The Senate

Foreign Affairs, Defence and Trade References Committee

Procurement procedures for Defence capital projects

Preliminary report

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Members of the committee

Core members

Senator Alan Eggleston, LP, WA (Chair) from 7.7.2011
Senator the Hon Ursula Stephens, ALP, NSW (Deputy Chair) from 7.7.2011
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Senator the Hon Alan Ferguson, LP, SA – until 30.6.2011
Senator Michael Forshaw, ALP, NSW – until 30.6.2011
Senator Russell Trood, LP, QLD – until 30.6.2011

Participating members who contributed to the inquiry

Senator Gary Humphries LP, ACT
Senator the Hon David Johnston LP, WA
Senator Nick Xenophon IND, SA

Secretariat

Dr Kathleen Dermody, Committee Secretary
Ms Jane Thomson, Principal Research Officer
Ms Alpana Modi, Research Officer
Ms Angela Lancsar, Administrative Officer
Ms Jo-Anne Holmes, Administrative Officer

Senate Foreign Affairs, Defence and Trade Committee
Department of the Senate
PO Box 6100
Parliament House
Canberra ACT 2600
Australia

Phone: + 61 2 6277 3535
Fax: + 61 2 6277 5818
Email: fadt.sen@aph.gov.au
Internet: www.aph.gov.au/Senate/committee/fadt_ctte/index.htm

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Acronyms and Abbreviations

ADF	Australian Defence Force
ANAO	Australian National Audit Office
AWD	Air Warfare Destroyer
CAB	Cost Analysis Branch, CIR Division, Capability Development Group
CABSUB	Cabinet Submission
CCDG	Chief, Capability Development Group
CDB	Capability Development Board
CDD	Capability Definition Document
CDF	Chief of the Defence Force
CDG	Capability Development Group
CDS	Chief Defence Scientist
CEO	Chief Executive Officer
CGRB	Capability Gate Review Board
CIOG	Chief Information Office Group
CIR Div	Capability Investment Resources Division, Capability Development Group
CM	Capability Manager
COTS	Commercial-off-the-shelf
CPSP	Capability Proposal Second Pass
CS Div	Capability Systems Division, Capability Development Group
CTD	Capability and Technology Demonstrator
DCDH	Defence Capability Development Handbook
DCM	Defence Capability Manual

DCP	Defence Capability Plan
Defence	Australian Defence Organisation
Department	Department of Defence
DMO	Defence Materiel Organisation
DPG	Defence Planning Guidance
DPPM	Defence Procurement Policy Manual
DSTO	Defence Science and Technology Organisation
DWP	Defence White Paper
EWG	Environmental Working Group
FIC	Fundamental Inputs to Capability
FMS	Foreign Military Sales
FSR	Force Structure Review
HCS	Head Capability Systems
HMAS	Her Majesty's Australian Ship
ICDS	Initial Capability Definition Statement
IPT	Integrated Project Team
JCPAA	Joint Committee on Public Accounts and Audit
LOR	Letter of Request
MAA	Materiel Acquisition Agreement
The minister	Minister for Defence
MINSUB	Ministerial Submission
MOTS	Military-off-the-shelf
MPR	Major Projects Report
MSA	Materiel Sustainment Agreement
NPOC	Net Personnel and Operating Costs
NSC	National Security Committee of Cabinet

ORC	Options Review Committee
OTS	Off-the-shelf
PMP	Project Management Plan
PPP	Public Private Partnerships
Joint PD	Joint Project Directive
POC	Personnel and Operating Costs
POCD	Preliminary Operational Concept Document
RAN	Royal Australian Navy
RFI	Request for Information
RFP	Request for Proposal
RFT	Request for Tender
RPDE	Rapid Prototyping, Development and Evaluation Program
SME	Small and medium enterprises
SRP	Strategic Reform Program
S&T	Science & Technology
TCD	Test Concept Document
TRA	Technical Risk Assessment
TRI	Technical Risk Indicator

Executive Summary

In his 2003 report, Malcolm Kinnaird commented on the numerous reviews undertaken into Defence procurement, observing that 'too often implementation has not been given the priority necessary to ensure that there is sustainable momentum for change and reform.[1] Eight years on and having witnessed an endless merry-go-round of reviews and implementation programs, the committee is convinced that the Australian Defence Organisation (Defence) is caught in a cycle of reforms that is adding further complexity to an already complicated and confused procurement process. The committee believes that the government and Defence must start to look beyond Defence's procurement processes to the root causes of its capability development woes. They must stop heralding reviews as a solution and accept them as a symptom of deep seated problems. Today's projects of concern list and the recent disintegration of Navy's amphibious capability stand as stark reminders of the magnitude of the problems before Defence.

In this preliminary report, the committee endeavoured to present Defence's capability development cycle in a clear and logical sequence. It found, however, a convoluted process overburdened by administration. Moreover, information provided by the Department of Defence and DMO did not help to bring clarity and certainty to the process or the roles of those responsible for it. The yet to be fully implemented recommendations and findings of the reviews still to be completed have complicated this task. Furthermore, recent reviews have highlighted the problem of non-compliance with revised manuals and guidelines on procurement practice and procedure. Indeed, evidence before the committee suggested that the convoluted process, lack of clarity and lack of compliance all point to failures of the governance structure within the broader Defence Organisation.

The committee notes, however, that Defence has made notable progress in some areas. These include improvements in the 'two-pass' capability development and government assessment process since 2003, the establishment of the Defence Capability Group, efforts by the Defence Materiel Organisation to become more business-like and the continuing efforts to improve the skills base of those involved in the capability development and acquisition process. Even so, while the committee acknowledges the efforts made to be more business-like in respect to the process, it also recognises that the governance structures within the broader Defence Organisation would not be tolerated in any successful business.

Overall, evidence before the committee identified the following major concerns:

- failure to appreciate the entire whole-of-life capability development process and its component parts and failure to adhere to and appreciate linkages between strategic guidance and capability development;

1 Malcolm Kinnaird, *Defence Procurement Review 2003*, p. 49.

- inefficiencies in the process from the earliest analysis, investment and industry engagement phase evident in ad hoc adherence to guidelines and manuals, and to changes to scope and delays;
- poorly defined responsibilities and accountabilities at every phase and across the lifecycle in relation to roles, functions and leadership which contribute to problems such as scope creep and schedule slippage;
- serious shortfalls in skills and resources compounded by difficulties attracting, developing and retaining technical and engineering expertise, and also by the trend to outsource—in this regard Navy's failure to address the scale and scope of the challenge is striking;
- poor risk management including failure to identify and mitigate risk effectively from the very beginning of the capability development process, loss of corporate knowledge and failure to incorporate lessons learned into verification and decision making processes;
- limited strategic consideration of Australia's defence industry including impact of off-the-shelf purchases, interconnection between industry viability and ADF capability, and relationship with Defence as sole customer;
- lack of contestability, independent verification (for example the role of DSTO in early risk analysis) and rigorous scrutiny of capability priorities identified in the Defence White Paper, Defence Capability Plan (DCP), and at first and second pass; and
- indications that Defence is already slipping behind its procurement schedule and will not meet the ambitious procurement program outlined in the White Paper, which highlights issues that go to the reliability of key documents, such as the White Paper and the DCP, and the transparency in Defence budgeting for stated future procurements.

The committee accepts that many of the above-mentioned outstanding issues have been raised repeatedly by various Defence reviews, in ANAO reports and by Defence analysts and observers over several years. As they are well-articulated and widely acknowledged, the key question for the committee is, therefore, why they persist.

Thus, while this preliminary report has highlighted long standing problems, its main purpose is to invite comment on the underlying causes that need to be fixed if Defence's reform program is to be effective and lasting. For example, it raises questions about whether an attitudinal sea change is required involving, on the part of Defence leadership, a commitment to genuine reform and to developing skills; openness to scrutiny; and willingness to accept responsibility, to be accountable and to lead. On the other hand, entrenched structural impediments to efficient and effective leadership within Defence could be at the source of Defence's procurement problems requiring reallocation and redefinition of roles, functions and responsibilities. Indeed, the current management matrix model may need overhauling or even dismantling. These are important questions that the committee will endeavour to answer in its main report to be tabled in the middle of 2012.

Chapter 1

The terms of the inquiry

Background to inquiry

1.1 In 2009, the Minister for Defence (the minister) released the Defence White Paper, *Defending Australia in the Asia Pacific Century: Force 2030*. This document sets out an ambitious acquisition program, including twelve submarines to be assembled in South Australia. According to one analyst, the scale, complexity and sophistication of the capability priorities needed to build Force 2030 would require 'sound plans and lots of money'.[1]

1.2 It should be noted, however, that for many years the Australian Defence Organisation's (Defence) program for the procurement of major capital assets has been dogged by delays and cost overruns. Indeed, a number of the projects in the White Paper that have progressed to the Defence Capability Plan (DCP) stage and beyond have experienced significant problems that have warranted their placement on the Defence Materiel Organisation (DMO) list of projects of concern. This list contains high profile projects that are experiencing significant cost and/or schedule troubles that require close monitoring in order to get the projects back on track. The projects in the White Paper on this list include the:

- Anzac Anti-Ship Missile Defence upgrade (added 2008, removed November 2011);
- Wedgetail AEW&C aircraft (added January 2008);
- Tactical Unmanned Aerial Vehicle (added September 2008, removed December 2011)
- KC–30A air-to-air refuelling craft (added October 2010);
- Joint Air-to-Surface Standoff Missile (added November 2010, removed December 2011); and
- MRH-90 Helicopter (formally added November 2011).

1.3 The Tiger Armed Reconnaissance Helicopter was on the list of projects of concern but was remediated and removed from the list in April 2008 before the White Paper was produced.

1.4 There are also other projects that have or are experiencing difficulties including the Air Warfare Destroyer (AWD) and the F-35 Joint Strike Fighter. With regard to the AWDs, adjustments had to be made to the construction program to

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1 Mark Thomson, 'Defence Funding and Planning: Promises and Secrets', *Security Challenges*, vol. 5, no. 2, (Winter 2009), p. 89.

relieve workload pressure on the shipyards which are expected to reduce the two-year delay in the project by twelve months. The F-35 Joint Strike Fighter has experienced serious setbacks at an early stage of its development in the United States. The minister stated in July 2011 that there were 'a range of unknowns' in this highly complex, high development project and that they were starting to 'rub up' against Defence's 'pre-planning for slippage on schedule and on cost'. According to the minister:

> In terms of schedule, there'll be an exhaustive review done before the end of this year, so I think by the first quarter of next year, we'll be in a much better position to know whether we need to start really seriously planning for a gap in capability, and cost will also be impacted upon by future decisions in terms generally of United States Defence budget cuts.[2]

1.5 For some major acquisitions, problems have emerged during their in-service or sustainment stage. The well publicised ones at the moment include the:

- landing platform ship where troubles such as extensive corrosion have resulted in the early decommissioning of HMAS *Manoora* and HMAS *Kanimbla* (decommissioned 25 November) and HMAS *Tobruk* undergoing maintenance for most of 2011; and
- Collins Class Submarine Sustainment Project, which is experiencing serious 'technically complex problems', and was added to the projects of concern list in November 2008. It remains there today.[3]

1.6 It is in this context of Defence's troubled acquisition and sustainment programs and the ambitious procurement schedule in the White Paper that, on 9 February 2011, the Senate referred the following matter to the Senate Foreign Affairs, Defence and Trade References Committee for inquiry and report:

> That the committee inquire into and report by 30 November 2011 upon procurement procedures for items identified in the Defence White Paper, *Defending Australia in the Asia Pacific Century: Force 2030* and in particular:
>
> a. assess the procurement procedures utilised for major defence capital projects currently underway or foreshadowed in the Defence White Paper, including the operations of the Capability Development Group and its relevant subcommittees;
>
> b. assess the timeline proposed for defence modernisation and procurement outlined in the Defence White Paper;

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2 Minister for Defence, the Hon. Stephen Smith MP, 'Interview with Ali Moore', Lateline, 27 July 2011, http://www.minister.defence.gov.au/2011/07/27/minister-for-defence-interview-with-ali-moore-lateline/ (accessed 5 December 2011).

3 Minister for Defence, the Hon. Stephen Smith MP, 'Paper presented to the Defence Senior Leadership Group', Canberra National Convention Centre, 18 November 2011, http://www.minister.defence.gov.au/2011/11/18/minister-for-defence-paper-presented-to-the-defence-senior-leadership-group/ (accessed 5 December 2011).

c. assess proposals arising from the Defence accountability reviews, including, the Mortimer Review, the Pappas Review and the McKinsey Report (2010), in regards to enhancing accountability and disclosure for defence procurement; and

d. make recommendations for enhancing the availability of public information and parliamentary oversight and scrutiny of defence procurement in the context of guaranteed 3 per cent real growth in the Defence budget until 2017–18.

On 5 July, the terms of reference were amended to include:

e. assess the effectiveness of the Defence Materiel Organisation including:

i. its role and functions;

ii. its processes, management structure and staffing, in particular as compared to similar organisations in the United Kingdom, the United States of America, Canada and other comparable jurisdictions and large Australian commercial enterprises;

iii. its full costs, assessed against the timeliness and quality of its output and the service it provides to the Australian Defence Force; and

iv. the extent to which it value-adds to national defence and to the long-term viability of Australian defence industries.

1.7 On 30 November, the committee sought an extension to table a preliminary report before 16 December 2011.

1.8 This preliminary report forms the basis for further investigation and analysis and will require the committee to take further evidence. It is the committee's intention to then table a final substantive report by 28 June 2012.

Conduct of inquiry

1.9 The inquiry was advertised in the *Australian*, *Australian Defence Business Review*, *Australian Defence Magazine* and through the Internet. The committee invited submissions from a wide range of Defence stakeholders including the Department of Defence and Defence Materiel Organisation, State and Territory Governments, the Defence industry, interested organisations and individuals.

1.10 The committee received 32 public and 4 confidential submissions. A list of individuals and organisations that made public submissions to the inquiry together with other information authorised for publication is at Appendix 1. The committee held public hearings in Canberra on 11 and 12 August, and 5 and 7 October 2011. Details of public hearings are referred to in Appendix 2. The submissions and Hansard

transcript of evidence may be accessed through the committee's website at http://www.aph.gov.au/senate/committee/fadt_ctte/index.htm

Key documents and references

1.11 In terms of documentation, the key Department of Defence (department) publication detailing the capability development process is the *Defence Capability Development Handbook* (DCDH). According to the foreword, the handbook serves as a 'guide' to the capability development body of knowledge, best practice and procedures for the Australian Defence organisation.[4]

1.12 Whilst primarily addressing the requirements phase of the capability life cycle, the DCDH should, according to Defence, be read in conjunction with the following three key documents:[5]

- *The Strategy Framework* (2010) published by the department and detailing the needs phase of the capability development life cycle.
- *DMO Acquisition and Sustainment Manual* (2007) published by the Defence Materiel Organisation (DMO) and detailing DMO's role in the acquisition and sustainment of capability.
- *Technical Risk Assessment Handbook* (2010) published by the Defence Science and Technology Organisation.

1.13 This report draws on all three publications. The committee is also aware of other important policy manuals, guidance documents, instructions, legislation and regulatory requirements regarding procurement including the *Defence Procurement Policy Manual* (DPPM). It is the committee's intention to identify all such relevant documentation in order to consider and draw upon it where relevant in its second substantive report.

Purpose of report

1.14 The purpose of this report is to lay the foundation for a more detailed and considered analysis in a subsequent report. In considering the intentions and broad thrust of the Defence reviews and of the capability development process, the report seeks to understand the process, identify the key adherence documents and the roles and responsibilities of the agencies and personnel involved.

1.15 In seeking to establish clarity about the capability development process, the committee raises a number of unanswered questions throughout the report. It also articulates a number of themes and issues raised in evidence regarding aspects of the process which it intends to consider and report on in the future. In taking this

4 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. iv.

5 The DCDH replaces the 2006 *Defence Capability Development Manual*. Department of Defence, *Submission 21*, Attachment D, p. 27.

approach, the committee hopes that the report will stimulate further discussion. Indeed, by identifying some of the key areas of concern, the committee's intention is to generate discussion amongst all involved stakeholders and thereby attract additional evidence.

Scope of report

1.16 In light of its stated purpose, this report does not address a number of terms of reference before the committee. While it considers term of reference (c) concerning the Defence reviews and identifies key issues in relation to terms of reference (a), (b) and (d), these matters will be considered in detail in the committee's second report.

1.17 Similarly, it is the committee's intention that its second and substantive report will consider term of reference (e) concerning the Defence Materiel Organisation (DMO). As part of these future deliberations, the committee will consider the impact of DMO operating as a Prescribed Agency.

1.18 The Defence Trade Controls Bill 2011, the purpose of which is to implement the *Treaty Between the Government of Australia and the Government of the United States of America Concerning Defence Trade Cooperation* is currently before the Senate Foreign Affairs, Defence and Trade Legislation Committee. Matters of substance raised by that committee may have implications for this inquiry and will, therefore, be considered by this committee in its main report.

Challenges encountered by the committee

1.19 It only takes a cursory glance at a Defence procurement chart to see the convoluted and incomprehensible web of documents, committees and milestones that underpin the capability development and procurement process. In this report, the committee sets out to simplify this maze by identifying the key steps and those responsible for fulfilling them. In pursuit of this objective, the committee sought evidence from a wide range of Defence stakeholders and held four days of hearings with Defence agencies, industry, analysts, and observers.

1.20 From the outset, however, the committee recognised that there are a number of challenges to achieving this objective. These include:

- the layers of administrative bureaucracy and documentation which have contributed to a process which is convoluted and extremely difficult to penetrate and understand;
- the ongoing reform agenda and ever-shifting ground under which Defence operates;
- the effect of an ever-growing number of reviews which remain pertinent but limited implementation, failure to adhere to policy or inconsistent application result in failings and shortcomings which are then met with another round of reviews and committees formed to respond to them;

- reluctance on the part of the defence industry to criticise publicly Defence procurement processes given the influence Defence is able to exert over industry as a monopsony; and
- the potential for the independent voice of agencies such as DSTO and DMO to get lost in pursuit of a 'One Defence' position.

1.21 These challenges remain before the committee in trying to understand the process, its structure and people. Whilst seeking to bring coherence to the procurement process in this report, the committee identifies, at each stage of the capability development life cycle, a series of unanswered questions, concerns and issues for future clarification.

Structure of report

1.22 This report focused on the findings and recommendations of Defence reviews including the Kinnaird Review, Mortimer Review and Pappas Report before considering the response and reforms undertaken by Defence agencies to implement those recommendations.

1.23 Each chapter of the report considers a phase in the capability development and acquisition process in terms of the process, the structure or the division of responsibility and accountability between the involved agencies and the personnel involved.

1.24 Chapter 2 provides an introduction and overview to the Defence capability development and procurement context which it recognises as unique in a number of ways including the fact that the government operates as both regulator and customer.

1.25 Chapter 3 details the respective Defence reviews (Kinnaird, Mortimer and Pappas) before outlining the current range of reviews before Defence and their implications for Defence.

1.26 Chapter 4 concerning the first stage of the capability development process identifies a number of concerns raised in evidence including the transition from strategy to capability, early engagement with and input from industry, and timely consideration of capability sustainability and whole-of-life costs.

1.27 Chapter 5 details the requirements stage of the process and acknowledges the debate surrounding consideration of the military-off-the-shelf option in relation to risk and industry sustainability.

1.28 Chapter 6, concerning the acquisition phase, considers governance issues including contract management, oversight and coordination as well as commercial practices.

1.29 Chapter 7 details the sustainment phase and raises questions regarding the strategic decision making process in relation to industry capacity to maintain an

Australian Defence Force capability and the centralisation of sustainment functions to the Defence Materiel Organisation.

1.30 In trying to make its way through the maze of procurement, the committee endeavours to peel back the layers of administrative bureaucracy in order to identify the fundamental elements critical to the integrity of the process. To this end, Chapter 8 provides an overview of the key areas that the committee intends to pursue.

Note on references

1.31 References to the Committee Hansard are to the proof Hansard: page numbers may vary between the proof and the official Hansard.

Acknowledgements

1.32 The committee would like to thank the individuals and organisations who contributed to the inquiry.

Chapter 2

Overview of Defence procurement

2.1 This chapter provides an introduction to Defence's procurement and the procurement environment. It explains the complexity and fluidity of the procurement environment whilst providing an overview of the scale and cost of Defence procurement. The chapter concludes with the committee's observations on governance and transparent feedback loops which it recognises as essential to the effective oversight of the entire capability process and its component stages.

Capability and acquisition

2.2 In the context of defence, capability refers to the capability or ability to 'achieve an operational effect'. Maritime, land, air and information capabilities provide Australia with the military capability to 'meet our strategic interests through the ability to act independently, lead military coalitions and make tailored military contributions'.[1] The procurement of capital equipment for defence purposes entails the process from the 'conceptual genesis' of the project to its acceptance into service and ongoing maintenance.[2]

2.3 Major Defence capital projects that provide the Australian Defence Force (ADF) with new or upgraded military capabilities include armoured vehicles, ships, submarines, aircraft, weapons, and communication systems.[3]

2.4 The procurement of capability is complex for reasons including the fact that it is the 'combined effect of multiple inputs' as Defence highlighted:

> Rather than being simply the sum of these inputs, capability is the synergy that arises from the combination and application of these inputs and this determines the level of capability in any particular context.[4]

2.5 Capability is defined as the effects of a system of interlocking and interdependent Fundamental Inputs to Capability (FIC) which include personnel, organisation, collective training, major systems, supplies, facilities and training, support, and command and management.[5] The committee recognises, therefore, that there are a number of key inputs to a capability project including resources, skills

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1 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 2.

2 Derek Woolner, *Submission 34*, p. 1. Disposal is outside of the inquiry terms of reference.

3 Australian National Audit Office, *Submission 22*, p. 1.

4 Department of Defence, *The Strategy Framework 2010*, p. 36, http://www.defence.gov.au/publications/TheStrategyFramework2010.pdf (accessed 6 September 2011).

5 Department of Defence, *The Strategy Framework 2010*, pp. 36–37.

including technical and engineering skills, intellectual property, infrastructure, risk and program management which determine the success or otherwise of a project.[6] Further, project performance is measured by elements including cost, schedule, risk, capability and sustainment.

Fluid and complex procurement environment

2.6 Defence explained the complexities involved in defence procurement:

> Defence must acquire leading edge capabilities and technologies to give our military and intelligence services an operational advantage. This invariably involves significant degrees of cost, capability and/or schedule risk not normally accepted by major companies, or found in most of the projects that they manage.[7]

2.7 Defence emphasised to the committee that leading-edge capabilities and comprehensive support services are 'essential to give Australia an advantage in military operations and intelligence activities'.[8] Defence projects are inherently complex for reasons, therefore, including the level of new or emerging technology employed and to their scale. Indeed, as Defence noted, complexity is a 'key factor in determining risk and the risk mitigation measures to be applied'.[9] Furthermore, the defence marketplace is undergoing change as Australia's major allies are increasingly developing 'single lines' of development for complex platforms through 'spiral' acquisition processes which require 'very early Australian engagement if our specific needs are to be taken into account'. Defence argued:

> Highly complex and integrated weapons systems such as the F-35 fighter aircraft cannot be purchased and then developed to suit Australian needs within reasonable cost or risk parameters and there is no other suitable fifth generation fighter to choose from. While providing opportunities for Defence to be involved in the early stages of major new allied capabilities, this type of international acquisition process limits choice, and limits our ability to influence cost and the timing of equipment delivery.[10]

2.8 Air Marshal John Harvey, Chief of the Capability Development Group (CDG), highlighted the level of risk involved in Defence procurement projects:

> Defence projects are complex because of their scale; the levels of advanced, often developmental, technology employed; the demanding environments in which they must operate; and the levels of assurance required. Procurement varies from developmental leading-edge systems with significant capability, cost and schedule risks through to less complex off-the-shelf buys. All these

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6 Miller Costello & Company, *Submission 30,* p. 2.

