitored industry capabilities given in the 2009 White Paper, specifically:

- Electronic warfare
- High frequency and phased array radars
- 'High end' system and 'system of systems' integration
- Through-life and real time support of mission and safety critical software
- Anti-tampering capabilities
- Signature management
- In-service support of the Collins combat system
- Acoustic technologies and systems
- Ship dry docking facilities and common user facilities
- Selected ballistic munitions and explosives
- Infantry weapons and remote weapons stations
- Combat clothing and personal equipment.

Given the many items that are clearly necessary for Australia's defence self-reliance but that are omitted from the latest list of PICs (such as routine repair, maintenance and provisioning), the conception of what a PIC is has narrowed considerably since the 2007 statement. It is not known what additional filter has been applied to generate the current list. While the fact sheet attempts an explanation, it remains unclear what it means for a PIC to be 'only that element of a broader industry capability that provides the ADF a strategic advantage' or the 'tip of the capability sword'. In the final analysis, it makes no sense to focus on the ability to maintain the combat system of a platform if its propulsion system is unsupportable—both are as necessary as they are 'strategic'.

What does industry think about the PICs?

While industry was pleased to see the PICs finally disclosed, it still felt that the PICs fall far short of providing adequate long-term guidance on what the government expects from industry. In particular, it noted that:

- the list focuses on a limited range of 'high profile' capabilities and ignores a great many routine capabilities that are nonetheless strategically essential
- the level of detail is too low.

Industry seeks a return to the sort of detail provided in the defunct *Defence needs of Australian industry* publication or the even more prescriptive UK *Defence Industrial Strategy*.

In parts of industry, the policy of designated PICs has created unmet expectations of more concrete action by the government. More generally, industry is frustrated with the lack of implementation of industry priorities and the 'on again, off again' approach that has arisen over the past nine years.

Conclusion

The quality of information about the government's priorities for the Australian defence industry reached a peak in 2000 and then fell. Attempts to correct the situation since then have lacked coherence and implementation.

Further reading

The basic framework upon which successive policies covering local industry capabilities have been built is set out in Chapter 6 of the 1987 Defence White Paper. The 1993 Strategic Review dealt with local industry priorities in Chapter 6, the 1994 Defence White Paper in Chapter 11, the 2000 White Paper in Chapter 9 and the 2009 White Paper in Chapter 16.

Defence and Industry Strategic Policy Statements were published in 1997 and 2007, with a discussion paper preceding the latter in 2006. A *Priority Industry Capabilities Fact Sheet* was published in mid-2009.

The trilogy of sector plans was made up of the Australian Naval Shipbuilding and Repair Sector Strategic Plan (2002), the Australian Defence Aerospace Sector Strategic Plan (2003) and the Defence Electronics Systems Sector Strategic Plan (2003). *Defence needs of Australian industry* booklets were published in 1997, 2000 and one year in the interim.

The United Kingdom's *Defence Industrial Strategy* was published by the British Government in 2005.

Copies of most of these publications are available at www.aspi.org.au/dcp_review_reading/.

Chapter 7: Increasing transparency

This chapter presents the findings and recommendations of the review. We conclude broadly that the benefits of greater disclosure are clear, and that any attendant risks are manageable. Therefore, our recommendations focus on ways to improve the quality and communication of defence capability planning information to industry and the public.

This report and our recommendations should be seen in context. While there has been a discernible decline in capability planning transparency in recent years, Australia is still more open than most other countries about its plans. The challenge is to build on the good features of the current approach to improve the disclosure of defence capability planning information.

Our recommendations fall into four categories:

- increase the range and precision of capability planning information
- enhance the flow of information between Defence and industry
- improve the reliability of capability planning information
- provide more useful information about industry priorities.

Increase the range and precision of capability planning information

The arguments for greater disclosure of defence capability planning information have been explored at length in earlier chapters. Two points stand out. First, as a monopsony customer, the more that Defence tells the market about its plans, the more likely its needs will be met efficiently—which, in turn, will deliver better value to the taxpayer. Second, the more that the public knows about defence planning, the more likely is an informed public discussion about those plans and Defence's performance in delivering them.