7 Department of Defence, *Submission 21*, p. 2.

8 Department of Defence, *Submission 21*, p. 3.

9 Department of Defence, *Submission 21*, p. 3.

10 Department of Defence, *Submission 21*, p. 5.

> projects involve some level of risk. Risk cannot be avoided but it can be measured, mitigated and managed.[11]

2.9 Indeed, Air Marshal Harvey continued:

> In the technologically demanding and expensive defence procurement marketplace, we have to manage risk rather than avoid it. In simple terms, to avoid schedule risk by lengthening project delivery time frames would deny the capability to the war-fighter in the time frame that they need it to. To avoid cost risk by always opting for a fielded capability solution rather than investing in the development of a new technological solution could similarly deny the ADF a capability edge. In seeking to achieve the best capability outcomes for the war-fighter, the best commercial outcome for government and industry and the best value for money result for the taxpayer, we cannot avoid risk and, even with management strategies in place, we are unlikely to be able to retire all schedule risk from every project.[12]

2.10 These concerns were echoed by the Australian National Audit Office (ANAO) which noted that the size and complexity of Defence major capital acquisition projects can be at the 'far end of the spectrum experienced by both public and private organisations within the Commonwealth'.[13] The ANAO suggested that, against a background of significant administrative change, there is also greater risk to be mitigated and over long periods of time. Whilst there are means of mitigating some risk such as purchasing equipment off-the-shelf and by focusing on the capability definition and planning phase, there remains a need for ongoing close management over the life of the project.

2.11 Some submitters to the inquiry also emphasised the complexity of the defence procurement environment. Miller Costello & Company, for example, noted that whilst Defence procurement of specialist military equipment takes place in a market that has the same rules and behaviour as other markets, there are two features that distinguish it:

- Complex manufacturing process required of defence products has no peer: 'No civil industry faces the same challenges and risks in so many technology areas'.
- The company also noted that the government acts solely and unilaterally as both regulator and customer.[14] This second feature and its consequences were raised by other witnesses and is a dynamic that will be considered throughout the inquiry.

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11 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, p. 1.

12 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, pp. 2–3.

13 Australian National Audit Office, *Submission 22*, p. 8.

14 Miller Costello & Company, *Submission 30*, p. 1.

Capability development process

2.12 Capability systems in the ADF have a life cycle that begins with the identification of the need to address a current or potential capability gap. This need is progressively translated into a functional capability[15] system that is operated, maintained and supported until it is ultimately withdrawn from service.[16]

2.13 The capability acquisition process is also followed for upgrades to major platforms which enter the Defence Capability Plan as separate projects, particularly if they contain 'capability enhancements'.[17]

The capability life cycle [18]

2.14 Both the Kinnaird and Mortimer reviews (which are discussed in detail in later chapters) considered Defence procurement through the capability life cycle from the initial stages of strategic assessment where a need is identified to address a current or potential capability gap.[19] Both reviews considered each phase of the capability life cycle and made a series of findings and recommendations directed at strengthening the respective phases as well as the overall life cycle.

2.15 The committee recognises that there are key phases in relation to the capability development life cycle that each major capital acquisition project goes through. These phases, which are interrelated and intersect, provide the framework of the committee's report and include:

- strategy, needs analysis and requirements phase;
- acquisition phase; and
- sustainment or through-life maintenance phase.[20]

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15 Department of Defence, *Defence Capability Development Manual 2006*, p. 4.

16 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, 2008, p. XI.

17 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 13.

18 Department of Defence, *Submission 21*, p. 31.

19 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, 2008, p. XI. Malcolm Kinnaird, *Defence Procurement Review 2003*, p. 3. See also p. 14 of Kinnaird for the capability life cycle graph detailing the points of government agreement and approval.

20 The committee acknowledges a fourth 'disposal' phase whereby major systems and elements of capability systems are withdrawn from service. This phase is not considered by the committee as it outside the inquiry terms of reference before it.

2.16 Defence noted that the major capability procurement process links 'strategic policy to individual equipment purchases, prioritises capabilities across Defence and ensures that capabilities are interoperable in a joint environment'.[21]

2.17 The 2009 Defence White Paper (DWP) provides a definition of interoperability:

> Interoperability is principally concerned with the ability of personnel and systems of different nations and agencies to work effectively together, safely and securely. Where it makes sense to do so, and it is cost-effective and in keeping with the policy settings in this White Paper, capabilities and systems should be designed to be interoperable from conception, not as an afterthought in the capability development process.[22]

2.18 Air Marshal John Harvey, Chief of Defence's CDG also explained the concept of interoperability to the committee:

> Interoperability occurs at a number of levels. In general terms, we have to make sure that any piece of equipment we acquire is interoperable with the system itself that it operates—for example, the radios et cetera in vehicles, to make sure they are compatible with that. We have to make sure that it operates with our own forces and that it also operates with forces of any allies that we are likely to work with as well. So interoperability occurs at a number of levels and can be achieved through common equipment, equivalent equipment or even equipment that just works to the same standards.[23]

2.19 Procurement of Defence major capital equipment is, therefore, complex and can be long term, large scale and must take account of interoperability. In order to provide leading edge capabilities, Defence must 'accept a high level of procurement risk'.[24] In this context, the following processes are fundamental:

- Defence White Papers—outline the strategic interests and priorities of government as well as the broad direction of Defence policy and tasks for the ADF.
- Force Structure Review (FSR)—underpins the White Paper and aims to strengthen the link between strategic guidance, force development and capability decisions. It determines the capability needs that become projects within the Defence Capability Plan (DCP).

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21 Department of Defence, *Submission 21*, p. 16.

22 Department of Defence, *Defending Australia in the Asia Pacific Century: Force 2030*, Defence White Paper 2009, p. 68.

23 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, p. 52.

24 Department of Defence, *Submission 21*, p. 23.

- The DCP provides a costed and scheduled plan for major capabilities identified in the White Paper and any that emerge as necessary between White Papers.[25]
- Forward Work Program—sets out how CDG will bring specific capabilities forward for internal and government consideration.
- A series of internal quality assurance processes and committees, working groups and other bodies as well as gate reviews to examine each project's capability, cost, schedule and risks in detail to ensure that each project is positioned to deliver as required.
- Consideration of major projects by the National Security Committee of Cabinet (NSC) through the first and second pass stages and as necessary thereafter.
- Defence review of its own performance in its annual reporting cycle.[26]

2.20 The committee was not assured, however, that there are clear linkages between the NSC and Defence capability and that they are auditable, have transparent performance measures and are appropriately classified. Indeed, a major issue for the next committee report will be to attempt to audit the links between the NSC, White Paper, Force Structure Review, DCP and Forward Work Program.

2.21 Furthermore, the internal reviews, audits and reporting are a major focus of this inquiry. Evidence obtained by the committee suggests that this feedback loop is not working properly and the committee will endeavour to examine who is involved, how competent (qualified, experienced and independent) they are for the role and how transparent the reporting is. As noted by Air Commodore (Retired) E.J. Bushell, there is:

> ... a critical need for management feed-back loops to ensure visibility and control of program activity and status, and to facilitate governance oversight.[27]

2.22 Indeed, in relation to reporting, questions of independence arise when 'bad news' from technically competent people at the coal face is rolled up in sequential summaries to be a 'green light' by the time the report reaches the Chief of the Defence Force (CDF) or Minister. Likewise, the Defence review of its own performance in the annual report will be examined by the committee in the context of the linkages between the NSC guidance and capability sustained by Defence.

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25 The public DCP is updated six-monthly. Department of Defence, *Submission 21*, p. 16.

26 Department of Defence, *Submission 21*, p. 16.

27 Air Commodore (Retired) E.J. Bushell, *Submission 3*, Attachment 1, p. [30].

Scale and cost of Defence procurement

2.23 In terms of scale, Defence noted that in 2010–11, it will spend over $10 billion acquiring and sustaining military equipment and services. In this regard, it noted that the capital and sustainment budgets are of 'roughly similar proportions'.[28] However, industry witnesses estimated that the ratio for industry was one-third capital and two-thirds sustainment over the life of a capability.[29] Further, Defence held that:

> There are over 230 approved major acquisition projects underway, over 100 minor projects and a wide range of other procurements associated with supporting services and infrastructure. Defence also maintains and sustains around 100 major equipment fleets. Defence is preparing approximately 150 not yet approved projects for consideration by government.[30]

2.24 Defence also stated that since the 2009 Defence White Paper (DWP) until the end of February 2011, the government had approved $7.3 billion worth of major projects, ranging across both first and second and other pass approvals.[31] A question for the committee, however, is what would the amount have been had projects not been deferred.

2.25 The Chief Executive Officer (CEO) of the Defence acquisition agency, the DMO, Mr Warren King, provided an outline of DMO expenditure in relation to major capital projects which will amount to about $11 billion for the year:

> That is 42 per cent of the Defence budget and nearly 0.9 per cent of GDP. To put that perhaps in more tangible terms, that is $45 million a day that we have to manage, and manage well. Fifty-four per cent of our budget is spent in Australia—so that is about $5.4 billion of the expenditure we make—and, of that budget, we spend about $2.8 billion with Australian SMEs.[32]

2.26 Mr King further explained that DMO runs between 230 and 240 capital projects. Of these projects, approximately 140 of them are worth more than $20 million whilst approximately 100 projects have a value of less than $20 million. Furthermore, DMO supports 100 projects in sustainment at $5 billion a year. In order to do this, DMO has a staff of 7500 people located across 40 mostly regional sites around the country.[33] At the same time, Australia's defence industry employs approximately 29 000 people and supplies in excess of $5 billion worth of material and services to Defence each year. [34]

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28 Department of Defence, *Submission 21*, p. 3.

29 Innes Willox, Australian Industry Group Defence Council, *Committee Hansard*, 11 August 2011, p. 14.

30 Department of Defence, *Submission 21*, p. 3.

31 Department of Defence, *Submission 21*, p. 3.

32 Warren King, Defence Materiel Organisation, *Committee Hansard*, 7 October 2011, p. 5.

33 Warren King, Defence Materiel Organisation, *Committee Hansard*, 7 October 2011, p. 5.

34 Department of Defence, *Submission 21*, p. 6.

Committee view

2.27 The Defence capability development and acquisition process is extremely complex and requires an understanding of the entire whole-of-life process as well as the respective phases and component parts. The committee appreciates that strong and well articulated linkages between strategic guidance and capability development as well as considerations including a project's life cycle and interoperability are fundamentally important to the process. Furthermore, in order to allow for both the oversight of the entire process and its components, well defined management feedback loops which work effectively are essential. In this regard, the committee notes the observations of Air Commodore (Retired) E.J. Bushell who articulated the importance of management feedback loops not only in terms of enabling an understanding of the accurate status of a project but also in relation to the effective implementation of Defence reforms.

> Feed-back loops, integrated with, but independent of, functional management, are designed to provide current and accurate project status visibility up through the executive chains of management and governance. Such loops, properly resourced in skills and competencies, offer a more cost effective and time efficient means of introducing reforms that become self-actualising and so will not fade over time or through interference or neglect.[35]

2.28 The next chapter will consider the Defence Reforms and their implementation.

35 Air Commodore (Retired) E.J. Bushell, *Submission 3*, Attachment 1, p. [30].

Chapter 3

The Defence reviews and fluid reform agenda

3.1 This chapter provides an overview of the Defence reviews as defined in the inquiry terms of reference. It details the respective reviews, their findings and recommendations whilst also providing a summary of the many other reviews that have been conducted or which are currently underway. The chapter concludes by acknowledging the fluid reform agenda and its impact on the Defence procurement process.

Background to the Kinnaird, Mortimer, Pappas and McKinsey reviews

Kinnaird Review

3.2 In December 2002, Malcolm Kinnaird, AO was commissioned to conduct a review of the 'problems associated with major Defence acquisition projects'. Kinnaird and his team submitted their *Report of the Defence Procurement Review* or Kinnaird Review on 15 August 2003 and the report was subsequently released on 18 September 2003. The review made ten recommendations and concluded that as there is no single cause of the failures in the development of capability and the acquisition and support of defence equipment, there is no single remedy to ensure that the problems will not recur.[1]

3.3 Kinnaird set in train a reform agenda that provided a key reference point for future reviews. The main thrust of his recommendations were directed at:

- improving the quality of information to inform decision-making, especially government;
- strengthening the capability definition and assessment function;
- developing reliable whole-of-life costs which are taken into consideration throughout a project's life;
- recognising off-the-shelf acquisitions as an integral part of procurement considerations;
- attracting project management skills to DMO;
- improving the accountability of Capability Managers; and
- transforming DMO into a performance driven organisation.

3.4 The Kinnaird Review recommendations led to a number of reforms including the two-pass approval system and creation of the Capability Development Group (CDG) headed by a three-star officer or equivalent. Lieutenant General David Hurley was appointed Chief of the CDG in December 2003 whilst the Defence Procurement

1 Malcolm Kinnaird, *Defence Procurement Review 2003*, p. 47.

Advisory Board was established in March 2004. Kinnaird's recommendations also led to the creation of the Defence Materiel Organisation (DMO) as a prescribed agency under the *Financial Management and Accountability Act 1997*.[2] The Minister for Defence, the Hon. Stephen Smith MP (the minister) stated in May 2011 that together with these initiatives, most of the Kinnaird reforms have been implemented and have had a 'positive impact'.[3]

Mortimer Review

3.5 In May 2008, the government commissioned David Mortimer, AO to conduct a formal evaluation into the effectiveness of ongoing reforms in the DMO implemented following the 2003 Kinnaird review. Mortimer and his team were also asked to provide advice on identifying further potential reforms to the acquisition and through-life support of defence equipment. *The Defence Procurement and Sustainment Review* or Mortimer Review was tabled in Parliament on 23 September 2008. The 46 recommendations of the Mortimer Review were directed at making the DMO 'more business-like and imposing commercial discipline on the defence procurement and sustainment processes'.[4]

3.6 Both the Kinnaird and Mortimer reviews considered Defence procurement through the ADF capability life cycle from the initial stages of strategic assessment and where a need is identified to address a current or potential capability gap. Both reviews make a series of findings and recommendations directed at strengthening the respective phases as well as the overall life cycle. For the committee's purposes, it will focus on three main phases of the capability life cycle—strategic analysis, needs and requirements; acquisition; and sustainment.[5]

3.7 The Mortimer Review recognised that the implementation of Kinnaird's recommendations resulted in wide-ranging reform and improvement in the capability development process in the Defence and the acquisition process in DMO.[6] However, Mortimer refuted claims that the two-pass process implemented following the Kinnaird Review had solved all the problems. In evidence to support this position, he drew on two examples including the acquisition of tactical unmanned aerial vehicles (Project JP 129) where he found continued problems of scope creep and poor commercial practice leading to the termination of the contract. In the second example

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2 Minister for Defence, the Hon. Stephen Smith MP, 'Strategic Reform Program', Media Release, 6 May 2011, http://www.minister.defence.gov.au/2011/05/06/strategic-reform-program/ (accessed 9 November 2011).

3 Minister for Defence, the Hon. Stephen Smith MP, 'Strategic Reform Program', Media Release, 6 May 2011.

4 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. ix.

5 Disposal as the last phase of the capability life cycle is outside of the inquiry terms of reference.

6 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. vii.

concerning Phase 3 of Project Land 121, Mortimer found that scope creep and poor capability definition and commercial practice resulted in the need to refresh the tender.[7]

3.8 Mortimer identified five principle areas of concern ranging from:

> ... inadequate project management resources in the Capability Development Group, the inefficiency of the process leading to government approvals for new projects, shortages in DMO personnel, to delays due to inadequate industry capacity and difficulties in the introduction of equipment into full service.[8]

3.9 Of the 46 Mortimer recommendations, the government agreed in full to 42 and in part to three. On 6 May 2011, the minister stated that whilst many of the recommendations had been implemented, some had yet to be fully implemented and that Defence would accelerate the implementation of all outstanding agreed Mortimer recommendations including:

- Project directives issued by the Secretary of Defence and Chief of the Defence Force (CDF) to ensure Defence acquisitions progress according to government direction;
- Benchmarking all acquisition proposals against off-the-shelf options where available.[9]

Pappas Report

3.10 On 30 July 2008, Mr George Pappas was appointed to lead an independent audit of the Defence budget. Known as the Pappas Report, the *2008 Audit of the Defence Budget* report was delivered to the government in April 2009. The objective of the audit was to advise ministers on the efficiency and effectiveness of and future risks associated with the Defence budget and to make recommendations to improve arrangements for managing the Defence budget.[10] The audit contains over 120 recommendations of which the majority are to be delivered through the Strategic Reform Program (SRP discussed below).[11] Mr Pappas serves as the chair of the

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7 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. viii.

8 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. xi.

9 Minister for Defence, the Hon Stephen Smith MP, 'Strategic Reform Program', Media Release, 6 May 2011, http://www.minister.defence.gov.au/2011/05/06/strategic-reform-program/ (accessed 9 November 2011).

10 George Pappas, *2008 Audit of the Defence Budget*, Department of Defence, 3 April 2009, p. 290.

11 Department of Defence, *Response to the Defence Budget Audit*, 2009, http://www.defence.gov.au/publications/DefenceBudgetAuditResponse.pdf (accessed 27 July 2011).

Defence Strategic Reform Advisory Board which is responsible for overseeing the SRP.[12]

3.11 The McKinsey Report (2010) is a benchmark study undertaken in 2008 and 2009 comparing the performance and productivity of defence ministries worldwide. The report ranked Australia near the bottom of an international league table of 33 countries on defence performance and equipment acquisition, finding Australia equal last with the US on defence spending.

3.12 According to then Defence Secretary, Dr Ian Watt, McKinsey published the report without consulting Defence which he noted was 'at complete odds with the advice that McKinsey's had given us in relation to the defence budget audit' or Pappas Report which was conducted by McKinsey Australia. According to Dr Watt, the Defence budget audit had considered a number of benchmarks which would have put Australia in the realm of 'world best practice'. Further, McKinsey International had published the report without the benefit of input from McKinsey's Australian practice. McKinsey International subsequently sent a letter of apology to Dr Watt and then CEO of DMO, Dr Stephen Gumley.[13]

3.13 McKinsey subsequently republished the article with Australia withdrawn from the list and the statement 'Australia has been removed because the data is incorrect for Australia and the methodology does not apply to Australia'.[14]

Implementing and monitoring Defence reviews recommendations

3.14 Defence informed the committee that the majority of the recommendations of the respective reviews (Kinnaird, Mortimer, Pappas) have been agreed to and implemented. Given the large number of procurement projects underway, Defence observed, however, that the effects of the respective reviews 'which primarily affect new projects, take some time to impact on the procurement system as a whole'.[15]

3.15 In terms of the mechanism to monitor the implementation of the reforms and recommendations of the respective reviews, Defence held that it has established the following bodies:

- In relation to the Kinnaird Review, the creation of a Defence Procurement Advisory Board to support the establishment of the DMO and report to the

12 Australian Government, Portfolio budget statements 2011–12: budget related paper no. 1.5A: Defence Portfolio, Commonwealth of Australia, Canberra, 2011, p. 17, http://www.defence.gov.au/budget/11-12/pbs/2011-2012_Defence_PBS_Complete.pdf (accessed 27 July 2011).

13 Dr Ian Watt, Department of Defence, *Estimates Hansard*, 31 May 2010, pp. 91–92, http://www.aph.gov.au/hansard/senate/commttee/S13034.pdf (accessed 10 October 2011).

14 Dr Stephen Gumley, Defence Materiel Organisation, *Estimates Hansard*, 31 May 2010, p. 93.

15 Department of Defence, *Submission 21*, p. 2.

Ministers for Defence and Finance and Deregulation at regular intervals on the implementation of the Kinnaird Review recommendations.[16]

- In relation to the Mortimer Review, the Strategic Reform Program (SRP) is delivering reform initiatives through a number of 'streams':

> The SRP incorporates the Mortimer Review reforms as one of the streams. SRP reforms target all stages of the capability life cycle and are designed to enhance alignment between strategic planning and capability development. The SRP also contains recommendations to improve the procurement process and increase the effectiveness and efficiency in the maintenance of defence capability. Reform streams that will contribute to these objectives are the Strategic Planning, Capability Development, Mortimer, and Smart Sustainment streams.[17]

- In relation to the Pappas Review, the recommendations are being delivered through the SRP.[18]

Strategic Reform Program

3.16 The SRP was announced in 2009 as a ten-year plan to deliver gross savings of approximately $20 billion. As part of the SRP, reforms and initiatives in the areas of accountability, planning and productivity, directed at improving management and at greater efficiency and effectiveness, were designed to deliver such saving that would in turn:

> ...be reinvested to deliver stronger military capabilities, to remediate areas where there has not been enough funding in the past and to modernise the Defence enterprise 'backbone', all of which are essential to support the fighting force.[19]

3.17 The SRP will be delivered through 15 reform streams each to implement a program of reform. As previously noted, implementation of the Mortimer Review recommendations is one of the SRP streams. Defence noted that as of 18 May 2011, 32 of the process Mortimer recommendations had been fully implemented with an additional two transferred to the SRP Stream whilst 11 recommendations remain 'on track' for implementation in 2012.[20]

3.18 According to Defence, some streams of the SRP will deliver direct savings that have been earmarked for reinvestment in Force 2030 whilst others will put downward pressure on costs through improved governance, planning and processes.

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16 Department of Defence, *Submission 21*, pp. 8–9.

17 Department of Defence, *Submission 21*, p. 9.

18 Department of Defence, *Submission 21*, pp. 8–9.

19 Department of Defence, *The Strategic Reform Program 2009*, Delivering Force 2030, p. 3, http://www.defence.gov.au/publications/reformBooklet.pdf (accessed 11 October 2011).

20 Department of Defence, Additional information, received 4 October 2011, Attachment A.

Streams that drive more efficient and effective outcomes but do not have cost reductions attached to them include Strategic Planning; Capability Development; Procurement and Sustainment (Mortimer); Preparedness, Personnel and Operating Costs; Intelligence; Science and Technology; Estate; and Output focused budget model.

3.19 Streams that drive more efficient and effective outcomes and have cost reductions directly attached to them include Smart Sustainment; Non-Equipment Procurement; Workforce and Shared Services; Information and Communications Technology; Reserves; Logistics; Defence Savings Program.[21]

3.20 According to Defence, improved processes and activities continue to be developed under the SRP reform streams, the Mortimer (Procurement and Sustainment) Reform Stream and the Capability Development Reform Stream. These reforms have been captured in the promulgation of an updated Defence Capability Development Handbook (DCDH) to 'record the improved processes and governance arrangements and provide guidance on capability development documentation'.[22]

3.21 As part of a comprehensive second report, the committee intends to consider what Defence means by 'improved governance' and 'governance arrangements' in the context of the SRP.

Defence reforms announced in 2011

3.22 A number of additional reforms were announced in 2011 and include reforms to:

- project management accountability (announced on 6 May);
- strengthen the Projects of Concern process (announced 29 June);
- the disposal of military equipment (announced 29 June);
- strengthen Australian industry (announced 29 June);
- support ship repair and management practices—implementing recommendations from the *Plan to Reform Support Ship Repair and Management Practices* or Rizzo Report (announced 18 July);
- improve accountability in Defence—implementing the recommendations of the *Review of the Defence Accountability Framework* or Black Review (announced 9 August).

21 Department of Defence, *Submission 21*, p. 25.

22 Department of Defence, *Submission 21*, p. 27.

3.23 The 'project management accountability reforms' which are also called the 'Accountability and Procurement' reforms by the Minister for Defence,[23] entail implementation of outstanding Kinnaird and Mortimer recommendations including that of benchmarking proposals against off-the-shelf options. However, they also include additional reforms set to build on the Kinnaird and Mortimer recommendations. Focused on improving project management and minimising risk at the start of a project whilst identifying problems early, they include the:

- introduction of a two-pass approval system for minor capital projects valued between $8 million and $20 million;
- implementation of an Early Indicators and Warning system;
- expansion of the Gate Review system; and
- introduction of Quarterly Accountability Reports.[24]

3.24 On 19 July 2011, the Minister for Defence detailed the government's reform agenda for Defence and the initiatives which are either linked to or in addition to the ongoing SRP program. The reforms, additional to those mentioned above, include:

- Procurement and Sustainment—focused on reforms to the Defence budgeting process, capability acquisition and development, and to the maintenance and sustainment of equipment in service;
- The Defence Budget—improving and reforming Defence's planning and budgeting processes;
- Defence Capability Plan (DCP)—including efforts to reduce the level of over-programming in the DCP;
- Linking the DCP to Defence Planning Guidance—linking updates of the DCP to the Defence Planning Guidance to ensure that information provided to industry is based on the latest national security tasks;
- Force Posture Review—to examine strategic and security considerations and assess the impact of the ADF's Force Posture of these considerations and make recommendations in relation to the basing options across Australia.[25]

3.25 The reviews yet to be completed and the reforms that flow from them should also be noted. These include the government's response to the Coles Review of the

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23 See further Minister for Defence, the Hon. Stephen Smith MP, 'Paper presented by to the Australian Strategic Policy Institute', National Gallery, Canberra, 19 July 2011, http://www.minister.defence.gov.au/2011/07/19/paper-presented-by-the-minister-for-defence-stephen-smith-to-the-australian-strategic-policy-institute-national-gallery-canberra/ (accessed 1 December 2011).

24 Minister for Defence and Minister for Defence Materiel, 'Strategic Reform Program', Media Release, 6 May 2011.

25 Minister for Defence, the Hon. Stephen Smith MP, 'Paper presented to the Australian Strategic Policy Institute', National Gallery, Canberra, 19 July 2011.

Sustainment of Australia's Collins Class Submarines and the Shared Services Review.[26]

Other relevant reviews and analysis

3.26 There are a number of other reviews of Defence which have addressed the issue of Defence procurement which are not only pertinent to this inquiry but also produce recommendations for Defence reform.

3.27 As part of its response to the Mortimer Review, the government stated that the Australian National Audit Office (ANAO) would be invited to audit the progress of reform at nine and 18 months post-commencement and report its findings against the agreed plan.[27] Further, the DMO and ANAO Major Projects Report (MPR) which is published annually, provides a performance overview of selected major defence capital acquisition projects managed by the DMO. The Parliamentary Joint Committee on Public Accounts and Audit (JCPAA) is charged with reviewing the MPR, making findings and recommendations for improvement. In addition, ANAO audit reports often include recommendations to Defence. The most recent Performance Audit Report 57 titled *Acceptance into Service for Navy Capability* serves as an invaluable resource on matters of Defence procurement and makes eight recommendations designed to improve Defence's management of the acquisition and transition into service of Navy capability.[28]

3.28 Other reviews conducted outside the Defence establishment include the committee's own 2003 *Report on the inquiry into materiel acquisition and management of Defence*. The JCPAA and the Joint Committee on Foreign Affairs, Defence and Trade have both produced reports of relevance to this inquiry with recommendations to government generally and Defence specifically in relation to improving processes.

3.29 Finally, the analyses of Defence procurement matters provided by the Australian Strategic Policy Institute (ASPI) are pertinent to this inquiry. Defence has in the past commissioned ASPI to provide advice on matters such as the Public Defence Capability Plan and to make recommendations for improvements and reforms. These recommendations are also a matter for implementation by Defence.

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26 Department of Defence, Additional information, received 4 October 2011.

27 Department of Defence, *The Response to the Report of the Defence Procurement and Sustainment Review*, p. 45, http://www.defence.gov.au/publications/Mortimer_Review_Response.pdf (accessed 30 August 2011).

28 Australian National Audit Office, *Acceptance into Service of Navy Capability*, Performance Audit Report No. 57, 2010–11, p. 27.

Stocktake of reforms

3.30 In 2003, Kinnaird argued that further fundamental reform was needed to ensure that the ADF receives the capabilities it expects according to the schedule required by the government. Five years later, Mortimer concluded that reform in acquisition and sustainment should continue in order to extract maximum benefit across the capability systems life cycle. In 2009, Pappas found the need for 'fundamental reform'.[29] Recently Rizzo and Black added to the reform program. Indeed Rizzo found, among other things, that Navy had 'poor whole-of-life asset management, organisational complexity and blurred accountabilities, inadequate risk management, poor compliance and assurance, and a "hollowed-out" Navy engineering function.'[30] Black pointed to poor outcomes in Defence including delivery failures for capability projects and poor or inappropriate procurement decision-making.[31]

3.31 As part of its stocktake, the committee wrote to the Department of Defence (department) on 6 July 2011 requesting a schedule showing the progress made on implementing the recommendations made in recent defence reviews with particular focus on the Kinnaird, Mortimer and Pappas reviews. The department responded on 21 July, but the committee was disappointed with the information provided and again wrote to the department and DMO on 22 August 2011.

3.32 In its letter, the committee informed the department that, while helpful, the information did 'not always convey a clear picture of what was being achieved'. It noted that the department's response provided no information in relation to the relevant Pappas recommendations. Further, that while the term 'fully implemented' was appropriate to describe some of the Mortimer recommendations, for others the term simply raised more questions. The committee explained that it would prefer a more informative response from Defence suggesting that a brief comment be added to each recommendation 'to put beyond doubt what is meant by fully implemented'.

3.33 On 4 October as part of a Defence Organisation response, the department provided the committee with an updated version of progress on the implementation of its reform program (see appendix 4). The committee notes, however, that with a number of recommendations made in the Mortimer review, Defence has indicated that implementation was complete. Yet, in the committee's view, some of the recommendations would form part of a continuous improvement process requiring constant attention, particularly those relating to developing the skills base. The committee is not convinced that Defence's account of the progress made in implementing its reform program has the coherence and foresight need to achieve

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29 George Pappas, *2008 Audit of the Defence Budget, Department of Defence*, 3 April 2009.

30 Paul Rizzo, *Plan to Reform Support Ship Repair and Management Practices*, July 2011, p. 7, http://www.defence.gov.au/oscdf/rizzo-review/Review.pdf (accessed 6 December 2011).

31 Rufus Black, *Review of the Defence Accountability Framework*, January 2001, p. 9, http://www.defence.gov.au/oscdf/BlackReview/black_review.pdf (accessed 6 December 2011).

lasting success. As an accountability measure, the report provided to the committee on the implementation of the reforms failed.

3.34 Furthermore, Defence informed the committee that in light of the Black Review's findings of challenges and weakness in Defence's end-to-end management of capability, 'a comprehensive end-to-end business process review of Defence's capability management will be undertaken'.[32] The committee has no insight into what this review is supposed to achieve and unfortunately again the focus appears to be on process.

Concerns regarding reform agenda

3.35 Many submitters maintained that the reform agenda has improved the capability development and acquisition process. Indeed, the findings and recommendations of such reviews and reports have led to what ANAO describes as 'rapid organisational change to procurement process, practice and organisational structures'.[33] These include the strengthening of existing processes, introduction of new processes, adjustment of high level command and oversight, the establishment of new committees and review boards, and the rearrangement of organisational charges. However, there remain two key concerns regarding the direction of the Defence reform agenda. First, that the reforms are focused on process at the expense of fundamentals and second, that constant reform has created fluidity rather than effect.

Focus on process rather than fundamentals

3.36 One of the major concerns raised in relation to the implementation of the reform agenda is that it has resulted in the addition of more process to an already process-bound organisation. Air Marshal Binskin noted that whilst each one of the respective reviews has increased the 'transactional costs; it has added to the process, not necessarily streamlined' it.[34] Air Commodore (Retired) Bushell noted congenital problems in Defence included an inability to manage complex projects and particularly those with any degree of system development or integration as well as difficulties in providing in-service support on time. In his view, they stem:

> ...directly from an entrenched, process-driven, contract centric approach to project management, rather than employing sound Project, Systems and Equipment Engineering management systems and procedures developed especially for controlling technology projects. The situation that has persisted for more than a decade is an inevitable consequence of the 'not thought through' de-skilling and downsizing of the Services and the structural changes imposed by the Defence Reform Program (DRP) and Commercial Support Program (CSP).[35]

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32 Department of Defence, Additional information, received 4 October 2011, p. [2].

33 Australian National Audit Office, *Submission 22*, p. 7.

34 Air Marshal M Binskin, Department of Defence, *Committee Hansard*, 5 October 2011, p. 56.

35 Air Commodore (Retired) E.J. Bushell, *Submission 3*, Attachment 1, p. [3].

3.37 The concern raised by submitters is that Defence has focused its efforts on implementing the reforms in relation to procurement processes without addressing the 'fundamental Defence, DMO and Service organisational structures, accountabilities and resource distribution'.[36] In this regard, Air Commodore (Retired) Bushell stated:

> No study has ever been made of the proper allocation of responsibility, accountability, and the division of resources between the Services and the Defence bureaucracy where the major problems have arisen and been left to fester for over two decades.[37]

3.38 Other submissions to the inquiry noted this focus on administrative process rather than the management of outcomes and employment of necessary feedback loops. As previously noted, such feedback would otherwise provide for an accurate understanding of the status of a project and enable the effective implementation of Defence reforms.

3.39 Some submitters raised concerns that the SRP is targeting process rather than addressing the critical issue of governance. As highlighted by a number of witnesses, the existing process is considered adequate but it is not applied consistently. The question for the committee is why the gap between procedure and practice persists. Evidence suggests that it relates to poor governance and a lack of internal checks and balances upheld by suitably qualified competent and independent personnel. In its next report, the committee intends to explore this evidence.

3.40 Other unintended consequences of the reforms which ignore the fundamentals go to the heart of the dysfunction within Defence. These include the low engineering skills base brought about by outsourcing as a consequence of the Commercial Support Program introduced in 1991 and the convoluted process and lack of clarity regarding responsibility which are unintended consequences emanating from the shared service reforms of 2009. This position is articulated by Air Commodore (Retired) Bushell who stated that:

> The problems being encountered have been institutionalised firstly by the fundamental models used in the management and governance of the acquisition bureaucracy, and secondly by the practice of replacing technologically skilled engineering professionals with technologically unskilled generalists. That is, the imposition of administrative process over project and systems engineering management. For more than a decade, the approaches adopted have been shown not to work, and can not be made to work.[38]

36 Air Commodore (Retired) E.J. Bushell, *Submission 3*, p. 1.

37 Air Commodore (Retired) E.J. Bushell, *Submission 3*, p. 8.

38 Air Commodore (Retired) E.J. Bushell, *Submission 3*, Attachment 1, p. [3].

3.41 In this regard, Dr David Robinson of Engineers Australia noted that 'if we have wrong decisions made at the beginning, inappropriate technical decisions, the best management may well deliver a lemon, but that is not what you want'.[39]

3.42 The committee is concerned that implementation measures that simply look at a further change to process will not, of themselves, be successful. The committee underlines its firm view that the focus on improving process will not solve deeper, fundamental problems. The critical question is why no one is probing these underlying issues.

Effectiveness of reform agenda

3.43 Air Marshal Binskin observed that one of the problems that arises is that 'we are changing every five years but the projects take eight years to deliver' and that:

> We are inside our own decision loop sometimes with the reviews rather than letting them mature for a little bit and refine the processes that you need to be able to run that system.[40]

3.44 The continual cycle of reviews and reports into Defence from which findings and recommendations are acted upon has led to an ongoing and fluid reform process. Given the frequency of such changes and average lifespan of major acquisition projects, ANAO noted that 'several changes to organisational structures and processes can occur over the life-cycle of a single project making it difficult to assess the effectiveness of any single change'.[41] The outstanding question for the committee, therefore, is what is the underlying factor that has prevented these accumulated changes from being effective? Witnesses to the inquiry indicated that they thought it was the extensive committee structure and interfaces between the many 'groups' within Defence that have an input (or indeed control) elements of the FIC that by definition are part of capability. It should be noted in this regard that the efficacy of governance over the procurement process cannot be divorced from the efficacy of governance across Defence because of the FIC interfaces.

3.45 The ANAO also recognised that managing projects in an 'environment of successive, significant organisational and management reforms can add to the complexity of the task'. It noted that given the long lifespan of most Defence acquisition projects, the full benefit of performance improvements expected from a reform are 'only likely to be realised in projects that are started following the introduction of the reform and arguably, only once the reform has been fully implemented and consolidated within Defence's practices'.[42] Other submitters to the inquiry raised concerns about the unintended consequences of the series of reforms to

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39 David Robinson, Engineers Australia, *Committee Hansard*, 5 October 2011, p. 6.

40 Air Marshal M Binskin, Department of Defence, *Committee Hansard*, 5 October 2011, p. 58.

41 Australian National Audit Office, *Submission 22*, p. 12.

42 Australian National Audit Office, *Submission 22*, p. 15.

which Defence has been subject which have created a context of fluidity and appearance of constant change. The result is a procurement process that has been subjected to and continues to undergo numerous changes to the point where mapping the process at any given time or providing a 'snapshot' of how the process works is a task made almost impossible.

3.46 These are critical matters that the committee intends to focus on in its second and substantive report.

Defence Capability Development Handbook

3.47 The 2011 *Defence Capability Development Handbook* (DCDH) builds on the 2006 *Defence Capability Development Manual* (DCDM) to which much of the evidence before the committee refers. According to Defence, the DCDH takes into account the recommendations of the Strategic Reform Program, Mortimer Review, and the 2009 ANAO Audit of *The Planning and Approval of Major Capital Equipment Projects*. Defence stated the following in relation to the DCDH:

> The DCDH provides guidance, and is the template of the process for the conduct of capability development in Defence. It is not in itself a policy document.[43]

3.48 Four interim versions of the DCDH were produced between February 2010 and March 2011 before the current August 2011 version was published. It remains, however, unavailable to the public. The DCDH was released before the Rizzo and Black reviews and does not, therefore, take into account the recommendations, reforms and developments emanating from those reviews.[44] Air Marshal Harvey noted that this was one of the challenges faced by Defence as there are 'always reviews and reforms going on' and that Defence would consider whether an update to the DCDH is required at the appropriate time.[45]

Committee view

3.49 The committee is concerned that when implementing the ongoing and seemingly endless reform agenda, Defence's focus has produced layers of additional administrative process without fixing deeper problems. It also means that Defence is caught in a reform roundabout where before one set of reforms can be implemented, another one takes over.

3.50 The question for the committee is how to redirect attention and energies towards addressing of the fundamentals in order to affect real change and stop the

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43 Department of Defence, *Submission 21*, p. 27.

44 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, p. 38.

45 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, pp. 37–38.

endless cycle of reviews and recommendations which have become a symptom rather than a solution to the problems before Defence.

Chapter 4

Strategic analysis and needs

4.1 This chapter and the chapters to follow discuss the respective Defence reviews namely the Kinnaird Review, Mortimer Review and Pappas Report. All chapters consider the extent to which the recommendations of the reviews have been implemented by Defence and its agencies whilst noting where the evidence suggests issues remain or challenges have emerged. Concerns raised in evidence in relation to aspects of the capability development process and areas which require further clarification and discussion are also noted for future committee consideration.

4.2 This and the following chapter detail the main findings of the reviews and their recommendations in relation to the first phase of the capability life cycle concerning strategy, and needs analysis and requirements.

Overview of the strategic analysis and needs stage

4.3 The needs and requirements phase in the capability development life cycle is recognised by most reviews as critical to the lifecycle of a project. This is because the phase entails the articulation and translation of strategic priorities and the identification of current and future capability gaps. During this phase, costs, capability and risks need to be considered and balanced as capability options are translated into costed, defined solutions.

4.4 The *Defence Capability Development Handbook* (DCDH) describes the outcome of the needs stage as the:

> …identification of high level capability and cost requirements for individual projects, and a Government approved DCP outlining planned capability acquisition over the next 10 years.[1]

4.5 Key issues identified in relation to strategy and needs by the respective Defence reviews include improving communication between Defence and government on capability and strategy, accurate costing and schedule estimates of projects including whole-of-life costs on entry to the DCP and early engagement with industry.

4.6 The Kinnaird Review (2003) established that poor project definition, analysis and planning before tenders had been sought from industry contributed to failures such as cost over-runs, schedule delays, and reduced capability of the delivered platforms and systems.[2] The Mortimer Review (2009) highlighted that as capability systems remain in service for 20 or 30 years, it is critical that new systems or upgrades

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1 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 25.

2 Malcolm Kinnaird, *Defence Procurement Review 2003*, pp. 9–10.

are 'initiated on the basis of a long-term defence strategy' which demands 'high quality strategic and capability advice to Government'.[3]

Relating strategy to capability

Process

4.7 In considering the priorities for the development of the ADF and its resources, the government must relate its strategic priorities for the defence and security of the country with the development of Defence capability.

4.8 Both Kinnaird and Mortimer made a number of recommendations to Defence directed at strengthening the information provided to government to enable it to 'assess the consequences of strategic decisions in terms of required defence capability within the context of its overall budget'.[4] A classified Defence Planning Guidance was introduced in response to these recommendations to provide government-endorsed direction on strategy, force structure and investment priorities on an annual basis.

Priority setting

4.9 The key cyclical planning documents that provide the foundation for Defence capabilities and serve as overarching guidance on capability include:

1. Force Structure Review (FSR)

4.10 This classified document considers defence capabilities broadly across Defence as well as specifically in areas such as submarine capability over a five-year period.[5] Its findings inform the Defence White Paper and in turn, the Defence Capability Plan.

2. Defence White Paper (DWP)

4.11 The Defence White Paper is a key strategic document that presents the government's long-term strategic forecast and commitments for Defence including for its future capability. Mr Neil Orme, acting Deputy Secretary, Strategy described it as

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3 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 2.

4 Malcolm Kinnaird, *Defence Procurement Review 2003*, p. 4; David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 3.

5 In June 2011, the Minister for Defence announced a new Force Posture Review would be undertaken which would inform the security and strategic considerations for the 2014 Defence White Paper. Minister for Defence, 'Announcement of the Force Posture Review', Press Conference, 22 June 2011, http://www.minister.defence.gov.au/2011/06/22/minister-for-defence-press-conference-announcement-of-the-force-posture-review/ (accessed 15 November 2011).

'the capstone guidance paper' for Defence.[6] This important public policy document also 'apportions Defence funding and workforce resources to achieve strategic interests and goals in accordance with priorities'.[7] According to Defence, together with other guidance provided by government, the White Paper informs:

> …the development of more detailed planning, capability, workforce, preparedness and financial guidance. This guidance, alongside classified documentation, sets the parameters for the Annual Defence budget.[8]

4.12 Defence argues that White Papers provide 'public transparency and accountability for Defence policy and plans'.[9] The 2009 DWP outlines the strategic priorities to 2030 including deterring and defeating armed attacks on Australia, contributing to stability in the South Pacific and East Timor and contributing to military contingencies in the Asia-Pacific region and the rest of the world.[10] The DWP provides a 'broad picture' of what major capability investment is required for the development of Force 2030 over a five-year cycle.[11] The capability investments laid out in the DWP are then translated into a Defence Capability Plan of solutions to meet requirements in the DWP.

3. Defence Planning Guidance (DPG)

4.13 The Defence Planning Guidance provides an opportunity for Defence to deal with threats and opportunities as they arise within the DWP five-year cycle.[12] This classified document is Defence's lead strategy document as it articulates the strategic priorities that guide Defence to produce the military outcomes sought by government.[13]

4. Defence Capability Plan (DCP)

4.14 The DCP is a costed, rolling ten-year program of unapproved major capital equipment projects identified to meet the requirements of the DWP.

4.15 In consultation with other Defence Services and Groups, CDG prepare the DCP which is then approved by the NSC. The DCDH states that the Defence

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6 Neil Orme, Department of Defence, *Committee Hansard*, 5 October 2011, p. 13.

7 Department of Defence, *The Strategy Framework 2010*, p. 20, http://www.defence.gov.au/publications/TheStrategyFramework2010.pdf (accessed 6 September 2011).

8 Department of Defence, *The Strategy Framework 2010*, p. 20.

9 Department of Defence, *The Strategy Framework 2010*, p. 20.

10 Department of Defence, *The Strategy Framework 2010*, p. 23.

11 Department of Defence, *Defending Australia in the Asia Pacific Century: Force 2030*, Defence White Paper 2009, p. 15.

12 Neil Orme, Department of Defence, *Committee Hansard*, 5 October 2011, p. 38.

13 Department of Defence, *Strategic Planning Framework Handbook 2006*, p. 13.

Investment Committee endorses capability proposals and recommends any changes to the DCP before it is provided to government. It makes clear:

> Defence capability committees may endorse proposed changes to the DCP, but they are not given effect until they are approved by the government.[14]

4.16 Once approved by government, a project in the DCP will be developed as part of the first and second pass government approval process in the requirements phase.

Structure

4.17 Kinnaird and Mortimer made recommendations regarding the provision of information to enable government to match strategic priorities with defence capability. In response to these recommendations, the Strategic Policy Division within Defence's Strategic Executive was made responsible for leading the strategic process with the support of CDG and other Defence elements.[15]

4.18 The Strategic Executive is responsible for developing and articulating the strategic guidance and military priorities that form the starting point of the needs analysis.[16] The five-yearly FSR and five-yearly DWP are key elements to this guidance.[17] The Strategy Executive will then translate the broad guidance of the DWP into an annual Defence Planning Guidance to provide a more refined assessment of needs and Quarterly Strategic Review.[18] In addition, the Strategic Executive is responsible for ensuring that the development, acquisition and evaluation of capabilities align with Defence's strategic priorities as articulated in the CDF's planning directives, Australian capability context scenarios, ad hoc strategic papers and the future joint operating concept.[19]

4.19 The strategic guidance developed by the Strategic Executive will inform the development of Force Structure Options which are then fed into the development of the DCP which 'articulates projects that give effect to delivering those capability outcomes'.[20]

4.20 In terms of establishing whether capabilities for later inclusion in the DWP are feasible, the Strategy Executive will commission environmental scans and

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14 Department of Defence, *Defence Capability Development Handbook*, August, 2011, p. 10.

15 Department of Defence, *The Response to the Report of the Defence Procurement and Sustainment Review*, 2009, p. 17, http://www.defence.gov.au/publications/Mortimer_Review_Response.pdf (accessed 6 July 2011).

16 Neil Orme, Department of Defence, *Committee Hansard*, 5 October 2011, p. 10.

17 Neil Orme, Department of Defence, *Committee Hansard*, 5 October 2011, p. 10.

18 Neil Orme, Department of Defence, *Committee Hansard*, 5 October 2011, p. 10.

19 Neil Orme, Department of Defence, *Committee Hansard*, 5 October 2011, pp. 10–11.

20 Neil Orme, Department of Defence, *Committee Hansard*, 5 October 2011, p. 14.

analysis. At the same time, intelligence assessments inform the development of policy guidance which in turn, help to shape more detailed plans to meet the government's security objectives which will then be developed into formal government guidance as a DWP.[21]

4.21 Once capability needs are identified in the DWP and Defence Planning Guidance, CDG will then take over and lead the development of the DCP which outlines a ten-year program for new major capital equipment investment. Thereafter, as CDG has representation on the internal Defence committees responsible for reviewing proposals prior to first and second pass, the Strategy Executive will consider each project that comes through the Defence committee system in terms of strategic guidance.[22]

People

4.22 The Strategy Executive is headed by the Deputy Secretary Strategy. The Strategy Policy Division, responsible for the strategic guidance, comprises approximately 80 people of whom 'a couple of dozen or so would be involved in the strategic planning business' including the Force Structure Development Cell.[23]

4.23 In terms of the skills and expertise of the Strategy Executive, the committee was not able to establish the level of expertise in this group and its ability to draw on and process information to inform strategic guidance. Moreover, the extent to which the Strategy Executive draws on and utilises personnel from CDG, DMO and the Services to inform its work was not clear.