Having looked closely at the risks associated with greater disclosure, we judge that the disclosure of capability planning information can be improved in range and precision without adversely affecting the Australian Government's commercial position in subsequent negotiations. Specifically, in the critical areas of cost and schedule, we recommend a regime similar to that employed in the 2001 DCP but with tighter cost bands and explicit schedule milestones with acknowledged uncertainties. We also believe that percentage spend spreads would be a useful tool to assist industry to structure offers consistent with Defence's available funds.

Recommendation 1: Restructure the public Defence Capability Plan to provide better information by adjusting and expanding existing information as follows:

- a ten-year time horizon based on years of decision (second pass)
- specific years for first pass, year of decision, initial operating capability (IOC) and full operating capability (FOC) for all projects in the plan, including the assessed uncertainty in each (this might be done through a single table giving the indicative uncertainty for each year of the plan)

- cost bands with an uncertainty of +/–10% (i.e. cost bands equal to ~20% of project value)
- a year-by-year percentage spend profile for each project
- dates for market solicitation (requests for proposals, requests for information, requests for tenders) for the first 24 months of the plan, by month for the first six months and by quarter thereafter
- a table disclosing changes to project names, numbers and phases, including those resulting from consolidating and splitting projects and phases.

Several extra pieces of information also warrant inclusion in the DCP. First, we think that the definition of IOC for each project should be disclosed to let industry know what Defence expects as an initial capability outcome from the project. In addition, basic information about the cost and duration of the in-service phase of prospective capabilities should be disclosed, not only to help industry gauge the scale of prospective opportunities in materiel sustainment, but also to assure the public that Defence is making realistic provisions for the future cost of ownership.

Recommendation 2: Include further data in the Defence Capability Plan on the in-service phase of planned capabilities as follows:

- a definition of IOC for each project
- the expected life-of-type for the capability sought by each project
- the estimated annual personnel and operating costs for the capability sought by each project.

Aggregate program-level information about future Defence demand is invaluable for large firms trying to make strategic decisions about their businesses, and equally so for anyone trying to gauge the cost and affordability of the government's capability plans. For these reasons, we conclude that the existing information on aggregate demand should be made more comprehensive and be supplemented by a discussion of the risks to the overall affordability of the program.

Recommendation 3: Improve the program-level data in the public DCP to provide better information on aggregate demand and overall risks as follows:

- graph in total and by industry sector
    - estimated overall sustainment spending over the next ten years
    - estimated local sustainment spending over the next ten years
    - estimated overall acquisition spending over the next ten years
    - estimated local acquisition spending over the next ten years
- an introductory chapter on the affordability of the DCP, containing;
    - a graph of estimated approved and unapproved major capital spending for the decade
    - assumptions about foreign exchange for the Euro and the US dollar
    - the price basis for the plan
    - the percentage of overprogramming
    - an analysis of the risks to the affordability of the capital equipment program.

While the Major Capital Equipment Program is the largest slice of Defence's annual investment spending, it is far from the whole story—there are also the Capital Facilities and Minor Capital Equipment programs. In recent years, the level of disclosure in both these areas has declined substantially. To some extent, this probably reflects the characteristics of each. The Capital Facilities Program operates in a very active and competitive market in which Defence is far from a monopsony customer. What is more, the civil construction sector can mobilise relatively quickly to bid for and undertake work. Similarly, because of their smaller scale and shorter duration, minor capital projects are not planned over as long a time horizon as major projects. Nonetheless, in each case, we believe that greater disclosure would improve the quality of competition that Defence receives for its work.

Recommendation 4: Reinstate previous disclosure of 'Minors' and facilities plans, specifically;

- publish every six months an electronic 'Yellow Book' of minor capital projects, with a two-year time horizon
- publish every six months an electronic 'Green Book' of capital facilities projects, with a two-year time horizon.

The information to be disclosed under Recommendations 1 to 4 is largely pre-existing and requires no additional work by Defence to generate. The only possible exception is an analysis of risks to the major capital equipment program. However, if no such analysis exists, it would be worth undertaking as part of prudent management of the program in any case.

Enhancing the flow of information between Defence and industry

If information is worth disclosing, it is worth making it readily available. Defence currently does a good job of producing and distributing the public version of the DCP, and we support the existing plan to update the DCP electronically every six months. However, having seen the utility of the hard-copy version of the plan to industry, we believe that a hard-copy version should be published every year rather than every two years—pending a review in two years time to gauge the uptake of the electronic version.