Unanswered questions

4.24 The committee held two days of hearings with Defence agencies to discuss and clarify each stage of the capability development and acquisition process, the responsibilities of those involved in the process and the division of responsibility and accountability between them. However, the questions that remain for the committee go to heart of the capability identification process from inception.

4.25 There is a strong claim made by Defence and government that there is a clear linkage between strategic guidance and capability, otherwise defined as the ability to 'achieve an operational effect'. In fact, witnesses highlighted that Defence drives much of the White Paper development which it then in turn quotes as the strategic guidance that gives it leave to develop and propose a capability case to government. Witnesses also discussed the propensity of government to delay funding for projects in the DCP and the impact this is having on industry. However, there is now a disconnect emerging between government expectations of Defence (stemming from NSC

21 Neil Orme, Department of Defence, *Committee Hansard*, 5 October 2011, pp. 10 & 13.

22 Neil Orme, Department of Defence, *Committee Hansard*, 5 October 2011, p. 14.

23 Neil Orme, Department of Defence, *Committee Hansard*, 5 October 2011, p. 13.

guidance as to the desired ability to achieve 'an operational effect' and the capability Defence actually operates. That is, capability in the procurement cycle, capability held captive in an unfunded DCP, and capability cases drawn from the White Paper that have yet achieved first or second pass approval from government.

4.26 Reviews of defence and procurement in the United States and United Kingdom have highlighted the importance of a transparent audit trail between government expectations and Defence capability management. Despite the claims, the committee is interested to establish how robust this linkage is in the Australian context. The committee intends to investigate the degree of alignment between the NSC guidance as to the ability it expects Defence to have in order to 'achieve an operational effect'. These matters will be raised in light of the budget which is eventually allocated in any given planning period and the agreed measures (if in fact any exist) by which both Defence and government can evaluate performance.

4.27 The committee understands that the Deputy Secretary Strategy drafts the DWP whilst the Strategy Executive is also responsible for informing the DWP. What is not clear to the committee, however, is the extent to which industry and other stakeholders are consulted as part of the DWP development process. A key example in point pursued by the committee is that of SEA 1180, the multirole vessels described in the DWP as an 'offshore combatant vessel', otherwise referred to as the patrol boat, mine-hunter, coastal and hydrographic ship replacement project.[24] SEA 1180 entered the DCP in 2009. Whilst the committee was informed by Defence that industry was engaged in the project through the Rapid Prototyping Development and Evaluation Team, other submitters questioned the timing of industry engagement and argued that the project's inclusion in the DWP demonstrates 'the risk of planning in an information vacuum'.[25]

Funding in the White Paper

4.28 The 2009 White Paper contained a financial plan with the following central features:

- 3 per cent real growth in the Defence budget to 2017–18;
- 2.2 per cent real growth in the Defence budget from 2018–19 to 2030;
- 2.5 per cent fixed indexation in the Defence budget from 2009–10 to 2030.[26]

4.29 A former Chief of the Defence Force, Admiral Chris Barrie, stated that the White Paper could be seriously criticised because of its lack of detail on funding. In this regard he noted that the White Paper only deals with funding in 1½ pages 'in

24 Department of Defence, *Defending Australia in the Asia Pacific Century: Force 2030*, Defence White Paper 2009, p. 73.

25 Mark Davies and Andrew Thomson, *Submission 8*, p. [2].

26 Department of Defence, *Defending Australia in the Asia Pacific Century: Force 2030*, Defence White Paper 2009, paragraph 18.4, p. 137.

broad brush statements of average percentage growth to the budget, and imperatives about savings (or cost reductions) intended to balance the books'.[27]

4.30 Dr Thomson noted that the 'analysis of the underlying trend in the cost of delivering military capability shows that real funding growth of around 2.7% per year is needed to maintain a modern defence force. Consistent with this, the trend in Australian defence funding over the past sixty years has been 2.7% real growth'. In his assessment, 2.2 per cent real growth post 2018–19 'will force a contraction of either the scale and range (or both) of capabilities in the defence force.' Furthermore, he was concerned about the 2.5 per cent fixed indexation. He argued that the adoption of a fixed index subverts the goal of maintaining the buying power of defence budget against changing circumstances. In his view it would make 'more sense to index the budget to the consumer price index, that way defence funding would be protected against an extended period of higher than average inflation'.[28]

Procurement targets

4.31 A number of submissions were also concerned about achieving the procurement targets set in the White Paper. They cited the Defence Incoming Government Brief 'Red Book' released by the government on 28 October 2010, which revealed that the two-pass process had stalled.[29] It was clear to Dr Andrew Davies and Dr Thomson that projects were falling behind schedule as early as May 2010. Since then, the situation has deteriorated further. They identified several contributing factors:

- The government has deferred substantial defence funding to beyond 2012–13, presumably to hasten a return to surplus for the Commonwealth.
- Some projects have been displaced by the bringing forward of projects to ensure force protection for Australian troops in Afghanistan.
- Bureaucratic delays in Defence have caused the approval of projects to proceed much more slowly than anticipated, especially in the case of first-pass approvals.
- Industry has failed to deliver capability to the contracted schedule across a large number of projects.[30]

4.32 In their view:

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27 Chris Barrie, 'The Defence White Paper 2009 and Australia's Maritime Capabilities', *Security Challenges*, Vol. 5, No. 1 (Winter 2009), p. 58.

28 Mark Thomson, 'Defence Funding and Planning: Promises and Secrets', *Security Challenges*, Vol. 5, No. 2 (Winter 2009), p. 91.

29 Australian Industry Group Defence Council, *Submissions* 10; BAE Systems Australia, *Submission* 12.

30 Andrew Davies and Mark Thomson, *Submission 8*, p. [3].

> Given the mounting delays, it looks increasingly unlikely that the program of modernisation can be achieved on schedule. To make matters worse, the deferral of funds to beyond 2012-13 has created a five year period where spending will need to grow in real terms by 6% a year to regain the promised '3% real growth over the decade'. On past experience, this is unlikely to be feasible especially in light of capacity limitations at almost every step of the process, from initial approval to industry delivery.
>
> Moreover, the level of funding promised (5.5% nominal growth to 2017–18 and 4.7% nominal growth thereafter) is unlikely to adequately maintain let alone expand the force as planned. [31]

4.33 More recently in his Defence Budget Brief, Dr Thomson stated that Defence 'can change the goalposts all they want, but the fact remains that implementation of *Force 2030* has fallen steadily behind schedule over the past two years'. He noted that over the past 24 months, only ten projects had been approved, 'whereas more than three times that number was planned. And it is set to get worse'.[32] He suggested that 'the unambiguous lesson of the past decade was that while planning for new capability is easy, delivering it can be very difficult'.[33] Dr Thomson informed the committee that his statistical analysis showed:

> …the plans that existed in May this year [2011] for approving projects first pass and second pass were clearly and manifestly unrealistic. They were beyond credibility. The rate at which projects have been approved since the introduction of the two-pass process has been very much smaller than what is an enormous bow wave of future approvals that are planned.[34]

4.34 Air Marshal Harvey acknowledged that Defence faces challenges regarding delays in procurement activities post project approval but was addressing them 'on a case-by-case basis at an organisational level'.[35] He was of the view that:

> …when we report at the end of this financial year you will see a number well above the average over the last few years. So far this year we have had nine approvals, one first pass and seven second passes, in the three-month period, which is already a good positive trend.[36]

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31 Andrew Davies and Mark Thomson, *Submission 8*, p. [3].

32 Mark Thomson, 'the Cost of Defence ASPI Defence Budget Brief 2011–2012, Seventy-two million, seven hundred & sixty-six thousand, six hundred &nineteen dollars & eighteen cents per day', Australian Strategic Policy Institute, 2011, p. vii.

33 Mark Thomson, 'the Cost of Defence ASPI Defence Budget Brief 2011–2012, Seventy-two million, seven hundred & sixty-six thousand, six hundred &nineteen dollars & eighteen cents per day', Australian Strategic Policy Institute, 2011, p. 103.

34 Mark Thomson, private capacity, *Committee Hansard*, 12 August 2011, p. 10.

35 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, p. 2

36 Air Marshal J Harvey, Department of Defence, *Committee Hansard* , 7 October 2011, p. 42

4.35 When questioned about funding and the slow down in approvals, Air Marshal Harvey indicated that 'quite a ramp-up of funds' would be 'available in the not-too-distant future, so we are making sure we get the project approval rate up to match that funding'.[37]

4.36 The committee is yet to be convinced about Defence's assurances regarding the approval rate and funding.

4.37 Furthermore, the committee had a series of questions pertaining to contestability and scrutiny of the DWP and FSR which remain largely unanswered. The committee would like, therefore, to establish:

- how particular capabilities enter the DWP and of those responsible for such decisions;
- how proposals for entry into the DWP are contested and by whom;
- the extent to which assumptions underpinning capability priorities identified in the DWP and FSR are subjected to independent and rigorous scrutiny and analysis;
- whether risk assessments are undertaken by the Strategy Executive in relation to particular capabilities before they are identified in the DWP;
- the extent to which the Strategy Executive engages with industry if at all during this early stage;
- the level of expertise within the Strategy Executive and its ability to digest information from across Defence and beyond into strategic guidance; and
- the weight that should be given to the funding arrangements and extent to which they shape or even bind future allocations to projects and how robust this process is.

Defence Capability Plan

Process

4.38 Identification of capability needs leads to the development of the DCP which outlines a 10-year program of new major capital equipment investment. In this regard, a revised DCP completes a five-yearly Force Structure Review and Defence White Paper package.

4.39 Projects for entry to the DCP are prepared by CDG on behalf of Defence for approval by the NSC.[38] The government will endorse the need to address the

37 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, p. 43.

38 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 10.

identified gap as a capability project by including the project and an indicative budget provision in the DCP.[39]

4.40 In order to develop the projects for inclusion in the DCP and provide the rigour and discipline which Kinnaird and Mortimer identified as lacking, the following documents are developed:[40]

1. Initial Capability Definition Statement (ICDS) which summarises the scope, key assumptions, risks, costs and performance criteria for the individual project and potential impact on all elements of the Fundamental Inputs to Capability;[41]

2. Preliminary Operational Concept Document (POCD) developed out of the ICDS which is a key document in the Capability Definition Document (CDD) suite which is progressed through various internal Defence committees before submission to government at first pass;

3. Capability Definition Document (CDD) which comprises three documents including the POCD detailed above and:

    a. Test Concept Document which is developed by the Defence Science and Technology Organisation (DSTO);[42] and

    b. Function and Performance Specifications developed by CDG.

Understanding risks and estimating costs

4.41 The Kinnaird Review found that there had been an inadequate understanding of technology risks and whole-of-life costs and too great a focus on presenting specific platform solutions to government 'in advance of a more complex understanding of a joint approach to overcoming the identified capability gap'.[43] In response to Kinnaird's findings, the Chief Defence Scientist who heads the DSTO was given the responsibility for providing independent advice on technical risk.

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39 Department of Defence, *Submission 21*, p. 30.

40 Kinnaird found that poor project definition, analysis and planning before tenders were sought from industry contributed to failures including cost over-runs, schedule delays, and reduced capability to deliver platforms and systems. The Kinnaird Review concluded that the underlying reason was that the current process of capability definition and assessment 'generally lacked rigour and discipline'. Malcolm Kinnaird, *Defence Procurement Review 2003*, pp. 9–10.

41 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 27.

42 DSTO is responsible to consult with the Australian Test and Evaluation Office to ensure that appropriate risk treatments are included in the TCD (Defence Science and Technology Organisation, *Technical Risk Assessment Handbook*, Version 1.1, 2010, p. 30).

43 Malcolm Kinnaird, *Defence Procurement Review 2003*, pp. 9–10.

4.42 The Mortimer Review established that cost and schedule estimates in the DCP had shown a 'persistent trend to significantly underestimate the cost and time needed to deliver capability'. Mortimer emphasised the importance of applying greater analysis to projects before entry into the DCP. He also highlighted the need to define more clearly what a project is to 'deliver, providing an initial judgement of the risk inherent in the project, and more accurately estimating its cost and schedule on the basis of evidence'.[44] Similarly, Pappas raised a number of concerns regarding cost estimates and individual accountabilities in relation to the development of cost estimates.[45] As part of efforts to strengthen the process, the Department of Finance and Deregulation (Finance) was mandated to 'provide external evaluation and verification of project proposals'.[46]

4.43 The committee acknowledges the Kinnaird Review's emphasis on the importance of funding for analysis and project development prior to inclusion in the DCP. Within this context, Kinnaird recommended the expenditure of up to 15 per cent of project funds prior to approval to cover independent investigation and analysis and industry studies.[47] Mortimer also underlined the crucial role of early analysis and project definition while recommending that CDG be adequately resourced to develop capability proposals and incorporate specialist advice.[48]

4.44 The DCDH refers to the importance of early engagement with industry as a means of providing, amongst other things, an indication of whole-of-life costs, any innovative options that might be available to address the capability gap and insight into the marketplace to inform an acquisition strategy.[49] The issue of early industry engagement, however, attracted considerable comment during the inquiry. Indeed, the committee recognises that the recently invigorated environmental working groups which serve as a means to facilitate early informal engagement within industry are utilised in the requirements stage prior to first-pass rather than during the needs stage. The committee intends, therefore, to pursue the issue of early industry engagement in relation to the drafting of the DWP and the needs stage of the capability development process.

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44 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 5.

45 George Pappas, *2008 Audit of the Defence Budget*, Department of Defence, 3 April 2009, pp. 60–68.

46 Department of Defence, *Submission 21*, p. 8.

47 Malcolm Kinnaird, *Defence Procurement Review 2003*, pp. 13–16.

48 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 26.

49 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 48.

Over-programming in the DCP

4.45 The Pappas Report raised the practice of over-programming whereby extra projects are included in the DCP, the total expected value of which exceeds the total amount of funding available. Pappas recommended that only those projects that Defence intends to deliver be included in the DCP (both pre- and post-first pass). In addition to over-programming, Pappas suggested that Defence should be trying to reduce the level of overplanning—'planning more expenditure than budget in the expectation it will be offset by slippage'— in the DCP.[50]

4.46 While he noted the tendency to overprogram and overplan, Pappas was also concerned that the lack of prioritisation in the DCP compounded these problems. As a result:

> …Projects can be rescheduled without reference to strategic requirements or rigorous debate about the consequences. It also means projects that should fill the most important capability gaps could have their scope changed, de-prioritised or not delivered at all.[51]

4.47 Pappas called for 'much greater transparency on which projects are priorities, and when they are expected to be delivered.' Overall, he concluded that 'the DCP should be an accurate statement of the capability Defence intends to acquire'.[52]

4.48 The DWP and the DCP are foundation documents. They not only inform parliament, industry and the public more generally but also reflect the consideration, planning, analysis and decision-making around the procurement of major capital assets. Both documents should be reliable and informative and provide the transparency required for scrutiny.

4.49 Earlier, the committee considered the ambitious acquisition program outlined in the DWP and raised concerns about both the funding and schedule targets. It has now noted criticism of the DCP—over-programming, over-planning and failure to indicate priorities. These two key documents are critically important to industry and government should ensure that they provide accurate and reliable signals that would encourage and enable companies to plan ahead with confidence.

4.50 In August 2011, the minister stated that Defence would implement improved planning to reduce over-programming in the DCP 'by better aligning capability with resources and strengthening management focus'.[53] He noted that while over-

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50 George Pappas, *2008 Audit of the Defence Budget*, Department of Defence, 3 April 2009, p. 84.

51 George Pappas, *2008 Audit of the Defence Budget*, Department of Defence, 3 April 2009, p. 84.

52 George Pappas, *2008 Audit of the Defence Budget*, Department of Defence, 3 April 2009, p. 84.

53 Minister for Defence and Minister for Defence Materiel, 'Release of the 2011 On Line Public Defence Capability Plan', 18 August 2011, http://www.minister.defence.gov.au/2011/08/18/minister-for-defence-and-minister-for-defence-materiel-release-of-the-2011-on-line-public-defence-capability-plan/ (accessed 7 November 2011).

programming provides flexibility and serves as an 'aid in ensuring that best use is made of available funding in the event of delays to the development of individual projects', reducing over-programming would improve the quality of information provided. The committee sought clarification as to what level Defence would reduce over-programming in the DCP. Air Marshal John Harvey informed the committee that whereas the current level of over-programming was around five per cent, the minister would like a reduction to zero.[54]

4.51 The committee recognises a disconnection in the information provided by Defence regarding a reduction in over-programming. It understands that the minister would like to see a reduction in rather than no over-programming and intends to consider over-programming and its impact on the public DCP in a latter report.

Structure

Capability Development Group

4.52 The development of the DCP is defined as a 'whole of defence' activity led by CDG but with 'input across the portfolio with all interested parties' to ensure there is alignment between strategy, priorities and resources.[55]

4.53 CDG was formed in accordance with Kinnaird's recommendation for a single point of accountability to manage the capability definition and assessment process.[56] In terms of overall responsibility, therefore, CDG is responsible and accountable for the development of the DCP. Indeed, the role of CDG is to prioritise all Defence's major procurements in line with strategic guidance and ensure that project proposals put to government for inclusion in the DCP have reliable capability, cost, risk and schedule estimates.[57]

4.54 Principally, CDG makes recommendations to government on the appropriate capability that would meet government priorities with agreed workforce and funding guidance. According to the DCDH, CDG manages four key transition points in the capability life cycle:

- developing the capability strategy aspects of the Defence Planning Guidance (DPG) which articulates strategic options, and capability priorities and themes, for DCP development;
- transforming future force capability needs into capability system needs for DCP entry;
- obtaining government approval of the DCP and associated projects; and

54 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, p. 34.

55 Neil Orme, Department of Defence, *Committee Hansard*, 5 October 2011, p. 11.

56 Malcolm Kinnaird, *Defence Procurement Review 2003*, pp. 9–10.

57 Department of Defence, *Submission 2*1, p. 8.

- transitioning approved projects to the Capability Manager and acquisition agency (usually DMO), following government approval.[58]

Capability Investment Resources Division of CDG

4.55 The Capability Investment Resources Division (CIR Div) is one of three divisions within CDG and is responsible for providing independent analysis and to review capability proposals and their related costs. The CIR Div is divided into two branches, the Investment Analysis Branch and the Cost Analysis Branch.

4.56 In line with the Pappas recommendations regarding independent analysis, CDG's CIR Div provides such analysis and reviews capability proposals and related costs, including the overall balance of investment in current and future capabilities, major investment proposals and priorities. The division is responsible for:

a) ensuring that the DCP is appropriately programmed;

b) independently reviewing capital and operating costs for all projects going to the Defence committees; and

c) management of Net Personnel and Operating Costs (NPOC) estimates for all DCP projects and those approved projects (ie post-second pass) for which NPOC has not been triggered.[59]

4.57 The Cost Analysis Branch (CAB) in the CIR Div is responsible for developing independent cost estimates as required whilst managing the DCP and associated NPOC.[60] The CAB will approve a cost model (which is a standardised spreadsheet) used to present whole-of-life cost information and capture assumptions on which the costs are developed.[61] The DCDH notes that the cost estimates presented at first pass for government consideration should be based on the cost model and articulate the basis and cost drivers for the estimates whilst determining amongst other things the 'overall affordability of each option in terms of acquisition and NPOC'.[62] Thereafter, at second pass, each option presented to government requires an Acquisition Business Case which includes a cost template detailing estimates and risks for total acquisition and whole-of-life costs including amongst other things, Personnel and Operating Costs (POC) and NPOC.[63]

58 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 15.

59 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 16.

60 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 16.

61 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 57.

62 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 57.

63 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 77.

Defence Materiel Organisation

4.58 The Defence Materiel Organisation (DMO) is responsible for assisting CDG to develop the CDD suite which defines the capability system baseline, provides cost and schedule estimates, and incorporates the results of risk reduction studies. It provides advice on industry's capacity to support new capabilities across the DCP whilst meeting current commitments to extant capabilities being either acquired or supported in-service.[64]

Defence Science and Technology Organisation (DSTO)

4.59 Science and Technology (S&T) advice informs government on capability development decisions. The DSTO is a principal source of that advice and provides a range of services through the capability development stages. The DSTO will produce a preliminary Test Concept Document for each project entering the DCP for further development.

Capability Managers

4.60 Capability Managers will develop some of the documents that make up the capability proposals which define the requirements of each of the Fundamental Inputs to Capability (FIC) elements of the capability system. They identify the requirements to generate capability including personnel and workforce requirements, organisation, collective training, major systems, supplies, facilities and training areas, support, and command and management. They are also responsible for detailing the risks for each option.[65]

Engaging with and informing industry

4.61 The need for early engagement with and the provision of adequate information to industry in the early stages of the capability development process was emphasised by many submitters to the inquiry as essential to both inform the development of the DCP and enable industry to plan for the future.

4.62 In response to Mortimer's recommendations regarding the public DCP, the *Defence Capability Development Handbook* (DCDH) states that the public DCP contains details of project descriptions and scope information including the interrelationship with other approved or unapproved projects or project phases as well as industry opportunities for acquisition and through-life support.[66]

4.63 However, evidence before the committee suggests that the clarity of the public DCP, which is a primary information tool for industry, has declined making

64 Defence Materiel Organisation, *DMO Acquisition and Sustainment Manuel*, 2007, p. 48.

65 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 111.

66 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 29.

measuring progress in the initial stage of a project and ability to align workforce capabilities with project demands extremely difficult.[67] The committee intends to consider evidence regarding the public DCP and extent to which it is sufficiently accurate in terms of time projections and estimated project value to meet industry expectations and enable industry to plan according. Conversely, the question for the committee is to what extent industry is led to rely upon the public DCP, as well as the DWP and other published information from Defence when making investment decisions.

4.64 Other issues for consideration include the impact of industry policy and implementation on long term industry capacity and how this implicates procurement decisions. In this context, key questions emerge in relation to the *Defence Industry Policy Statement 2010*. Whilst this policy has committed $445.7 million in industry support over ten years, it is not clear how much of those funds have already been distributed. Furthermore, the committee is interested to establish whether the policy framework is adequate and how well it has been implemented to date. Acknowledging that the strength of the Defence industry base has a real impact on its capacity to engage with the procurement process at the early stages and throughout the lifecycle, the committee intends to pursue these matters.

4.65 Many submitters also raised concerns about the state of Australia's defence industry and its future more broadly including the consequences of delays in capital procurement outcomes on the viability of local industry and expertise.[68] Others emphasised the point that maintenance of a viable defence industry is critical to Australia's (maritime) defence.[69] Some submitters held that Australian design, development and construction of new equipment for the ADF should be recognised as a first order policy priority for government.[70] These are matters for the committee's main report.

People

4.66 CDG is responsible for both the DCP and the preparation of documentation for submission to government at first and second pass. In the context of considering the requirements phase in the next chapter, the committee will consider CDG and other players responsible across the needs and requirements phase.

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67 Submarine Institute of Australia, *Submission 9*, p. 2.

68 Australian Industry Defence Network Inc, *Submission 19*, p. 1; Northern Territory Government, *Submission 4*, p. 1.

69 Australian Association for Maritime Affairs, *Submission 17*; Royal Institution of Naval Architects (Australia Division), *Submission 18*.