Furthermore, it is clear to us that much greater use could be made of the web to provide comprehensive and up-to-date information on individual DCP projects. Defence already has plans to expand the Defence+Industry ePortal to include project-specific information. We endorse this idea—with the caveat that the information should be available to the public as well as to industry—and offer recommendations for what it should include.

Recommendation 5: Ensure the ready availability of the information in the DCP by:

- publishing a hard-copy DCP every year (pending a review in two years)
- publishing a PDF update at the intermediate six-month point
- providing an interactive web-based facility with a web-page for each DCP project containing

- links to the latest and all previous public DCP entries (so that a baseline for tracking change is available)
- advice on forthcoming industry solicitations
- a link to any project website held elsewhere in DMO or Capability Development Group
- links to related approved and unapproved projects
- links to relevant ministerial and departmental media releases and speeches
- contact details for each project.

The DCP is one component of a cluster of documents and interactions that convey information between Defence and industry. Aside from the DCP and other avenues of communication already mentioned, there is also a scorecard framework that provides a mechanism for Defence and industry to rate each other's performance on specific contracts. But while the flow of information is reasonably healthy, the review believes that improvement is possible and desirable. This is not just a matter of Defence providing further opportunities; industry must also be willing to engage openly and honestly with Defence for effective communication to occur. Understandably, however, talking frankly to your only customer can create concerns.

One point deserves explanation. The Defence+Industry Conference is a highly valued opportunity for industry to meet Defence officials and show its wares. While the two most recent conferences in Adelaide have enjoyed excellent facilities, industry was disappointed that far fewer working-level Defence personnel attended than when the conference was held in Canberra. Unless Defence is willing and able to bring its people from Canberra, future conferences should be held in the national capital.

Recommendation 6: Improve the flow of information between industry and Defence by:

- holding regular meetings of the Capability Development Advisory Forum
- creating an Infrastructure Advisory Forum to facilitate communication between the construction industry and Defence
- regularly engaging with peak bodies such as the Australian Industry Group Defence Council and the Australian Constructors Association
- appointing a representative from the Australian Industry and Defence Network to the DMO CEO consultative forum on the Strategic Reform Program so that SME views can be heard
- holding the two-yearly Defence+Industry conference in Canberra so that working-level capability development and DMO staff can interact with industry participants, or committing to bring those personnel to an interstate venue if the conference is held interstate
- using the successful Land Environment Working Group as an archetype for how the Maritime and Aerospace working groups can engage industry, especially in regard to linking prime contractors with SMEs.

Improving the reliability of capability planning information

Industry appreciates that the DCP is subject to ongoing review and revision, and adapts accordingly. However, while it is accepted that the plan will change as strategic priorities shift and new technical solutions emerge, there is considerable frustration with delays and deferrals due to poor planning and execution. There is also

no doubt that delays and volatility in the plan add costs to industry and ultimately to the taxpayer. These considerations strengthen the argument for proceeding apace with the reforms stemming from the Mortimer Review of defence procurement, particularly in the areas cited by industry as a concern: accountability, delegation and commercial behaviour.

The review believes that defence capability planning information can drive performance if the delivery of the plan is monitored and reported. The Defence Budget papers currently list all projects planned for first- and second-pass approval in the following twelve months. Reconciling planned approvals with achieved approvals in the annual report would close the loop on planning and implementation. Because delays to market solicitations are cited by industry as a significant area of additional costs, the planned and achieved dates of major industry solicitations could usefully be subject to the same reporting regime. In any case, to assure industry that it will be kept informed, Defence should explicitly adopt a policy of continuous disclosure of changed dates of planned solicitations.

Recommendation 7: Improve the timely execution of DCPs by:

- implementing the recommendations of the Mortimer Review as a matter of priority, particularly those concerning accountability, delegation and commercial orientation
- monitoring the in-year delivery of DCP milestones for first- and second-pass approval and major industry solicitations, and reporting the performance in the Defence annual report
- introducing a policy of continuous disclosure of revised deadlines for industry solicitation; once it is known that a milestone will slip, industry should be advised within one week.