70 Australian Industry Group Defence Council, *Submission 10*, p. [4].

Unanswered questions

4.67 The committee appreciates that the process by which the DCP is developed has been strengthened in response to the Kinnaird, Mortimer and Pappas findings and recommendations. However, the committee questions the extent to which the process provides for contestability and independent verification. One of the key areas where this should take place is in relation to industry and early engagement with industry.

4.68 The majority of submitters to the inquiry held the view that whilst early engagement with industry is fundamental, there are few opportunities for two-way exchange of information and knowledge with industry in the needs stage of the capability development process.[71] However, the committee was unable to establish exactly how and when industry is involved at the needs stage. Questions remains therefore as to:

- when and how industry is involved in the needs stage;
- the role and importance of the public DCP in informing industry planning, and in relation more broadly to the question of contestability;
- the process by which projects entered into the DCP are subject to rigorous and independent verification and analysis.

4.69 Whilst the committee appreciates that DSTO has a role in the needs stage, the committee is interested to establish whether:

- the Capability Managers, CDG and DMO have the science and technology expertise to fully appreciate the risk assessments undertaken by DSTO; and
- whether the DSTO Test Concept Document is given adequate weight in consideration of feasibility and technical risk.

Committee view

4.70 The committee recognises a number of challenges in relation to the strategic analysis and needs stage including the strength and clarity of the linkages between strategic guidance and capability development as identified in the DWP. Furthermore, the committee acknowledges the concerns raised in relation to the DWP funding and procurement targets and the key questions of whether the DWP program will be achieved. Such matters raise concerns for the committee regarding the reliability of the DWP and DCP as central planning documents. The committee intends to pursue these questions and consider the inefficiencies in the process from the earliest analysis and how they impact along the process including in terms of changes to scope and delays. These questions also go to the issue of risk management and the capacity of Defence to identify and mitigate risk from the beginning of the capability process, the

71 Australian Business Defence Industry Unit, *Submission 6*, p. 5; BAE Systems Australia, *Submission 12*, p. 3; Andrew Davies and Mark Thomson, *Submission 8*, p.[2]; Australian Industry Defence Network, *Submission 19*, p. 3; Australian Industry Group Defence Council, *Submission 10*, p. [4]; Defence Teaming Centre Inc, *Submission 16*, p. 4.

veracity of the process as well as to the management feedback loops recognised as fundamental for providing transparency in relation to a project's status.

Chapter 5

Requirements stage

Overview of the requirements stage

5.1 The *Defence Capability Development Handbook* (DCDH) identifies two goals of the requirements stage. Firstly, first pass approval by government to allow further investigation and refinement of the option(s) that will 'satisfy the identified capability need'.[1] The other goal is that of second pass approval by government to 'acquire and implement an agreed capability that fulfils the capability requirement identified in the Defence Capability Plan' (DCP). The DCDH notes that this approval will include a 'defined acquisition budget, schedule and level of performance, and a budgeted whole-of-life cost and workforce requirement'.[2]

5.2 The Kinnaird, Mortimer and Pappas reviews identified key challenges in relation to the requirements stage. They included: the efficiency of the two-pass process for new acquisitions; balancing cost and risk including identification and mitigation of technical risks; benchmarking off-the-shelf options; accountability and responsibility for program management; skills and expertise in capability planning; strengthening the Capability Development Group; and understanding whole-of-life costs.

Process

DCP entry to first pass

5.3 Once a project commences (following entry into the DCP), a number of documents are developed to inform the final Ministerial Submission (MINSUB) or Cabinet Submission (CABSUB) provided to government for approval. The information required by government at first pass includes a business case for each capability option which must identify the:

- background including strategic policy and recent developments;
- rational or how the option proposed addresses the capability gap identified by government in the DCP;
- key outcomes sought or the capability option requiring approval;
- levels and types of risk associated with the option's implementation; and
- financial and workforce implications including expected whole-of-life costs.[3]

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1 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 33.

2 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 67.

3 Department of Defence, *Defence Capability Development Handbook*, August 2011, pp. 64–65.

5.4 In order to reach first pass, a substantial number of documents are prepared starting with a Project Management Plan (PMP) which outlines what is to be done, when, by whom and at what cost. It also identifies the risks and responding mitigation strategies. Thereafter, the key information required prior to first pass and key steps in the process to obtain it include consideration of the scope, operational parameters, option set for a project and how the project should be tailored to suit its needs.

5.5 Part of the pre-first pass documentation preparation process will also include scoping studies and industry engagement to establish availability of product in the marketplace, and provide an indication of whole-of-life costs and innovative options that might be available. The formal pre-first pass solicitation mechanisms include the following:

- Request for Information (RFI) used to obtain estimated cost, capability and schedule information on a new project;
- Rapid Prototyping, Development and Evaluation (RPDE) Program which can be tasked with investigating potential options and solutions for a capability based on the project scope, cost and schedule parameters in the DCP; and
- Capability and Technology Demonstrator (CTD) Program which is a collaborative activity between CDG, DMO and DSTO to enable industry to demonstrate how advanced technologies can enhance priority areas of Defence capability.

5.6 In terms of establishing technical risks, DSTO develops a Technical Risk Indicator (TRI) to determine the feasibility of the technology to provide the capability being proposed and identify any potential areas of significant risk. The TRI will also identify high technical risks associated with any options and address differing risk profiles that arise with each capability option (i.e. military-off-the-shelf, Australianised).[4] In addition, a draft Materiel Acquisition Agreement (MAA) and Acquisition Strategy, which identifies the preferred alternative for procuring and implementing each capability system beyond second pass, must be developed.

5.7 Kinnaird, Mortimer and Pappas recommended that a military-off-the-shelf (MOTS) alternative be part of any set of options put to government to ensure as Kinnaird noted that a 'benchmark is established against which the costs, military effects, and schedule of all proposals can be assessed'.[5] Conversely, all reviews found that any requirements set beyond that of off-the-shelf equipment generate what Mortimer described as 'disproportionately large increases to the cost, schedule and

4 Defence Science & Technology Organisation, *Technical Risk Assessment Handbook*, Version 1.1, 2010, p. 3.

5 Malcolm Kinnaird, *Defence Procurement Review 2003*, p. 19; David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, pp. 19–20; George Pappas, *2008 Audit of the Defence Budget*, Department of Defence, 3 April 2009, p. 80.

risk of projects'.[6] They would therefore need to be based on 'a rigorous cost-benefit analysis of the additional capability sought against the cost and risk of doing so'.[7]

5.8 In light of these recommendations, the 2009 DWP states that MOTS and commercial-off-the-shelf (COTS) solutions will be the benchmark against which a rigorous cost benefit analysis of the military effects and schedule aspects of all proposals will be undertaken.[8] The DCDH reconfirms the DWP by noting that where an off-the-shelf option exits, it will be presented to government and be the benchmark against which a rigorous cost-benefit analysis of any additional capability is sought, taking into account the cost and risk in doing so. The DCDH explains that when an off-the-shelf option is 'judged not to exist', this will be explained in the first pass submission to government.[9] In relation to an Australianised option, the DCDH states that any option proposing the Australianisation or modification of off-the-shelf equipment must detail the rational and associated costs and risks. The DCDH also makes clear that the first-time integration of a number of separate off-the-shelf systems is no longer an off-the-shelf solution and must be considered 'developmental'.[10]

5.9 Defence noted that, as indicated in the 2009 DWP, it is seeking to drive down the costs of ownership of military capability and that part of this drive will include, where appropriate, 'focus on military- and commercial-off-the-shelf equipment'.[11] In relation to Mortimer's recommendation 2.3 concerning the provision of cost-benefit analysis of any option that is not off-the-shelf, however, the minister stated in May 2011 that Defence would 'accelerate implementation' of this recommendation which is yet to be fully implemented.[12]

Second pass

5.10 Once government has approved a capability proposal at first pass, the options agreed by government will be further refined. The key activities to achieve second pass include the development of:

- detailed requirements definition and CDD refinement;

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6 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 18.

7 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 20.

8 Department of Defence, *Defending Australia in the Asia-Pacific Century: Force 2030*, Defence White Paper 2009, p. 127.

9 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 47.

10 Department of Defence, *Defence Capability Development Handbook*, August 2011, pp. 47–48.

11 Department of Defence, *Submission 21*, p. 6.

12 Minister for Defence and Minister for Defence Materiel, 'Strategic Reform Program', Media Release, 6 May 2011, http://www.defence.gov.au/minister/Smithtpl.cfm?CurrentId=11766 (accessed 25 August 2011).

- solicitation documentation (RFT, Letter of Offer and Acceptance);
- industry and Foreign Military Sales (FMS) solicitation activities including contract negotiations and offer definition activities. These include:
    - Request for Proposal (RFP) used to encourage suppliers to propose solutions to achieve a desired outcome or resolve a specific problem;
    - Request for Tender (RFT) utilised to obtain offers for clearly defined and specific requirements;
    - Letter of Request (LOR) which initiates a request for the establishment of a Foreign Military Sales (FMS) case;
- consideration of project documents including a Capability Proposal Second Pass (CPSP), Acquisition Business Case and commercial, technical and workforce risk assessments by internal Defence committees and CABSUB/MINSUB; and finally
- government approval of the CABSUB/MINSUB.[13]

Structure

Capability Development Group

5.11 CDG takes carriage of the requirements stage and is responsible for developing options for government consideration at both first and second pass. The Capability Systems Division (CS Div) Desk Officers within CDG manage this process. They are responsible for leading the Integrated Project Team and bringing together people 'from the capability manager, from DSTO, from DMO, maybe CIOG [Chief Information Officer Group] if required, and maybe then might hire contractors to provide some professional support as well'.[14] In fulfilling this role, the CS Div Desk Officers develop capability options and manage the development of the project document suite which includes the Capability Definition Document (CDD) for each option; Workforce Plan and cost estimates; Science and Technology Plan with DSTO; draft MAA with DMO; and the capability proposal from which the MINSUB/CABSUB is produced for government consideration at first and second pass.

5.12 Prior to submission at first and second pass, the CS Div Desk Officers are responsible for ensuring that the necessary documentation is considered by a number of internal Defence committees starting with the Options Review Committee (ORC).

13 Department of Defence, *Defence Capability Development Handbook*, August 2011, pp. 67–68.

14 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 5 October 2011, p. 45.

Chaired by the Chief of CDG, the ORC will provide direction on capability options that should be developed for first pass consideration.[15]

MOTS benchmarking and options

5.13 Part of the role of the CS Div Desk Officer is to ensure that a MOTS option is provided as a benchmark against which other options can be considered by government at first pass. However, evidence provided to the committee suggests that whilst the 2009 DWP requires the inclusion of a MOTS option for each project, the requirement will often translate into a hypothetical off-the-shelf option or local construction of an off-the-shelf design.[16] Other evidence highlighted the consequences for domestic industry of a MOTS purchase in terms of viability and skill base with concerns raised that MOTS:

- options should only be pursued when the Australian defence industry is unable to meet the capability requirement;[17]
- can actually increase risks and costs when sustainment and whole-of-life costs are analysed whilst offering limited opportunities to develop a domestic industry capability to support the ADF capability acquisitions;[18]
- procurement should not allow the erosion of domestic capability to design, develop and produce equipment when it is in the national interest to retain such capabilities;[19] and
- can either be a model for risk management or disguise risk.[20]

5.14 The Rizzo Report highlighted that the benchmark must take into account the longer-term costs of COTS/MOTS acquisition whereby Defence loses engineering capacity which then carries costs in terms of project and capability failure with amphibious ships being a case in point.[21] He also noted that long-term costs in terms of actions required to rebuild the technical capability some years down the track should also be considered. Rizzo further recognised that the combination of MOTS and the Commercial Support Program (CSP) has implications for Defence personnel and technical competence as well as domestic industry. The committee is interested to establish, therefore, what elements of industry capability are in fact strategic

15 The Options Review Committee also comprises the Head Capability Systems and the First Assistant Secretary of the Capability Investment & Resources Division. Permanently invited attendees include DMO's General Manager Programs.

16 Andrew Davies and Mark Thomson, *Submission 8*, p. [2].

17 Australian Industry Group Defence Council, *Submission 10*, p. [2].

18 Australian Industry Defence Network, *Submission 19*, p. 1; Australian Industry and Defence Network Inc, *Submission 19*, p. 1.

19 Victorian Government, *Submission 27*, p. 2; Defence Teaming Centre Inc, *Submission 16*, p. 4.

20 Miller Costello & Company, *Submission 30*, p. 3.

21 Paul Rizzo, *Plan to Reform Support Ship Repair and Management Practices*, July 2011.

capability that should not be lost to overseas suppliers. This goes to the question of moving elements of industry division to CDG and having this decision made as part of first pass approval.

5.15 Other considerations in relation to MOTS include interoperability as well as compliance with Australian regulations including health and safety requirements. As overseas providers and governments have different risk tolerance to that of the Australian authorities, a purely MOTS acquisition can therefore place Defence in a position of either being non-compliant with Australian law or having to accept additional cost and modification to make the equipment compliant. Sometimes the non-compliance is inconsequential and yet because so much is driven by process rather than decisions made by informed people, significant cost and waste results from attempts to modify equipment unnecessarily. On the other hand, sometimes the true costs of required upgrades are not factored in because the process assumes that a US Army or Air Force product will automatically be suitable for ADF use. It has been suggested to the committee that the concept of an Airworthiness Board-like review of CDG business cases will allow informed, independent corporate knowledge to be applied to the issue early on in the development cycle.

5.16 The committee recognises that there is considerable debate around the MOTS benchmarking requirement including the suggestion that the requirement has turned into a preference for MOTS. The committee also acknowledges the wider options debate and the impact of MOTS procurements on the domestic defence industry. The committee intends to consider these debates in its main report.

Independent analysis and engagement with industry

5.17 Kinnaird and Mortimer recommended the use of resources on early analysis including funding industry studies and gathering the best 'commercial advice on acquisition options'.[22] In accordance with these recommendations, in the pre-first pass phase, the CS Div Project Officers can draw on Project Development Funds to develop the CDD, conduct technical and trade studies, market studies, costing studies and analysis.[23]

5.18 Another consideration in relation to the capability development, procurement and sustainment options is that of the capacity and sustainment of Australia's defence industry. Mr Graham Priestnall of the Australian Industry and Defence Network noted of industry that:

> The sustainment of ADF capability, an area where many SMEs operate, is the greatest cost to the government in acquiring and maintaining capability,

22 Malcolm Kinnaird, *Defence Procurement Review 2003*, p. 16; David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 26.

23 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 35.

> yet this draws relatively minor focus and analysis within all ongoing reviews.[24]

5.19 Despite recommendations by Kinnaird, Mortimer and Pappas, industry representatives argue that this remains an area that draws relatively minor focus and analysis during the capability development lifecycle and in ongoing reviews.[25] Moreover, the perception is that through-life support and sustainment experts in industry are not involved in the design phase of a developmental project. The committee intends to consider the evidence that sustainment of industry is not a central consideration in the context of through-life costs and capability sustainment. Additionally, the committee is interested in establishing an understanding of how such considerations are articulated and of the relative importance given to them.

5.20 In relation to engagement with industry more broadly, Defence recently reinvigorated its environmental working groups to facilitate early informal engagement in order to establish what is available on the market and gather ideas from industry. These forums provide an opportunity for Defence and industry to discuss DCP projects during the requirements stage leading then to formal engagement on the draft tender document. CDG will invite industry comment on the draft tender document in order to ensure that only specifications that can be delivered are included in the final tender document.[26]

Defence Science and Technology Organisation

5.21 DSTO provides the technical and technology risk analyses required at first and second pass. In light of findings and recommendations by Kinnaird, Mortimer and Pappas regarding the need for greater consideration of such risks, DSTO has been mandated to 'provide external evaluation and verification of project proposals'.[27]

5.22 The Joint Decision Support Centre which is a CDG–DSTO initiative is a forum where methodologies can be applied to assist decision makers within CDG to look at particular concepts or options that might arise in a DCP project. According to Dr Ian Sare, Deputy Chief Defence Scientist, DSTO provides the staffing for the centre which is tasked by CDG CS Div Desk Officers to conduct studies to assist them in preparing the formal documentation for government consideration. In this regard,

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24 Graham Priestnall, Australian Industry & Defence Network, *Committee Hansard*, 11 August 2011, p. 3.

25 Australian Industry & Defence Network, *Submission 19*, p. 1.

26 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 5 October 2011, p. 51.

27 Malcolm Kinnaird, *Defence Procurement Review 2003*, p. 13; David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 26; George Pappas, 2*008 Audit of the Defence Budget*, Department of Defence, 3 April 2009, p. 81; Department of Defence, *Submission 21*, p. 8.

Dr Sare noted that the centre 'has been a very effective way of trying to apply objective operational analysis-type methodologies to assist decision support'.[28]

5.23 The DSTO provides detailed analyses of the technical issues in relation to the options that might be then brought forward to government for consideration.[29] In relation to this process, Dr Sare informed the committee that the role of DSTO is to provide advice and:

> We will then frequently do studies and analyses to investigate the feasibility of different options that might then deliver a capability. We will utilise our best knowledge of what is happening in the broader community. We have, for example, very strong international defence science links with the US, the UK, Canada and New Zealand.[30]

5.24 As previously noted, a TRI forms part of the documentation required by government at first pass. The TRI identifies the key systems with which the proposed options will need to interact to deliver the required capability. It can also note any developmental system or technology that needs to be developed in time to meet the proposed schedule and which could potentially provide greater capability than those options previously identified.[31] Air Marshal Harvey further explained the TRI process:

> What happens is that you have a broad study to understand the field and what might be possible. You will talk in general terms about what the technical risks are and that helps to inform the options review committee in order to determine which options to pursue.[32]

5.25 Whilst the TRI provides an early indication of risk, the Technical Risk Assessment (TRA) provides a detailed assessment of technical risks and issues associated with each option in the capability proposal prior to first pass consideration. A number of internal Defence review committees will consider the DSTO risk assessments from which the Chief Defence Scientist will draft a Technical Risk Certification for inclusion in the MINSUB/CABSUB at first pass as appropriate.

5.26 Pappas referred to DSTO's involvement in pre-approval assessments of major acquisition projects but was of the view that there was 'scope for more constructive

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28 Dr I Sare, Defence Science and Technology Organisation, *Committee Hansard*, 5 October 2011, p. 21.

29 Dr I Sare, Defence Science and Technology Organisation, *Committee Hansard*, 5 October 2011, p. 21.

30 Dr I Sare, Defence Science and Technology Organisation, *Committee Hansard*, 5 October 2011, p. 25.

31 Defence Science and Technology Organisation, *Technical Risk Assessment Handbook*, Version 1.1, 2010, p. 3

32 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, p. 32.

involvement'. Importantly, he noted that DSTO's involvement and assessments are 'not always paid the respect they should be'. He went on to say:

> Scope and specification changes make the conduct of a Technical Risk Assessment very difficult and there does not appear to be consistent criteria that determines the degree of initial and ongoing DSTO involvement in retiring technical risk in projects.[33]

5.27 He urged closer cooperation which would, among other things, assist project teams to understand the 'grounds for risk assessments and the potential ways to reduce/mitigate the major risks'.[34] Pappas also made a number of recommendations directed at more effective management of technical risk.

5.28 Preparation for second pass approval involves detailed assessment by DSTO of the options the government has agreed to pursue. This assessment includes the identification and execution of risk treatment and issue resolution activities that may involve industry as well as the preparation of statements of technical risk. Documentation produced by DSTO on risk includes a second pass TRA, a Science and Technology (S&T) Plan for second pass and a final TRC for inclusion in the MINSUB/CABSUB as appropriate.[35]

Defence Materiel Organisation

5.29 The Mortimer Review noted that the DMO is responsible for delivering military equipment to the ADF according to cost, schedule and specifications agreed to by government. Mortimer argued that in order to be held accountable for such delivery, the DMO must provide independent advice to government on matters within its remit. Indeed, the review specifically recommended that the DMO be responsible for the 'equipment acquisition strategy throughout the requirement definition process'.[36] To this end, Mortimer recommended that the CEO of the DMO provide independent advice to government on cost, schedule, risk and commercial aspects of all major capital equipment acquisitions at DCP entry and at first and second pass.[37] Moreover, in order to be able to answer the government's questions on these matters, he recommended that the CEO be a permanently invited adviser to government committees considering Defence equipment acquisitions.[38]

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33 George Pappas, *2008 Audit of the Defence Budget*, Department of Defence, 3 April 2009, p. 82.

34 George Pappas, *2008 Audit of the Defence Budget*, Department of Defence, 3 April 2009, p. 82.

35 Defence Science and Technology Organisation, *Technical Risk Assessment Handbook*, Version 1.1, 2010, p. 5.

36 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, Recommendation 2.7, p. 23.

37 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 27.

38 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, Recommendation 2.10, p. 27.

5.30 In keeping with Mortimer's recommendations, the DMO is progressively more involved as a project moves through the requirements phase. DMO's responsibilities include direct support in developing the CDD, cost and schedule estimates, and in undertaking risk reduction studies whilst evaluating proposals and offers from industry.[39] Indeed, consistent with Mortimer's recommendation 2.7, the DMO is responsible of the acquisition strategy throughout the capability development process with the CEO of the DMO responsible for signing off on the strategy. Furthermore, in accordance with Mortimer's recommendation 2.10, the CEO of DMO provides independent advice to the Defence Minister and Cabinet on the costs, schedule and other commercial aspects of military equipment procurements in each capability development Cabinet submission.[40]

5.31 The DMO is also represented on the four internal Defence committees responsible for reviewing and endorsing options at first and second pass to ensure that a 'One Defence' view is offered to government. Such representation includes either membership or permanent invitation.[41]

5.32 Whilst the Defence committee system was established to strengthen the two-pass process and provide greater rigour and scrutiny of projects across Defence, the Black Review found that committees 'tend to function to confuse accountability, blur strategic focus and disperse decision-making capacity'.[42] The findings that committees serve to diffuse individual accountabilities will be considered in greater depth by the committee.

Capability Managers

5.33 Capability Managers are responsible for 'raising, training and sustaining force', and have an overarching role across the capability development cycle to ensure that it all comes together as a complete capability. Furthermore, as defined in the *Defence Capability Development Handbook* (DCDH), Capability Managers have a 'far greater role right up front on capability development and a far greater say over the development of those projects as they come into service'.[43] Indeed, according to Chief of Air Force and Capability Manager, Air Marshal Brown, as the Capability Managers are ultimately accountable for a capability, they will follow the project from start to finish.[44]

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39 Defence Materiel Organisation, *DMO Acquisition and Sustainment Manual*, 2007, p. 48.

40 Department of Defence, *Submission 21*, p. 14.

41 These committees include the Options Review Committee, Capability Gate Review Board, Defence Capability Committee, Defence Capability and Investment Committee.

42 Associate Professor Rufus Black, *Review of the Defence Accountability Framework*, Department of Defence, January 2011, pp. 34–35.

43 Air Marshal G Brown, Royal Australian Air Force, *Committee Hansard*, 5 October 2011, p. 37.

44 Air Marshal G Brown, Royal Australian Air Force, *Committee Hansard*, 5 October 2011, pp. 39–40.

Department of Finance and Deregulation

5.34 In response to recommendations by Kinnaird, Mortimer and Pappas concerning greater certainty of costs and a strengthened two-pass process, the Defence Capability Assessment Branch was established in 2004 within the Department of Finance and Deregulation (Finance) Budget Group. The branch is staffed by specialist cost analysts responsible for evaluating the costs and financial risks associated with Defence capability procurement proposals. In order to implement the Kinnaird recommendations, Finance agreed to a guide that defines the standards by which the Budget Group assesses the cost and risk estimates associated with major Defence acquisition proposals at first and second pass. Finance then provides advice to its minister on these costs and risks.[45]

5.35 The Finance Minister is a member of the Expenditure Review Committee and, according to Finance, is often coopted to the NSC to consider major capability proposals of $100 million in value or greater that have been brought forward by Defence for government consideration.[46] The Defence Minister and Finance Minister jointly consider proposals with a total project value between $20 million and $100 million, unless either minister refers the project to the NSC.