Although the next two recommendations are relevant to the review's terms of reference, they clearly overlap with broader issues. For this reason, they are each put forward for further consideration in a larger context. The first concerns an opportunity to involve industry in the early stages of capability planning. Industry believes that it could help Defence retire risk and improve outcomes if it were engaged at the earliest possible stage in the process. The review believes that the Rapid Prototyping Development and Evaluation Program may provide an appropriate avenue for some projects. Of course, care would be needed to ensure that RPDE members did not gain a competitive edge at the expense of those outside—the principle of non-discriminatory competition must apply—but this can probably be achieved by being careful about the questions posed. In fact, the RPDE Program has already done work relevant to several unapproved projects.

Recommendation 8: Consider making greater use of the Rapid Prototyping Development and Evaluation Program to engage industry at the earliest possible stages of selected DCP projects to help refine options, scope and costs.

The second item for further consideration concerns giving priorities to DCP projects along the lines used in New Zealand. From an industry perspective, the assignment of priorities would allow industry to marshal its efforts in line with the government's priorities. Equally, assigned priorities would help industry to identify the projects more likely to be approved on schedule if the overall program comes under pressure due to resource limitations. However, assigning priorities to projects would inevitably

change the management of the DCP within government, so a decision should rest on its utility in this area.

Recommendation 9: Consider adopting a system of assigning priorities to projects in the DCP.

Providing more useful information about industry priorities

The quality of information about the government's priorities for the Australian defence industry reached a peak in 2000 and then fell precipitously. Repeated attempts to correct the situation over the past nine years have lacked coherence and concrete implementation. And although the eventual publication of the Priority Industry Capabilities in mid-2009 was appreciated by industry, it still falls well short of a comprehensive statement of the government's priorities for local industry. The forthcoming Defence Industry Policy statement is an opportunity to clarify the government's policy and let industry know what the government wants and what it plans to do.

Recommendation 10: The forthcoming Defence Industry Policy statement should:

- provide a comprehensive overview of the government's priorities for local defence industry across all sectors, not just the limited subset presently designated as Priority Industry Capabilities
- commit to providing a regular and more detailed disclosure to industry of Defence's long-term industry priorities, along the lines previously contained in the *Defence needs of Australian industry* publication
- include a clear implementation strategy for all policy objectives.

Further reading

An example DCP web-page appears at www.aspi.org.au/dcp_review_reading/.

Annex 1: Terms of reference

DEFENCE CAPABILITY PLANNING INFORMATION:

TERMS OF REFERENCE

Project Aims

The Government is seeking to improve the content, quality, presentation, transparency and utility of the information made available publicly relating to its current and forward capability planning.

The Government's objective is to provide the public in general and the defence industry in particular, with substantive and reliable information about intended capability acquisitions. For industry, the goal is to help inform future investment decisions and to facilitate quality tenders for upcoming projects, and at the same time to protect the Commonwealth's capability to pursue value-for-money.

Terms of Reference

Identify options for the publication of Defence Department planning information, in a form and at a level which optimises the value of that information to the public in general, and to the defence industry in particular, for planning and investment purposes while protecting the Commonwealth's commercial position.

Issues to be considered include:

- The balance between prescriptive information and broader guidance (such as cost bands, key decision points and capability outcomes).
- The balance between the needs of industry and the need to protect the Commonwealth's commercial position and its requirement to achieve value-for-money.
- Increased information about key project activities that precede first and second pass (such as timings for release for Requests for Information, Requests for Proposal and Requests for Tender) and follow project approval (such as design, build, test and acceptance-into-service schedules).
- Information that will assist industry's planning, skilling and investment decisions.
- Information on the ratio between acquisition and sustainment investment at an individual project level.
- Information about linkages between project, and between projects and related policies, including strategic guidance and operations.
- Information that would assist small to medium enterprises to interpret the planning information and understand potential opportunities through prime contractors.
- Information on Strategic Industry Capabilities.

- Advice on the level of detail which should be provided regarding Priority Industry Capabilities, taking national security concerns, business planning and market impact factors, into account.
- The nature and level of information currently made available and which has previously been made available.
- The limitations of publishing short, medium and long-term planning information.
- The appropriate time horizon and level of certainty required by industry for the provision of public planning information.
- The interaction of the release of planning information to the five-yearly White Paper schedule.
- Any other information that is desirable and appropriate to provide.