People

CDG CS Div Desk Officers

5.36 CDG brings together all available advice from DSTO, DMO, Capability Managers and industry in order to develop the CABSUB/MINSUB for the government to consider at first and second pass.[47] This includes information emanating from the CDG-DSTO Joint Decision Support Centre which applies 'objective operational analysis-type methodologies' to assist CDG in decision making'.[48]

5.37 In order to fulfil this role, Mortimer emphasised the importance of CDG being adequately resourced in terms of 'workforce numbers and skills to develop capability proposals and incorporate specialist advice' from DMO and the DSTO.[49]

5.38 Indeed, of five principal areas of concern identified by Mortimer in relation to the procurement process, inadequate project management resources in CDG and

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45 Department of Finance and Deregulation, *Submission 23*, p. [1].

46 Department of Finance and Deregulation, *Submission 23*, p. [1].

47 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 5 October 2011, p. 40.

48 Dr I Sare, Defence, Science and Technology Organisation, *Committee Hansard*, 5 October 2011, p. 21.

49 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 26.

shortages in DMO personnel were listed amongst them.[50] Mortimer held that the accuracy of information provided to government would be improved if CDG was better and more appropriately resourced and skilled to consult and consider expert advice.[51] Evidence before the committee, moreover, suggested that CDG CS Div Desk Officers were not adequately trained and lacked appropriate supporting management structures, processes and tools to carry out their role.[52] Furthermore, they did not have experienced independent individuals with the necessary corporate knowledge and ability to capture lessons learned to lead, guide and mentor them.

5.39 Mortimer noted that core personnel in CDG were military officers on short term postings with an average of 18 months in an area where the work was complex. Mortimer argued in favour of extending the duration of postings to CDG and recommended that CDG and the DMO both deepen their expertise in cost and schedule estimation and project management as a matter of priority.[53] Pappas had similar concerns, noting that the short assignments of CDG desk officers created continuity problems in acquisition program management as multiple desk officers could be responsible for the evolution of the specifications of a single platform.[54] High turnover of staff within CDG and DMO was also raised in evidence as a problem in relation to the consequent difficulties for large primes and SMEs.[55] Other submitters noted that CDG personnel are primarily military officers who might bring military experience and expertise to the technical aspects of proposals whereas their primary role in CDG is project management and administration. The ANAO noted that this dynamic coupled with a lack of training and management support given to CDG desk officers 'particularly hampered their ability to understand complex cost and schedule estimations for the capability proposals'.[56] In relation to this matter, the committee notes Mortimer's recommendation that in order to make effective use of the technical, engineering and commercial expertise received from DMO and the DSTO, CDG may require in some areas additional personnel with specialist expertise.[57] The committee questions whether this recommendation has been fully realised.

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50 David Mortimer, *Going to the Next Level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. xi.

51 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, pp. 24–25.

52 Australian National Audit Office, *Submission 22*, p. 5.

53 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, pp. 24–25.

54 George Pappas, *2008 Audit of the Defence Budget*, Department of Defence, 3 April 2009, p. 52.

55 Submarine Institute of Australia, *Submission 9*, p. 2.

56 Australian National Audit Office, *Submission 22*, p. 5.

57 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 25.

5.40 In response to these findings and recommendations concerning skills development and support to CDG CS Div Desk Officers, Air Marshal Harvey observed that CDG managers currently consider 90 per cent of the desk officers to be sufficiently skilled to perform their assigned duties without additional support. Furthermore, a structured CDG Desk Officer skilling program has been implemented to address core capability development skilling. Air Marshal Harvey informed the committee that the program provides an annual 'induction course and then a flexible, progressive skilling program to address project and individual needs'. Air Marshal Harvey concluded:

> Realisation of the full benefits of the initiatives will be protracted, due to the extended procurement life cycles, which are typically two to five years just in the approval process.[58]

5.41 Furthermore, he stressed that training is currently underway to address the skills shortages in relation to cost estimations.[59]

5.42 However, Defence also acknowledged challenges in relation to attracting and retaining qualified and skilled staff to progress projects through the capability life cycle. Air Marshal Harvey detailed the initiatives in place to address these challenges:

> Several skilling and professionalisation strategies have been implemented to enhance the skills base of Defence and DMO workforces. Identified skills shortages are being addressed via education and training, targeted recruitment and employment schemes and above-the-line contractor support, when necessary. As part of our commitment to improve our performance, Defence and DMO have introduced a professional industry standards certification framework for procurement and contracting staff. This includes a continuing professional development or CPD program.[60]

5.43 In addition to training initiatives, Air Marshal Harvey informed the committee that CDG was 'looking at higher pay for specific individuals who are particularly valued by the organisation' as well as securing industry support and increasing the numbers available within CDG.[61] He explained that where baseline funding is not adequate, CDG can bid for resources through the Workforce Financial Management Committee to the CDF and Secretary of Defence.[62]

Committee evidence

5.44 While reforms and improvements have been made to strengthen the two-pass process, the committee received considerable evidence to suggest that problems and

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58 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, p. 3.

59 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, p. 3.

60 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, p. 3.

61 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, p. 35.

62 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, p. 35.

challenges remain. CS Div Desk Officers play a crucial role in drawing on and synthesising often highly technical information into key documents for government consideration and it is in relation to their role that this evidence is largely directed.

5.45 Such concerns included the following:

- although the administrative framework for implementation of the two-pass process is appropriate, the quality of record keeping within CDG is poor;[63]
- CDG officers responsible for managing capability proposals through the two-pass process are inadequately trained and lack appropriate supporting management structures, processes and tools to perform their role, particularly complex cost and schedule estimates for capability proposals;[64]
- the absence of a core of experienced professionals in CDG including retired military officers and ex-project managers;[65]
- given extended project timeframes, changing staff with departmental and project offices inevitably result in a large number of different uniformed and public service personnel working on a Defence project which can be disruptive;[66] and
- the level of contestability, independent scrutiny and analysis previously undertaken by the Force Development and Analysis division (FDA) should be reinstated.[67]

5.46 The committee raised these questions with CDG during two days of public hearings. It sought evidence from Defence and specifically CDG in order to establish the extent to which CDG has a demonstrated ability to draw on and process technical, engineering and commercial expertise and advice received from the DMO, DSTO and industry. Whilst the committee appreciates that efforts and improvements have been made in relation to attracting and retaining qualified personnel, skill development and training, it recognises that challenges remain which must be addressed. The committee intends, therefore, to consider these matters in greater depth.

5.47 One of the consistent themes in evidence before the committee concerned the level of engineering skill and input across the capability development and acquisition life cycle. Some submitters recognised this challenge as symptomatic of a general deskilling across Defence and consequent dilution of technical support services and engineering skills.[68] Much of the discussion regarding engineering and technical skills focused on the DMO and the Services. Even so, the committee appreciates that

63 Australian National Audit Office, *Submission 22*, p. 9.

64 Australian National Audit Office, *Submission 22*, p. 5.

65 Andrew Davies and Mark Thomson, *Submission 8*, p. [2].

66 Sonartech ATLAS Pty Ltd, *Submission 13*, p. 3.

67 Andrew Davies and Mark Thomson, *Submission 8*, p. [2].

68 Air Commodore (Retired) E.J. Bushell, *Submission 3*, p. 5.

engineering input would be essential at the needs and requirements phase to the extent that such skills would enable CDG to have a greater appreciation for, and ability to, interpret input from industry and DSTO. This is another area for further committee consideration.

Capability Managers

5.48 One of the issues raised in evidence and taken up by the committee during the hearings with Defence was the extent to which the centralisation of resources to CDG (and the DMO in relation to acquisition and sustainment) and away from the Services has affected the ability of Service Chiefs to manage the capability process. Furthermore, evidence to the committee suggests that under the current governance model, the Capability Managers are not and cannot be accountable and that this is one of the fundamental flaws in governance that has prevented successful reform.[69]

5.49 ANAO's recent audit regarding Navy highlighted the impacts of centralisation. ANAO found that the removal of capability personnel from Navy into CDG to manage capability proposals diminished the ability of Chief of Navy as Capability Manager to obtain guidance and assistance in relation to the requirements determination and how it fits into the process.[70] Ms Fran Holbert, Executive Director of ANAO's Performance Audit Services Group described the consequences:

> It meant that the technical regulatory framework had stepped back and was not engaged with the procurement framework being operated through DMO. It is not clear how so much distance could have arisen given that there are Navy people in Navy, in DMO and in CDG. But it is the case that gaps opened up in the knowledge those different areas had about how risks were developing and what was going on with them.[71]

5.50 The committee recognises the substantial work undertaken by the ANAO in this regard and as centralisation is a key theme emanating from the evidence, the committee expects to consider it and its significance in a subsequent report.

Defence industry

5.51 Some submissions to the inquiry argued that the NSC's annual approval rate has dropped to 10 projects rather than the expected rate of 50 projects a year.[72] The consequences for industry of such a slippage include increased cost as project teams are formed and disbanded and aggravation of the 'already severe problem of uneven workload'.[73] However, Defence rejected the suggestion that there had been slippage in

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69 Air Commodore (Retired) E.J. Bushell, *Submission 3*, pp. 9–10.

70 Fran Holbert, Australian National Audit Office, *Committee Hansard*, 11 August 2011, p. 27.

71 Fran Holbert, Australian National Audit Office, *Committee Hansard*, 11 August 2011, p. 28.

72 BAE Systems Australia, *Submission 12*, p. 3; Australian Industry & Defence Network, *Submission 19*, p. 1.

73 BAE Systems Australia, *Submission 12*, p. 3.

the approval rate. Defence maintained that whilst a project may 'slip a month or so in terms of scheduling with the cabinet', it was not aware of any material delays with any implications for delivery of capability at all over the last few years.[74] The committee recognises a serious disconnect between Defence and industry's view of the approval rate, which is affecting industry's ability to plan and up-skill as well as the working relationship between Defence and industry. Indeed, the position of Defence is that industry must plan to ensure that it can play its part.[75] This divergence in understanding and the respective information underpinning it together with its consequences will be considered in greater depth by the committee at a later stage.

5.52 These considerations, the impact of MOTS procurement on the domestic industry in terms of viability and skills maintenance, the tension between security needs and industry needs, schedule delays resulting from slow supply from industry, and the challenges for the defence industry will also be considered in greater detail by the committee.

74 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, p. 32.

75 Department of Defence, *Submission 21*, pp. 6–7.

Chapter 6

Capability acquisition

Overview of the capability acquisition phase

6.1 The second major phase of the capability life cycle concerns the acquisition or procurement of an appropriate materiel system to meet the identified requirements or establishment of the approved capability solution. This phase covers the period from government approval for a project (at second pass) to the transition of the acquired equipment into service. During the acquisition phase, the DMO works with industry to turn government-endorsed requirements into functional military equipment.[1] The project will move out of this phase and into the sustainment or third phase when the capability is transitioned from the DMO to the end user, namely the Defence Services. Whilst responsibility for the acquisition rests with the DMO, the respective Capability Manager will give advice on the capability the DMO needs to deliver. Once acquired by the DMO, the equipment is then entered into service by the Capability Manager.

6.2 Both Kinnaird and Mortimer emphasised the importance of the DMO developing into a more business-like organisation.[2] As Kinnaird emphasised, the role of DMO is to manage the acquisition and support of Defence equipment.[3] Recommendations emanating from the respective reviews focused on accountability and improving governance across the Defence agencies including the DMO as well as improving performance across projects including skill development and contract management.

6.3 Both the Kinnaird Review (recommendation 6) and Mortimer Review (recommendation 5.1) supported the establishment of DMO as an Executive Agency under the *Public Service Act 1999* whilst retaining its status as a Prescribed Agency under the *Financial Management and Accountability Act 1997*. The government, however, did not agree with such recommendations. When the issue was raised during committee hearings, DMO representatives argued that there were no significant advantages in DMO operating under an executive agency model.[4] The committee intends, however, to consider the evidence in support of the change and of the rationale for it.

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1 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 30.

2 Malcolm Kinnaird, *Defence Procurement Review 2003*, p. 31, David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 68.

3 Malcolm Kinnaird, *Defence Procurement Review 2003*, p. 31.

4 Harry Dunstall, Defence Materiel Organisation, *Committee Hansard*, 7 October 2011, p. 36.

Process

6.4 The various stages in the acquisition phase include:

- release of tender document and completion of tender evaluation;
- development of a Contract Negotiating Directive—providing the terms of reference and constraints within which the chief Commonwealth negotiator is required to operate and establish a negotiation team;
- commencement of the contract comprising Conditions of Contract (or the rules of engagement between the Commonwealth and contractor for the operation of the contract) and a Statement of Work (which represents the work undertaken by the contractor and includes contract milestones) and contract start-up activities;
- management of the contract by:
    - tracking changes that are made to the Contract Baseline and control over personnel who may order or agree to changes and thereby potentially prevent the Commonwealth from exercising its rights under the contract;
    - monitoring and reviewing the performance indicators, standards and risks throughout the life of the project;
    - agreeing on informal remedial action in the early stages of underperformance and identifying appropriate counter-action; and
- capability realisation and creation of a Project Transition Plan to move the project from Project to Sustainment Managers.[5]

6.5 The key milestones in relation to a project at the acquisition stage may include the following:

1. release of tender documents and completion of tender evaluation;
2. contract signature;
3. completion of requirements definition reviews, preliminary design reviews, and detailed design reviews;
4. commencement of systems integration;
5. commencement of test readiness reviews;
6. completion of system acceptance;
7. delivery of the first increment of material systems;
8. commencement of the transition of capability to service; and
9. project closure activities.[6]

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5 Defence Materiel Organisation, *DMO Acquisition and Sustainment Manual*, 2007, pp. 65–72, 78.

Alignment of contracting with commercial practice

6.6 As part of efforts to make DMO into a commercially oriented body, Mortimer argued that the DMO should establish a General Manager–Commercial position to manage strategic commercial issues and acquisition strategy and to support the CEO to 'achieve a more business-like focus throughout the organisation'.[7] Mortimer also recommended that the DMO align its contracting to commercial practice and apply public-private partnerships (PPP) to appropriate projects.[8]

6.7 Towards this end, the General Manager–Commercial, appointed in February 2007, works with industry to identify key procurement and contracting issues that do not align with commercial practice. Changes have been made to templates and policies to reflect this requirement.[9] In relation to PPP, Defence held that the Mortimer recommendations had been implemented to the extent that:

> On a project by project basis DMO is applying the Defence PPP checklist to evaluate capabilities suitable for acquisition under PPP arrangements. DMO liaises with the PPP centre of excellence in Defence Support Group in relation to PPP opportunities.[10]

Structure

CDG to DMO

6.8 Mortimer recognised the transition of a project from CDG to the DMO following second pass approval as a 'critical step' in the capability development cycle demanding close cooperation prior to second pass approval.[11]

6.9 The two key documents that specify roles and responsibilities which are agreed to and signed off on by the relevant Capability Manager (CM), DMO and CDG include the Joint Project Directive (Joint PD) and Materiel Acquisition Agreement (MAA). The Joint PD is issued by the Secretary of Defence and CDF following second pass approval and it covers the time from that approval to the closure of the acquisition business case. In terms of the transition of the project from CDG, the DCDH describes the Joint PD as the means through which this is achieved:

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6 Defence Materiel Organisation, *DMO Acquisition and Sustainment Manual*, 2007, p. 69.

7 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 69.

8 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, Recommendations 3.7 to 3.9, pp. 37–40.

9 Department of Defence, Additional information, received 4 October 2011.

10 Department of Defence, Additional information, received 4 October 2011.

11 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 31.

> After Second Pass approval, management responsibility for the project is transferred to the CM through the Joint PD. Before handing over leadership to the CM, changes made to a project's scope, schedule and budget at Second Pass must be reflected in the Joint PD and other relevant project documents. Once these changes are made, the acquisition agency assumes responsibility for managing the CDD and associated documents. Where the DMO is the acquisition agency, they begin to report against the MAA at this stage.[12]

6.10 Thus, the Joint PD assigns accountabilities and responsibilities to:

- the Capability Manager for overall responsibility for the in-service realisation of the capability;
- CEO of the DMO through terms and conditions in the MAA; and
- other key enablers including the Chief Information Officer and Chief Defence Scientists for provision of FIC elements.[13]

6.11 The MAA is an agreement between the CEO of the DMO, relevant Capability Manager and Chief of CDG. As noted in the previous chapter, a draft First to Second Pass MAA is required as part of first pass approval. Its development is the responsibility of the CDG Capability Systems Division Desk Officer who will work in conjunction with the DMO Emerging Project Team and in consultation with the Capability Manager and DMO Systems Program Office.[14] At second pass, the draft MAA will detail the scope and cost of the acquisition and 'commit the signatory agencies to completing assigned tasks and providing the necessary resources and assets to ensure effective management of the Acquisition Phase'. The draft MAA is finalised and approved by government after second pass.[15]

Defence Materiel Organisation

6.12 During the acquisition process, the DMO works with industry to turn government-endorsed requirements into functional military equipment. The *DMO Acquisition and Sustainment Manual* recognises that the responsibility, authority and accountability for management of the acquisition phase is vested in the DMO's line management, the 'focal point of which is the designated Project Manager for the acquisition project'.[16]

6.13 Mortimer emphasised that Defence must hold the DMO to account for the provision of the equipment and support it has agreed to deliver. Mortimer's Recommendation 5.8 states therefore that 'Defence should manage its relationship

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12 Department of Defence, *Defence Capability Development Handbook*, August 2011, pp. 86–87.

13 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 80.

14 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 58.

15 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 78.

16 Defence Materiel Organisation, *DMO Acquisition and Sustainment Manua*l, 2007, p. 65.

with DMO in terms of costs and delivery against performance levels'. Furthermore, Mortimer highlighted that there can be gaps between what a project delivers and the expectations of the Capability Manager at the point of acceptance into service. The Mortimer Review held that in principle, therefore, DMO should be held to account for delivering equipment and services as set out in the MAA.[17]

6.14 In accordance with Mortimer's recommendation, DMO, as acquisition agency, has primary responsibility for the acquisition or procurement of an appropriate materiel system as set out in the MAA. The MAA specifies the scope, schedule, price, milestone completion criteria and customer for work assigned to DMO for an individual project as approved by government. In fulfilling these responsibilities, DMO is required to advise the relevant Capability Manager and CDG of project progress against the MAAs.[18] Mr Warren King, DMO CEO explained the importance of the MAA:

> Where we are now, after the Mortimer review, is that the project directive, which is the enunciation of what governments agreed, is now formalised. It has three participants in that, the CDG, DMO and the capability manager. Then the MAA, which is the agreement between DMO and Defence to what they are going to supply when, is a derivation of that. Again, all three signed to it.[19]

6.15 Another area of concern to the reviews in relation to accountability was that of acquisition contracts. Pappas emphasised the importance of contractual conditions creating the right incentives for performance improvements and recommended that contracts should be structured to retain competitive tension at prime, second and third tier contractor levels, and ensure contracts include incentives for annual improvements.[20] Mortimer recognised the importance of establishing critical milestones as a means of increasing accountability and alignment. The *DMO Acquisition and Sustainment Manual* notes that contract milestones are a requirement under the Statement of Work which details the work undertaken by the contractor with completion of a milestone triggering a milestone payment under the Conditions of Contract.[21] However, evidence before the committee suggested that critical milestones were not always adhered to as the ANAO found in relation to the Super Seasprite project which was ultimately cancelled in 2008:

> Critical milestones, if not achieved, are intended to allow Defence to stop all contract payments until the milestone is achieved. The ANAO's audit of the Super Seasprite project found that although critical milestones were

17 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 44.

18 Defence Materiel Organisation, *DMO Acquisition and Sustainment Manual*, 2007, p. 65.

19 Warren King, Defence Materiel Organisation, *Committee Hansard*, 7 October 2011, p. 16.

20 George Pappas, *2008 Audit of the Defence Budget*, Department of Defence, 3 April 2009, p. 126.

21 Defence Materiel Organisation, *DMO Acquisition and Sustainment Manual*, 2007, p. 66.

> included in the original contract for some design reviews, these protections were not preserved.[22]

6.16 The committee is interested in establishing the key checks and safeguards in relation to accountability mechanisms such as contract milestones and the extent to which they are enforced and adhered to.

Capability Development Group

6.17 Air Marshal Harvey explained that CDG operates as the sponsor of a post-second pass project once it is approved or as the 'owner of the scope that government has approved'. CDG is responsible, therefore, for ensuring that performance meets cost, schedule and capability requirements approved by government. Air Marshal Harvey continued:

> We will be involved in any discussions on clarification of exactly what the scope was and what the risks will be. We work on behalf of the capability manager and with the capability manager to see what was required and what the mitigation strategies are on the way ahead, how you might address the risk as you go through. So we keep involved throughout the process.[23]

6.18 Mortimer highlighted the importance of a robust process to manage scope changes after second pass. He noted that it was inappropriate to 'arbitrarily apply project contingency funding to facilitate changes in scope as the application of contingency would 'depend on a thorough analysis of the original project scope and the scope change envisaged'.[24] Further, Mortimer recommended that changes to the scope of projects 'should occur through a disciplined process that considers the merit of the change mindful of the impact on cost and schedule'.[25]

6.19 As the Defence agency responsible for project scope and managing changes to it, CDG is responsible for recommending and obtaining approval from Defence or government for any proposed changes to alter the specific project scope, cost, workforce, schedule or risk parameters agreed by government. The DCDH allows for any changes within the project parameters agreed by government to be considered and approved by authorised Defence officials. Such approvals are exercised providing the Capability Manager has concurred and 'there is no additional workforce requirement, or any adverse change to the risk profile of the project, or the whole of life costs to the capability system'.[26] Therefore, all proposed changes to the capability baseline must

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22 Australian National Audit Office, *Submission 22*, p. 8.

23 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, pp. 39–40.

24 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 44.

25 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, Recommendation 3.13, p. 44.

26 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 90.

be cleared by the Chief of CDG in consultation with the Strategic Policy Division and the Capability Manager before 'the acquisition agency approves any engineering change proposal, contact change proposal, wavier or deviation that affects the approved baseline'. Whether a project baseline change is approved by Defence or government will depend on the Project Approval threshold and the accumulation rule.[27]

6.20 One of the key tasks of CDG throughout the acquisition phase is to contribute to remediation plans for projects of concern. CDG will provide information on whether a project will cost more and whether funds are available within the DCP to draw on. Furthermore, as Mr King, CEO of the DMO explained:

> If it [the remediation plan] has a knock-on effect, for example, on other capabilities that are also being introduced under the DCP that are dependent on it or interrelated with it then the CDG look at those dependencies and the impact on the broader capability program we are introducing, to make sure we understand all the consequences of that remediation. We need all three parties [CDG, DMO and Capability Managers] coming up [with] the solution, understanding the impacts of that solution and then implementing it.[28]

6.21 On 6 May 2011, the Minister for Defence noted that Defence would accelerate the implementation of Mortimer's recommendation concerning the creation of a more disciplined process for changes in scope of a project, including the requirement that Defence seek government approval for significant changes to the scope of a project.[29] The statement raises questions about the veracity of current practice and whether government approval as a policy requirement is appropriately sought. It goes to the question of adherence to necessary checks and balances within the system to ensure the integrity of the process.

Capability Managers

6.22 Kinnaird argued that Capability Managers (CMs) should be responsible for monitoring and reporting to government on the whole of capability from second pass approval through to the retirement of the capability. Kinnaird emphasised, however, that this responsibility did not imply 'any authority to directly instruct the DMO on any aspect of its function as the manager of equipment acquisition'.[30] Mortimer argued that such a recommendation provided for an oversight function but left open the question of a coordination function during the acquisition phase. Mortimer held that whilst the delivery of capability elements was the

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27 Department of Defence, *Defence Capability Development Handbook*, August 2011, pp. 90–91.

28 Warren King, Defence Materiel Organisation, *Committee Hansard*, 7 October 2011, p. 40.

29 Minister for Defence and Minister for Defence Materiel, 'Strategic Reform Program', Press Release, 6 May 2011, http://www.defence.gov.au/minister/Smithtpl.cfm?CurrentId=11766 (accessed 25 August 2011).

30 Malcolm Kinnaird, *Defence Procurement Review 2003*, Recommendation 4, pp. 24–25.

responsibility of individual agencies, there remained a need for a single point of accountability to coordinate all facets of capability during this phase.[31] To meet this requirement, Mortimer recommended that Defence implement a framework through the CMs to coordinate all the inputs to developing military capability (Recommendation 3.3) and that CMs provide advice on the status of capability development projects for which they are accountable (Recommendation 3.4).[32]

6.23 Defence informed the committee that CMs have 'prime responsibility' during the acquisition phase for ensuring that the project as a whole is brought together through the coordination of the Fundamental Inputs to Capability (FIC).[33] Vice CDF, Air Marshal Binskin explained that CMs are now central to the whole process:

> Right up front now the capability manager signs off on projects as they—and it is all part of their maturement as they go through—that it will meet the needs, will there be capability gaps or not, risks that are foreseen, and whether the service or the capability manager can even accept that into service in the time. So the capability manager is more up front now.[34]

6.24 Air Marshal Binskin argued that as CMs are responsible for signing off on the MAA for the delivery of capability, Defence is assured that the DMO is procuring what the CM wants or has agreed to and that the DMO must deliver to that MAA.[35]

People

Defence Materiel Organisation

6.25 Kinnaird found that DMO Project Managers lacked the skills and experience required to manage technically complex and financially risky projects. He noted the remuneration level and structure within the DMO made it difficult for the organisation to attract and retain sufficient numbers of quality staff. For his view, such a situation had contributed to high staff turnover which was detrimental to both ongoing project development as well as relations with industry.[36] Recognising the need for highly skilled project managers, Kinnaird recommended that they be drawn from the military, industry or public service, be appointed by the head of the DMO and have minimum tenures of five years.[37]

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31 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, pp. 33–34.

32 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, Recommendations 3.2 to 3.4, p. 34.

33 Department of Defence, *Defence Capability Development Handbook*, August 2011, p. 12.

34 Air Marshal M Binskin, Department of Defence, *Committee Hansard*, 5 October 2011, p. 16.

35 Air Marshal M Binskin, Department of Defence, *Committee Hansard*, 5 October 2011, p. 41.

36 Malcolm Kinnaird, *Defence Procurement Review 2003*, p. 39.

37 Malcolm Kinnaird, *Defence Procurement Review 2003*, Recommendation 7, p. 40.

6.26 Kinnaird found that approximately 25 per cent of over 2000 DMO staff were from the military. Further, he noted that the short military posting cycle often combined with no clear requirement for minimum project management skills, was not 'consistent with the development of the professional project management culture and the commercial focus essential for enhancing the DMO's performance'.[38] Kinnaird found that this situation was exacerbated if military staff regarded themselves as 'remaining within their respective Service reporting chain rather than being accountable to the head of the DMO'.[39] While acknowledging that Service loyalty was an integral part of military culture, he argued that it should not be confused with the reporting arrangements of a commercially focused organisation. The Kinnaird Review's recommendation, which emanated from these findings, was that the head of DMO should be consulted on military postings to the DMO and accept only those ADF personnel who possess the requisite skills and experience.[40] Notwithstanding this recommendation, however, Kinnaird also recommended that the Service Chiefs retain the right as CMs to place military staff in the DMO to monitor acquisition and logistics placement on their behalf.[41]

6.27 In response to the staffing challenges within the DMO, Mortimer recommended that the CEO of DMO should have greater flexibility to manage the organisation's workforce including control over appointments, remuneration and performance management.[42] In June 2009, the government agreed to Mortimer's recommendation 5.9 noting that the CEO of DMO would manage DMO's workforce under a total labour cost model with the powers and functions devolved to the CEO. The government further noted that the autonomy of the CEO to exercise such powers over the DMO would be codified accordingly.[43]

6.28 Air Marshal Harvey, Chief of CDG, explained to the committee that the DMO has worked progressively towards an integrated professional workforce with 'vocational, university and professional accreditation and has introduced a professional industry standard certification framework for procurement and contracting staff'.[44] In response to concerns raised in evidence and by the committee regarding the need to attract and retain engineers specifically, the DMO emphasised that it attracts engineers and technical staff via a number of avenues. These include the materiel TAFE employment scheme, materiel graduation scheme, materiel undergraduate scheme and the engineering undergraduate scholarship at the

38 Malcolm Kinnaird, *Defence Procurement Review 2003*, p. 41.

39 Malcolm Kinnaird, *Defence Procurement Review 2003*, p. 41.

40 Malcolm Kinnaird, *Defence Procurement Review 2003*, Recommendation 8, p. 41.

41 Malcolm Kinnaird, *Defence Procurement Review 2003*, Recommendation 9, p. 42.

42 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 67.

43 Department of Defence, Additional information, received 4 October 2011.

44 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, p. 3.

Australian Defence Force Academy. Furthermore, to attract and recruit high quality engineers and technical staff, memoranda of agreement have been established with Engineers Australia and the Australia Maritime College. In addition, the DMO is continuing to support the Australasian Procurement and Construction Council initiative to develop strategic procurement courses at Australian Technology Network universities and the University of Canberra.[45]

6.29 Mr King, CEO, also noted that the DMO was particularly interested in attracting and retaining individuals with skills at the Australian Public Service or equivalent Executive Level 1 and 2. With this in mind, Mr King explained that a building Defence capability plan has been introduced which 'allows some flexibility to add increased base salary payments and retention payments for a commitment to stay three years or something like that'. He noted that this initiative had proven successful in retaining skills.[46]

6.30 Notwithstanding these initiatives and improvements, the committee received considerable evidence which emphasised the importance of:

- DMO retaining skills and project management in-house throughout the life of a project;[47]
- DMO and Defence more broadly retaining an adequate number of appropriately qualified engineers who are in a position to influence the procurement process;[48] and
- the challenges in doing so within current and future workforce constraints.[49]

6.31 The committee notes that the DMO sets itself to be the 'premier program management, logistics and engineering services organisation in Australia'.[50] Notwithstanding the evidence, which suggested that improvements need to be made in the area of program management, a question for the committee is whether the DMO's aspiration in relation to program management is appropriate.

6.32 Furthermore, evidence before the committee emphasised the importance of DMO attracting personnel with commercial acumen and technological knowledge. In this regard, industry and other stakeholders supported the approach of paying private

45 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, p. 3.

46 Warren King, Defence Materiel Organisation, *Committee Hansard*, 7 October 2011, p. 35.

47 Australian National Audit Office, *Submission 22*, p. 8; Defence Teaming Centre Inc, *Submission 16*, p. 4.

48 Royal Institution of Naval Architects (Australia Division), *Submission 18*, p. 3.

49 Australian National Audit Office, *Submission 22*, p. 6.

50 Defence Materiel Organisation, About DMO, http://www.defence.gov.au/dmo/about/index.cfm (accessed 5 December 2011).

sector salaries where necessary to secure such skills and private sector incentives and sanctions to drive performance.[51]

6.33 While building the required skills base is central, evidence before the committee also emphasised the need for greater discipline within Defence to implement its own policies and to maintain adequate records to support appropriate monitoring of capability development performance.[52] Indeed, the gap between policy and practice is a constant theme throughout evidence to the committee. Some submitters argued that the consequent lack of common understanding of procurement policy across the DMO was reflected in its 'poor implementation and apparent non compliance' with the various manuals, schedules and processes. [53] For industry, this lack of application can translate into an inconsistent message and different expectations. The committee intends to pursue these matters.

Defence industry

6.34 The Mortimer Review drew attention to DMO analysis which demonstrated that approximately 50 per cent of project schedule slippage is due to delays by local or overseas suppliers.[54] Mortimer identified two primary factors behind this failure including the fact that industry was working with capacity constraints imposed by the skills shortage in the wider economy which was particularly acute in relation to skilled engineers. In response to DMO analysis, which suggested that industry may need to recruit up to 20 000 skilled workers over the next decade, Mortimer suggested that the government consider measures to assist industry. In this regard, he recommended that the government work with industry and state governments to address the skills shortage.[55] The second primary factor behind slippage was identified as 'poor scheduling, planning and risk appreciation by industry'.[56] In relation to this factor, Mortimer noted that just as Defence and DMO find it hard to formulate 'realistic expectations of project progress, so too does industry'.[57]

6.35 Defence held that the majority of schedule delay was caused by slower than forecast supply from industry in the acquisition stage but did not provide explanation

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51 Andrew Davies and Mark Thomson, *Submission 8*, p. [2]; Mark Thomson, personal capacity, *Committee Hansard*, 12 August 2011, p. 3.

52 Auditor General, *Committee Hansard*, 11 August 2011, p. 24.

53 Australian Industry & Defence Network, *Submission 19*, p. 3.

54 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 41.

55 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, Recommendations 3.10 and 3.11, p. 42.

56 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 41.

57 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 41.

for the slow response.[58] Other submitters argued that industry had failed to deliver capability to the contracted schedule across a large number of projects but again did not go to the reasons why.[59] This is another area for committee consideration.

6.36 The committee recognises that there are a number of initiatives underway to address the skills challenges within industry including the Industry Skilling Program Enhancement (ISPE) package. According to Defence, major achievements in implementing the package include the establishment of the Defence Industry Innovation Centre and three Defence Industry School Pathways Programs. Other initiatives include funding for an industry component of the Defence Technical Scholarship Program, Engineering Scholarship Program, Defence Industry Sector Branding Strategy as well as expansion of the DMO Institute and Masters of Military Systems Integration and introduction of a Masters of Systems Support Engineering.[60] Furthermore, in August 2011, the minister announced that 109 companies would share in nearly $14 million for more than 4000 trained places to boost the skills of the Defence industry workforce including $1.4 million to support approximately 250 apprentices in trades including aerospace skills, engineering fabrication and electro technology.[61]

6.37 Moreover, Defence informed the committee that the Kinnaird, Mortimer and Pappas recommendations continue to be implemented resulting in 'increased rigour and reduced slippage rates'. Defence noted further that 'implementation and maturation of an early indicators and warning system will improve Defence's and government's ability to react to failing projects'.[62]

6.38 In response to Mortimer's recommendations regarding a Joint Industry Training Task Force (JTTF), Defence held that a number of recommendations regarding the JTTF have been incorporated into the ISPE proposal. Further, it is now intended that Defence and the Industry Skills Taskforce will replace the JTTS and provide advice and analysis to ensure a critical mass of skills relevant to the Defence sector and future sustainment of these skills. In addition, the new taskforce will identify and grow the skills to deliver and sustain the capability and equipment of the ADF as detailed in the 2009 DWP, CDG and Priority Industry Capabilities.[63]

6.39 The committee recognises the skills shortage across Defence and industry as a key challenge in the capability development and acquisition process. Indeed, the committee intends to consider the skills question both in terms of industry skills including technical and engineering skills as well as the Defence skill set and the

58 Department of Defence, *Submission 21*, p. 23.

59 Andrew Davies and Mark Thomson, *Submission 8*, p. [3].

60 Department of Defence, Additional information, received 4 October 2011.

61 Department of Defence, Additional information, received 4 October 2011.

62 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 7 October 2011, p. 3.

63 Department of Defence, Additional information, received 4 October 2011.

challenges, implications and consequences across the acquisition process in detail in a latter report.

6.40 Another key area of concern in relation to DMO and industry raised in evidence is that of the nature of the working relationship. In this regard, Defence industry stakeholders held that the relationship between DMO and industry was often not harmonious or productive and that this leads to project failures.[64] Moreover, the question was raised as to why the Industry Division sits within DMO, when it 'belongs at the highest strategic level underneath the secretary and the CDF' in order to look at how Defence interacts with all of industry and 'not just those related to major systems'.[65] These questions will be pursued by the committee.

64 Returned and Services League of Australia, *Submission 5*, p. [2]; Australian Industry Group Defence Council, *Submission 10*, p. [2].

65 Christopher Burns, Defence Teaming Centre Inc, *Committee Hansard*, 11 August 2011, p. 18.

Chapter 7

Sustainment

Overview of the sustainment phase

7.1 The third phase of the capability life cycle concerns sustainment of the capability and involves through-life maintenance and support. The capability is supported, modified and managed by Defence's Capability Managers throughout this phase whilst responsibility in relation to sustaining materiel systems and equipment rests with the DMO.[1] Mortimer estimated that through-life or whole-of-life maintenance and support account for more than half of the DMO's annual budget and involves approximately two-thirds of its workforce.[2]

Process

7.2 The in-service or sustainment phase begins on the Service Release of the materiel system by the Capability Manager.[3]

7.3 The material sustainment to the ADF is provided by the DMO through the delivery of products and services to Capability Managers under the Material Support Agreements (MSA). Each MSA is renegotiated between the DMO and respective Capability Manager on an annual basis, within a ten-year context.

MSAs have two components:

1. Agreement Principles and Management Information—which set the condition for the operation of the agreement between the DMO and Capability Manager; and

2. Service Fee and Product Schedules—comprising nine sections including product description, health assessment, sustainment functions, performance, performance constraints; and product-specific roles and responsibilities.[4]

Structure

Defence Materiel Organisation

7.4 The areas that Mortimer identified for improvement include that of assuring sustainment funding, strengthening the MSA, and streamlining logistic support

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1 Defence Materiel Organisation, *DMO Acquisition and Sustainment Manual*, 2007, p. 48.

2 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 46.

3 Defence Materiel Organisation, *DMO Acquisition and Sustainment Manual*, 2007, p. 85.

4 Defence Materiel Organisation, *DMO Acquisition and Sustainment Manual*, 2007, pp. 83–84.

arrangements.[5] In response to these recommendations, the DMO has taken steps to remediate and improve management of existing capabilities by strengthening the performance indicators in the MSAs. Furthermore, as part of the Strategic Reform Program's Smart Sustainment Reform Stream, Defence through the DMO is partnering industry in the application of improved maintenance and inventory management techniques that will deliver the same or improved levels of capability at a lower cost.[6]

7.5 In response to Mortimer's recommendation to establish an independent Sustainment Efficiency Office, Defence noted that the Sustainment Reinvestment Office was established to integrate and oversee delivery of the Smart Sustainment Program. According to evidence from Defence, the office 'supported delivery of the program by DMO Divisions and Defence through the development of tools, training and guidance material and through facilitation and information sharing'.[7] The committee notes, however, that there is no information available on the role or responsibilities of this body in the *DMO Acquisition and Sustainment Manual*.

7.6 In relation to strengthening the sustainment business model which is due for completion at the end of 2011, the DMO is liaising with the Capability Managers to ensure that the model is appropriate. Mrs Shireane McKinnie, General Manager, Systems in the DMO explained the sustainment planning strategies currently under development:

> The intention is that, for each of the major fleets that we manage, they will take a long-term view of that fleet and work through how we are going to support it in the longer term. They look at all of the upgrades we see coming through the DCP or other areas that are planned and establish, if you like, an integrated master schedule that looks at all of the things that we know we will be doing on those platforms to plan them out. Also, we are in a position to work with the capability managers to identify when they may need to release those platforms and to try to optimise the amount of time we take them offline in order to do the upgrades. That piece of work to establish the guidance under which our SPOs will operate to move to a more strategic, well-planned basis for operating fleets is underway at the moment. As a part of that, there may be a series of reviews that we put in place to oversee significant decisions that need to be made, but we have not got that detail.[8]

5 David Mortimer, *Going to the next level: the report of the Defence Procurement and Sustainment Review*, September 2008, p. 47.

6 Department of Defence, *Submission 21*, p. 15.

7 Department of Defence, Additional information, received 4 October 2011.

8 Shireane McKinnie, Defence Materiel Organisation, *Committee Hansard*, 7 October 2011, p. 49.

Capability Managers

7.7 When negotiating the MSA with the DMO, Capability Managers are responsible for establishing a level of support that will 'allow them to meet their obligations to the CDF/Secretary for the required capabilities and preparedness levels laid down in their preparedness directives and organisational performance agreements'.[9] The Capability Manager is responsible for ensuring that the individual FIC that make up the capability system are operated, supported and modified as required to deliver the capability.[10]

People

Defence Materiel Organisation

7.8 Embedding technical and engineering personnel in the DMO and the Services into the maintenance organisations of contractors engaged in sustainment activities is a critically important developmental tool for Defence. The real challenge according to Mrs McKinnie in relation to embedding, however, is to provide a degree of certainty that the personnel to be provided by the military will fill those positions. She noted that the DMO has negotiated arrangements with contractors whereby military people will be incorporated into the contractor's workforce with provisions in the event that those military personnel cannot be provided.[11] However, the DMO's CEO, Mr Warren King noted that steps are being taken to address this challenge as part of an integrated plan to encourage engineering skills. He drew on the experience of the Air Warfare Destroyer (AWD) alliance as an example of where a significant number of positions are resourced from the military and/or public service.[12]

Capability Managers

7.9 Many of the responsibilities in relation to sustainment that previously rested with the Service Chiefs now reside with the DMO. At the same time, much of the skill set has moved over to the DMO from the Services including the technical and engineering skills required to sustain a capability. Acting Chief of Navy, Rear Admiral Jones explained of Navy:

> We have some engineering experience within our regulatory domain in terms of mobile architecture and other engineering advisors, both civilian and uniform, particularly in our regulatory domain. The majority of the skill sets that you are talking about rest with the DMO in the sustainment of our

9 Defence Materiel Organisation, *DMO Acquisition and Sustainment Manual*, 2007, p. 84.

10 Department of Defence, *Submission 21*, p. 30.

11 Shireane McKinnie, Defence Materiel Organisation, *Committee Hansard*, 7 October 2011, p. 48.

12 Warren King, Defence Materiel Organisation, *Committee Hansard*, 7 October 2011, p. 48.

capabilities and in commercial industry that supports our capabilities, particularly in the sustainment cell.[13]

Centralisation of functions and responsibilities across Defence

7.10 One of the issues before the committee in relation to sustainment is whether responsibilities that now fall under the DMO's purview should remain so or whether those responsible for sustainment within the DMO should be accountable to the relevant Service (thereby remaining response to the Service needs) as well as the CEO DMO.[14] The issue raises questions about the growing role of the DMO, whether it has moved beyond that originally envisaged and of the consequences. It also goes to the heart of the question of centralisation of particular functions and the movement of technical skills across Defence.

7.11 The Auditor-General held that as part of efforts to improve performance, there has been a level of centralisation of particular functions with some of the responsibilities previously held with the Services being shifted across to the DMO. The Auditor-General recognised the advantages of 'putting in the one organisation a critical mass of people with the right skills to deliver on project acquisition and sustainment'. He then acknowledged, however, the challenges. They include the need for greater and more complex organisational linkages across Defence; clarity about roles and responsibilities; and the need for consistent adherence to policies and procedures to manage risks and deliver and sustain capability.[15] The suggestion is that the Defence reform agenda and efforts to drive efficiency have had unintended consequences including a decline in engineering and technical skills in the Services, namely Navy. Such a decline has, in turn, limited the ability of the Service Chiefs to make informed decisions and rigorously challenge the capability process going forward.[16]

7.12 The committee appreciates, however, that the hollowing out of engineering and technical skill has not taken place to the same extent in the Air Force. Indeed, according to the Chief of Air Force, Air Marshal Geoffery Brown, Air Force 'tends to breed a set of specialists, whether it is the engineers, the logisticians or intel specialists'.[17]

7.13 Another consequence of the reform agenda is that of the increasing transfer of key functions in terms of capability design, system development and logistics support

13 Rear Admiral T Jones, Royal Australian Navy, *Committee Hansard*, 5 October 2011, p. 37.

14 Mark Thomson, personal capacity, *Committee Hansard*, 12 August 2011, p. 18.

15 Auditor General, *Committee Hansard*, 11 August 2011, pp. 24–25.

16 Paul Rizzo, *Plan to Reform Support Ship Repair and Management Practices*, July 2011, p.7.

17 Air Marshal Geoffery Brown, Royal Australian Air Force, *Committee Hansard*, 5 October 2011, p. 32.

from the ADF to other Defence groups and now into the private sector.[18] These matters were most recently considered in the Rizzo Report.

Rizzo Report

7.14 Whilst sustainment was not a central focus of the previous Defence reviews, the *Plan to Reform Support Ship Repair and Management Practices* (or Rizzo Report) by Paul Rizzo brought sustainment issues to the fore. Rizzo recognised that the recent early decommissioning of *HMAS Manoora*, extended unavailability of *HMAS Kanimbla* and temporary unavailability of *HMAS Tobruk* were the result of the failure to allocate adequate resources to address materiel and personnel shortfalls since the ships were brought into service 20 years ago:

> The inadequate maintenance and sustainment practices have many causal factors. They include poor whole-of-life asset management, organisational complexity and blurred accountabilities, inadequate risk management, poor compliance and assurance, a 'hollowed-out' Navy engineering function, resource shortages in the System Program Office in DMO, and a culture that places the short-term operational mission above the need for technical integrity. In addition, Navy and DMO need to improve coordination and integrate their interdependent activities more effectively. Whilst the overall outcome is a poor reflection on Defence and DMO, actions by individuals were taken, in the main, to meet the operational demands of the day with inadequate resources and tools.[19]

7.15 Rizzo was unable to find evidence to demonstrate that 'planning before the acquisition phase of major projects is based on a detailed cost-benefit analysis of continued sustainment versus replacement'.[20] In this regard, he strongly endorsed the Mortimer recommendation that decisions to purchase new equipment or maintain existing equipment be based on the through-life cost of each option regardless of whether funding is for the acquisition or sustainment budgets. The Rizzo Report made 24 recommendations to improve operational availability and ensure the ongoing technical integrity of Navy ships of which the following seven are strategic:

- formalise asset and sustainment methodologies;
- take whole-of-life decisions;
- establish closer working arrangements between Defence and DMO;
- establish an integrated risk management system;
- rebuild Navy engineering capability;
- reinstate the cultural importance of technical integrity; and

18 Australian National Audit Office, *Submission 22*, p. 2.

19 Paul Rizzo, *Plan to Reform Support Ship Repair and Management Practices*, July 2011, p. 7.

20 Paul Rizzo, *Plan to Reform Support Ship Repair and Management Practices*, July 2011, p. 35.

- confirm Defence Capability Plan (Maritime) Resourcing.[21]

7.16 Rizzo found that during the planning and acquisition phases, there was a tendency to focus on delivery of a new capability above all else and neglect of sustainment as a priority. He argued that this led to 'inadequate logistic support products and increased sustainment requirements, often to the detriment of whole-of-life capability and cost'. Rizzo noted that this risk was supposed to be addressed through joining the acquisition and sustainment functions into a single organisation, the DMO. However, he concluded that the continued focus on acquisition and 'insufficient attention to through-life costs has reduced the impact of this sensible initiative'.[22]

7.17 The committee acknowledges the findings and recommendations of the Rizzo Review and appreciates the importance of interweaving and prioritising whole-of-life and sustainment considerations throughout the capability development process. Interesting, the concerns cited by Rizzo in the sustainment phase replicate many of those identified in the early phases of the capability lifecycle—organisational complexity and blurred accountabilities, inadequate risk management, poor compliance, shortfall in skills and resources and inadequate coordination and integration.[23]

7.18 Furthermore, the committee notes that the outsourcing that has occurred as part of cost saving measures imposed during the 1990s, has contributed to the current lack of engineering skills available within Defence.