The review should:

- Consult with interested stakeholders.
- Advise on options for keeping published planning information up-to-date and the frequency and method of these updates.
- Examine any other matters that would help contribute to the Government's stated aims as outlined above.
- Work closely with the Department of Defence and the Defence Materiel Organisation in delivering advice on these issues.

It is expected that the project would be completed by [two months after contract signature].

Annex 2: Consultations

Where consultations have clearly been undertaken with representatives of a private or public sector organisation, the name of the organisation has been given. Where individuals have been consulted for their individual expertise, a name has been given.

Australian Business Limited, Defence Industry Unit (roundtable with members)

Australian Constructors Association (roundtable with members)

Australian Council of Trade Unions

Australian Defence Association

Australian Industry and Defence Network (roundtable with members)

Australian Industry Group (AiGroup) Defence Council (roundtable with members)

Australian Industry Group (AiGroup) Defence Council Contracting Committee

Australian Manufacturing Workers' Union

Australian National Audit Office

Professor Ross Babbage, Chairman. Kokoda Foundation

Mr Lloyd Bennett, Client Account Executive, Unisys (previously Defence CFO)

Senator Mark Bishop

Air Vice-Marshal (Retd) John Blackburn, AO

Rear Admiral (Retd) David Campbell, AM

Peter Cook, Managing Director, Decision Analysis Ltd, United Kingdom

DefenceSA, Government of South Australia

Defence Teaming Centre, South Australia

Department of Finance and Deregulation, Australian Government

Department of Innovation, Industry and Regional Development, Government of Victoria

Department of Innovation, Industry, Science and Research

- Manufacturing Division
- Enterprise Connect Division
- Enterprise Connect (Defence)

Department of Defence, Australian Government

- Secretary
- Chief of the Defence Force
- Capability Systems Group
- Defence Materiel Organisation
- Minors Program (Navy, Army, Air Force and Joint Logistics Command)
- Industry Division
- Infrastructure Division

Department of the Prime Minister and Cabinet, Australian Government
Department of State and Regional Development, Government of New South Wales
Professor Paul Dibb, AO, Strategic and Defence Studies Centre, ANU
Mr Henry Ergas
Air Vice-Marshal (Retd) Norm Gray, AM
Professor Peter Hall, School of Business, Australian Defence Force Academy
Industry Capability Network (New South Wales) Limited
Industry Capability Network (Victoria) Limited
Industry Capability Network (South Australia) Limited
Mr John Kerin, *Australian Financial Review*
Professor Stefan Markowski, School of Business, Australian Defence Force Academy
Mr David Mortimer, AO
Air Vice-Marshal (Retd) Peter Nicholson, AO
Rapid Prototyping, Development and Evaluation Program
Dr Richard Brabin-Smith, AO, Strategic and Defence Studies Centre, ANU
Mr Trevor Thomas, Editor, *Australian Defence Business Review*
The Treasury, Australian Government
Mr Greg Tunny
Mr Bob Wylie, School of Business, Australian Defence Force Academy
Mr Patrick Walters, *The Australian*
Professor Hugh White, Strategic and Defence Studies Centre, ANU
Katherine Ziesing, Editor, *Australian Defence Magazine*

Acronyms and abbreviations

ACAT	acquisition categorisation
ADF	Australian Defence Force
AIDN	Australian Industry and Defence Network
AiGroup	Australian Industry Group
ANAO	Australian National Audit Office
ASPI	Australian Strategic Policy Institute
CDG	Capability Development Group
DCP	Defence Capability Plan
DoD	Department of Defense (US)
DMO	Defence Materiel Organisation
FOC	full operating capability
FMS	foreign military sales
IOC	initial operating capability
MoD	Ministry of Defence (UK)
NZ	New Zealand
LTDP	Long-Term Development Plan (NZ)
NPOC	net personnel and operating cost
PBS	Portfolio Budget Statements
PIC	Priority Industry Capability
SME	small to medium enterprise
R&D	research and development
RPDE	Rapid Prototyping Development and Evaluation
UK	United Kingdom
US	United States

Notes