7.19 When asked about implementing the recommendations of the Rizzo Review, Rear Admiral Trevor Jones commented that:

> We are fully seized of the outcomes of the Rizzo report and our need to improve our technical skills base, particularly our engineering strength. That is a focus of the current Chief of Navy, and we continue to work to implement the Rizzo reviews. We are looking very carefully at how we have our resources allocated within Navy at the moment. We are also looking to see where we might be able to get supplementation to improve our engineering base.[24]

7.20 The committee is, however, yet to see that any concrete steps have been taken to improve the technical skill base of Navy.

7.21 The committee recognises that the effectiveness with which the Services, the DMO and industry plan for and sustain capability is a reflection of both the

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21 Paul Rizzo, *Plan to Reform Support Ship Repair and Management Practices*, July 2011, pp. 7–8.

22 Paul Rizzo, *Plan to Reform Support Ship Repair and Management Practices*, July 2011, p. 8.

23 Paul Rizzo, *Plan to Reform Support Ship Repair and Management Practices*, July 2011, p. 7.

24 Rear Admiral T Jones, Royal Australian Navy, *Committee Hansard*, 5 October 2011, p. 46.

interdependencies between Defence agencies and industry as well as the individual accountabilities of each Defence agency. As a key issue which brings to the fore considerations including skills and accountabilities, therefore, sustainment is an area that the committee intends to focus on. Furthermore, whilst recognising the hollowing out of engineering skills in Navy, the committee acknowledges that Air Force has been able to retain, to a greater extent, its engineering and technical expertise and focus. By utilising Air Force as the basis for further discussion on technical skills, the committee intends to consider the experience of Navy and Army in this regard. The committee also noted that Coles is yet to complete his sustainment review of the Collins Class submarines.

7.22 The question of how acquisition and sustainment are managed in relation to each other and of how they should be managed has also been raised to the committee. The question of whether sustainment should be handed back to the Service Chiefs requires careful examination given that sustainment, as a major activity, has the potential to divert ADF resources away from core operational duties. Moreover, with approximately 55 per cent of the DMO budget this year allocated to sustainment, the issue requires careful consideration. Within this context, the committee will first establish the level of accountability within the DMO for sustainment functions.

Outstanding questions

7.23 Despite two days of hearings with Defence stakeholders including many of the Capability Managers and CEO of the DMO, the committee remains uncertain about the division of responsibilities between the Capability Managers and the DMO in relation to sustainment. The committee would like to establish therefore:

- what responsibilities and technical and engineering skills have been transferred from the Services to the DMO, when, how and why;
- the impact of this trend on the ability of Service Chiefs to maintain capability;
- the current technical input into decision making in the Services;
- how Air Force has been able to retain an engineering and technical skill base;
- the organisational linkages established to compensate for the shift in responsibility from the Services to the DMO;
- the level of accountability within the DMO for sustainment functions;
- the impact of these trends on the ability of Service Chiefs as Capability Managers responsible for the overall capability to lead and manage the capability development process;
- how acquisition and sustainment functions are managed in relation to each other;
- the extent to which whole-of-life and sustainment considerations are brought to the centre and prioritised during the needs, requirements and acquisition phases;

- when and how industry is engaged in establishing whole-of-life costs and consulted on sustainment matters;
- the extent to which sustainment experts in industry are involved in the design phase of a developmental project;
- which Defence agency decides on which military or civilian personnel will be embedded in maintenance organisations responsible for sustainment activities and the length and terms of their placement;
- why plans to embed military personnel working for the DMO and the Services in a maintenance organisation fall through and of the consequences in terms of skill development for Defence; and
- initiatives that have been identified to address this problem.

Sustainment of Australia's defence industry

7.24 Whilst the costs of, and responsibility for, capability sustainment are fundamental considerations, another key element is that of local capacity to maintain the capability. Air Marshal Harvey explained this consideration:

> If I understand it as well, the through-life support is an essential consideration throughout the whole process. As I said before, you gradually refined that. But the expectation is that at least a significant amount of the maintenance sustainment will be done in country, so you just have to make sure that you have got those arrangements set up early in the process.[25]

7.25 Sustainment is an area where the interrelationship between national security and viability of the domestic defence industry comes to the fore. It is particularly apparent in the MOTS debate as industry stakeholders argue that to meet the government's priorities for future capabilities whilst remaining viable and relevant in the marketplace, domestic industry requires a mix of new and sustainment projects.[26]

7.26 The need to consider the interconnection between strategy and ADF capability sustainment throughout the life-cycle process is advocated by industry in light of findings which suggest that approximately 70 per cent of industry engagement in the Defence sector is in sustainment rather than procurement work.[27] As Mr Innes Willox of the Australian Industry Group Defence Council explained, the question for industry is: 'How do we sustain ourselves to sustain?'[28] Mr Priestnall of the Australian Industry and Defence Network argued the case that:

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25 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 5 October 2007, p. 20.

26 Ben White, Australian Business Defence Industry Unit, *Committee Hansard*, 11 August 2011, p. 2.

27 Innes Willox, Australian Industry Group Defence Council, *Committee Hansard*, 11 August 2011, p. 14.

28 Innes Willox, Australian Industry Group Defence Council, *Committee Hansard*, 11 August 2011, p. 14.

> The sustainment of ADF capability, an area where many SMEs operate, is the greatest cost to the government in acquiring and maintaining capability, yet this draws relatively minor focus and analysis within all ongoing reviews.[29]

7.27 Pappas identified a number of strategic reasons as to why Australia should maintain a local Defence industry including national sovereignty, the ability to develop valuable knowledge, guaranteed supply, and the ability to maintain and upgrade in Australia. Pappas recommended therefore that the 'cost of local sourcing in comparison to other options must be determined prior to government approval, and presented to Government with the option set'. Furthermore, Pappas recommended that local sourcing should be considered 'when it is a strategic priority or where it is competitive with other options, and if local sourcing is chosen outside this criteria, that the rationale be clearly articulated'.[30]

7.28 Whilst acknowledging that Defence has to ensure that there is an industry base to support sustainment, Mr Warren King, CEO of the DMO argued that ways had to be found to take advantage of the global support network whilst also interrelating it with adequate skills and support in Australia.[31] Further, strategic considerations for Defence in relation to sustainment include whether in-country support for a capability is more important than a guaranteed supply chain.[32] Drawing on the example of the Wedgetail, Air Marshal Binskin, acting CDF, noted that whilst the project is developmental, 'through-life support and maintainability was a key driver up front in the design of that'.[33]

Outstanding questions

7.29 The committee appreciates that the debate regarding the current and future viability of Australia's defence industry is complex and interwoven with strategic decisions regarding capability requirements and development, locally available skills and best use of the global supply chain. The questions that remain for the committee include:

- how and when industry capacity and necessary support to maintain a capability are taken into consideration;
- what weight is given at each stage to local industry capacity to maintain a new capability;

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29 Graham Priestnall, Australian Industry and Defence Network Inc, *Committee Hansard*, 11 August 2011, p. 3.

30 George Pappas, *2008 Audit of the Defence Budget*, Department of Defence, 3 April 2009, p. 233.

31 Warren King, Defence Materiel Organisation, *Committee Hansard*, 7 October 2011, pp. 28–29.

32 Air Marshal J Harvey, Department of Defence, *Committee Hansard*, 5 October 2011, p. 19.

33 Air Marshal M Binskin, Department of Defence, *Committee Hansard*, 5 October 2011, p. 20.

- how considerations regarding industry sustainment feed into the decision-making process; and
- how industry is able to grow when it is currently sustained by 70 per cent in-service rather than procurement activities.

Chapter 8

Key areas for future consideration

8.1 It is widely recognised that improvements have been made by Defence in terms of the capability development and acquisition process. One key area of improvement is in relation to the two-pass process which has become more robust. Furthermore, key strategic and policy documentation which serve as the basis for the capability process including the DWP, DCP, the MAA, and MSA provide some certainty and clarity about strategic objectives and operational requirements. However, the concern that has been raised to the committee is that the capability process is choked by unsurmountable layers of administration and bureaucracy. In this regard, the Pappas Report held the view that there were too many documents whilst the Black Review argued that there were too many committees, the combined result of which is a 'process labyrinth'.[1]

8.2 The Defence reviews and submission to this inquiry point to breakdowns in the capability life cycle through poor administration including a failure to follow processes and procedures as well as a diffusion of responsibility, decision making and accountability.[2] Dr Andrew Davies noted that '[t]here are too many viewpoints being represented at the table, and as a result decisions belong to everyone and they belong to no-one'.[3]

8.3 In this report, the committee endeavoured to present a coherent comprehensible account of Defence's procurement process, only to find a maze of practice and procedure, much of which appears to be ignored or by-passed.

8.4 Pappas argued that the process needs to be refined with better and stronger linkages. Whilst it is clear that the reforms need to be continued, consolidated and intensified, evidence suggested that the reform agenda should now focus on establishing clearer definitions and understanding of the process, the more appropriate allocation of responsibility and stronger accountability rather than continual reform of the process itself. One witness argued that the 'quality of decision-making has not improved by any measure since the introduction of the Mortimer reforms; the same work is simply taking much longer to perform'.[4]

8.5 One of the risks for Defence, however, is that reforms that have not been implemented to their full effect will be confused with failure to reform itself. Indeed, many submitters to the inquiry refer to reform fatigue or the endless fluidity and

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1 Miller Costello & Company, *Submission 30*, p. 3.

2 Andrew Davies, private capacity, *Committee Hansard*, 12 August 2011, p. 7.

3 Andrew Davies, private capacity, *Committee Hansard*, 12 August 2011, p. 7.

4 Returned and Services League of Australia, *Submission 5*, p. 1.

inconsistencies that result from a continual reform agenda.[5] What is of key significance is that the reforms that have been proven to work are built on whilst others that are only now being implemented are given time to work.

8.6 In its next report, the committee's task will be to strip back the layers of administration and process to identify and focus on the fundamentals. That is, to identify:

- who has (or should have) responsibility;
- who is accountable;
- how the process moves from one phase to another;
- how information, understanding and expectations, responsibilities and accountabilities transfer from one phase to another;
- whether the right people with the appropriate training and skills are in the right place at the right time;
- whether key personnel are adequately resourced and supported to perform key tasks; and
- the key checks, balances and safeguards meant to uphold the integrity of the process and the decisions that are made at each stage of it.

8.7 In this process-driven environment, the committee will identify key documents, their function and worth. It will then look at basic adherence to policy, compliance with manuals and the quality of record keeping which are all indicators of sound administration and shared understanding. These matters also go to the culture of Defence and its respective agencies. The committee will consider whether there needs to be a change in attitude and approach including in relation to Defence's perception of, and relationship with, industry. Importantly, the committee will look at the quality of analysis and information that informs decision makers and the decision making process itself with a particular emphasis on risk management throughout the capability life cycle.

8.8 The issue before the committee is how to make the development, acquisition and sustainment of Defence capability work more effectively without the need to introduce more major reforms. That is, how to make the reforms that have been implemented or should have been implemented work better. In pursuit of answers to these questions, a number of key themes have emerged in evidence which the committee intends to pursue.

5 Miller Costello & Company, *Submission 30*, p. 2.

Common concerns across the capability development lifecycle

8.9 In considering the capability development, acquisition and sustainment life cycle, the committee identified a number of common concerns across the process. These concerns raise questions of:

- contestability and the value given to independent analysis and risk assessments including that of technical risk and how such information feeds into the decision making process;
- clear lines of responsibility and accountability for decisions at every stage and in relation to transition from one phase to another;
- timing and level of engagement with industry including the quality of information provided to industry as well as strategic consideration of Australia's defence industry and its sustainability;
- engineering and technical input and the impact of outsourcing;
- a competent and stable workforce adequately supported with necessary tools, structures and processes;
- consistency in relation to policy implementation and adherence including a consistent approach to industry; and the
- checks, balances and safeguards built into the system and extent to which they are adequately implemented, understood and adhered to.

8.10 Such issues and concerns are identified and raised in the various chapters of this report for consideration and deliberation in a latter report. As a means of encouraging further debate and discussion, the committee provides the following elaboration of the key thematic areas for further consideration and inquiry.

A holistic view of the entire process and its component parts

- an overarching view of the capability process with linkages between strategic guidance and capability development;
- linkages between strategy and capability definition through the DCP, an integrated approach, defined expectations and priorities, accurate timelines, and over-programming;
- overarching guidance, clarity, understanding and compliance with agreed procedures and processes and consistent application across Defence;
- coordination, communication, integration, and a consistent message across Defence.

Improving efficiency in the process

- early analysis and investment;
- early and ongoing industry engagement;

- early identification of logistic support and in-service requirements and capability;
- setting realistic schedule and mitigating slippage;
- adequate record keeping and consistent application of and adherence to policies and guides.

Responsibility and accountability at every phase and across the lifecycle

- clearly defined roles, functions and responsibilities;
- correct alignment between function and responsibility;
- accountability for decisions, agreements and commitments as laid out in the DWP, DCP, CDS, MAA, and MSA;
- overarching responsibility and vision to enable early and appropriate responses to emerging issues;
- adherence to capability management principles and practices across the whole capability continuum;
- understanding and managing shared responsibility;
- providing for contestability and independent verification of estimates, assumptions and risks.

Skills and resources

- attracting and retaining appropriate skills including technical and engineering expertise and the scale and scope of the challenge;
- initiatives to counter the impact of the skills shortage including contracting and tendering;
- collective training and initiatives directed at consistent policy application or a 'One Defence' response;
- complementing effective project management with systems engineering principles and matching management and technical expertise;
- building resources to ensure competence and consistency—staff rotation, matching skills and experience with allocated tasks, deployment of skills across Defence and industry;

Risk management

- early identification and mitigation;
- establishing feasibility early;
- science and technology evaluations and their influence on decisions;
- incorporating corporate knowledge and lessons learned into verification and decision making processes;

- MOTS and COTS and balancing procurement risk with battlefield risk and domestic industry capability;
- through-life-costs and sustainment including linkage between ADF capability and industry sustainment;
- test and evaluation.

Australia's defence industry

- impact of MOTS on industry capability including skills;
- clarity of public information tools including DWP and public DCP;
- early engagement and contribution to sustainment considerations;
- Defence as a sole customer and relationship with Defence agencies;
- impact of National Security Committee of Cabinet annual approval rate;
- interconnection between industry viability and ADF capability;
- industry sustainment including workflow.

Contestability

- contestability, independent verification and scrutiny of capability priorities identified in the DWP, DCP, and of projects at first and second pass.

Additional remarks

8.11 It should be noted that on 13 December 2011, the minister released phase 1 of Mr John Coles' Collins Class Sustainment Review. His findings underscore many of the concerns raised throughout this report including poor risk management which was evident from the very beginning of the program:

> Due to the failure to recognize fully what they were taking on, the various agencies involved did not make all the necessary investments post delivery and this, together with the unreliability of a number of key equipments in the submarines, got the program off to a bad start.[6]

8.12 Mr Coles' observation that the review was unable 'to identify anyone who was charged with taking full responsibility clearly and decisively for all aspects of the sustainment of the Collins Class Program' was of particular relevance.[7] The review found:

> …many instances where accountability, authority and responsibility are misaligned, fragmented or simply not understood.[8]

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6 Mr John Coles, *Collins Class Sustainment Review,* Phase 1Report, 4 November 2011, p. 8

7 Mr John Coles, *Collins Class Sustainment Review,* Phase 1Report, 4 November 2011, p. 9.

8 Mr John Coles, *Collins Class Sustainment Review,* Phase 1Report, 4 November 2011, p. 10.

8.13 The review also highlighted the importance of all the key strands of activity that deliver the submarine capability operating as an 'Enterprise'. It gained the impression, however, of 'highly-charged, difficult and often hostile relationships' between the Department of Finance and Deregulation, DMO, the Navy and Industry.[9]

8.14 Finally and importantly, the review drew attention to the successive initiatives in Defence, 'all of which seem to have added to the complexity of already complex structures, to the point where adequate levels of knowledge of the submarine domain no longer appear to exist.' The review concluded that 'no amount of business process refinement could overcome this loss of expertise'.[10]

8.15 This most recent review adds to the mounting and substantial body of evidence that the acquisition and sustainment of Defence's major capital equipment is beset by long standing problems that persist despite numerous reviews and reform programs.

Senator Alan Eggleston

Chair
Senate Foreign Affairs, Defence and Trade References Committee

9 Mr John Coles, *Collins Class Sustainment Review,* Phase 1Report, 4 November 2011, p. 9.

10 Mr John Coles, *Collins Class Sustainment Review,* Phase 1Report, 4 November 2011, p. 11.

Appendix 1

List of submissions

Public submissions

1 Emeritus Professor Lawrence J. Doctors

2 Mr Richard Brabin-Smith

3 Air Commodore (Retired) E.J. Bushell

4 Northern Territory Government

5 The Returned and Services League of Australia Limited

6 Australian Business Defence Industry Unit

7 CAE Australia Pty Ltd

8 Dr Andrew Davies and Dr Mark Thomson

9 Submarine Institute of Australia Inc

10 Australian Industry Group Defence Council

11 Australian Manufacturing Workers' Union

12 BAE Systems Australia

13 Sonartech ATLAS Pty Ltd

14 QinetiQ and BMT Design and Technology (Joint submission)

15 Babcock Pty Ltd

16 Defence Teaming Centre

17 Australian Association for Maritime Affairs

18 Royal Institution of Naval Architects, Australian Division

19 Australian Industry and Defence Network (AIDN)

20 Mr Bruce Green

21 Department of Defence

22 Australian National Audit Office

23 Department of Finance and Deregulation

24 Confidential

25 Confidential

26 Confidential

27 Victorian Government

28 Transparency International Australia

29 Motive Power Pty. Ltd

30 Miller Costello and Company

31 Defence Science and Technology Organisation

32 Engineers Australia

33 Confidential

34 Mr Derek Woolner

35 Commodore (Retired) Ormsby R. Cooper

36 Association of Professional Engineers, Scientists and Managers Australia

Appendix 2

Public hearings and witnesses

Thursday 11 August 2011—Canberra

BOND, Mr Kim, Senior Director, Performance Audit Services Group, Australian National Audit Office

BURNS, Mr Christopher Mark, Chief Executive Officer, Defence Teaming Centre

CAHILL, Mr Matt, Group Executive Director, Performance Audit Services Group, Australian National Audit Office

HOLBERT, Ms Fran, Executive Director, Performance Audit Services Group, Australian National Audit Office

MANSELL, Mr Brian, Chairman, Corporate Members Group, Australian Business Defence Industry Unit

McPHEE, Mr Ian, Auditor-General, Australian National Audit Office

O'CALLAGHAN, Mr John, Executive Officer, Australian Industry Group Defence Council

PRIESTNALL, Mr Graham, President, Australian Industry and Defence Network Inc.

TONKIN, Mr Robert, National Secretary, Australian Industry and Defence Network Inc.

WHITE, Mr Ben, Manager, Australian Business Defence Industry Unit

WHITE, Mr Michael, Executive Director, Performance Audit Services Group, Australian National Audit Office

WILLOX, Mr Innes Alexander, Director, International and Government Relations, and Executive Director, Australian Industry Group Defence Council

Friday 12 August 2011—Canberra

DAVIES, Dr Andrew John, Private capacity

GEHLING, Mr Robin Charles, Secretary, Australian Division, Royal Institution of Naval Architects

GRIFFITHS, Mr Richard David, Chair of the Board, Australian Association for Maritime Affairs

GROVE, Mr Ken, Director of Strategic Development, Babcock Pty Ltd

HOROBIN, Mr Peter, President, Submarine Institute of Australia Inc.

LOCKHART, Mr Craig, Chief Executive Officer, Babcock Pty Ltd

MACDONALD, Mr Gordon, Executive Director, BMT Design and Technology

RENILSON, Professor Martin Robert, President, Australian Division, Royal Institution of Naval Architects

THOMSON, Dr Mark John, Private capacity

WATES, Mrs Wendy Denise, Strategic Business Team, QinetiQ Pty Ltd

Wednesday 5 October 2011—Canberra

BINSKIN, Air Marshal Mark Donald, Vice Chief of the Defence Force, Department of Defence

BROWN, Air Marshal Geoffery Charles, Chief of Air Force, Royal Australian Air Force

CALIGARI, Major General John, representing Chief of Army, Australian Army

DAY, Major General Stephen Julian, Capability Manager, Department of Defence

DERWORT, Air Commodore Noel Gregory, Commander, Aerospace Operational Support Group, Royal Australian Air Force

GRAYSTON, Mr Rupert, Acting Chief Executive, Engineers Australia

HARVEY, Air Marshal John, Chief, Capability Development Group, Department of Defence

JACKSON, Mr Brent, Director, International and National Policy, Engineers Australia

JONES, Rear Admiral Trevor Norman, Acting Chief of Navy, Royal Australian Navy

McKENZIE, Mr Ian Robert, Acting Deputy Secretary, Intelligence and Security, Department of Defence

ORME, Mr Neil, Acting Deputy Secretary, Strategy, Department of Defence

ROBINSON, Dr David Keith, Director, Education and Assessment, Engineers Australia

SARE, Dr Ian Richard, Deputy Chief Defence Scientist, Platform and Human Systems, Defence Science and Technology Organisation

SMITH, Mr James Stuart, Chief, Projects and Requirements Division, Defence Science and Technology Organisation

Friday 7 October 2011—Canberra

CAWLEY, Mr Andrew, General Manager, Programs, Defence Materiel Organisation

CROSER, Mr Peter, Acting Program Manager, Air Warfare Destroyer, Defence Materiel Organisation

DUNSTALL, Mr Harry, Acting Deputy Chief Executive Officer and General Manager, Commercial, Defence Materiel Organisation

HARVEY, Air Marshal John Paul, Chief, Capability Development Group, Department of Defence

KING, Mr Warren, Acting Chief Executive Officer, Defence Materiel Organisation

MCKINNIE, Mrs Shireane, General Manager, Systems, Defence Materiel Organisation

MOFFITT, Rear Admiral Rowan C, Head, Future Submarines Program, Capability Development Group, Department of Defence

THORNE, Air Vice Marshal Colin, Head, Aerospace Systems Division, Defence Materiel Organisation

Appendix 3

Additional information, tabled documents, and answers to questions on notice

Additional information and tabled documents

1 Dr Mark Thomson and Dr Andrew Davies—Public hearing dated 12 August 2011—Serving Australia—Special Report June 2011-Issue 41—Serving Australia Control and administration of the Department of Defence.

2 Dr Mark Thomson and Dr Andrew Davies—Public hearing dated 12 August 2011—The cost of Defence ASPI Defence Budget Brief 2011–2012.

3 Australian Industry Group Defence Council—Public hearing dated 11 August 2011—Opening statement.

4 Australian Association for Maritime Affairs—Public hearing dated 12 August 2011—Opening statement.

5 Submarine Institute of Australia Incorporated—Public hearing dated 12 August 2011—Opening statement.

6 QinetiQ and BMT Design and Technology—Public hearing dated 12 August 2011—Additional information.

7 Australian Industry and Defence Network—Public hearing dated 11 August 2011—Answer to a question taken on notice by Mr Graham Priestnall.

8 Department of Defence – Public hearing dated 5 October 2011 – Offshore Combatant Vessel

9 Department of Defence – Public hearing dated 5 October 2011 – Project SEA 1180 – Patrol Boat, Mine Hunter Coastal and Hydrographic Ship Replacement

10 Capability Development Group, Department of Defence – Public hearing dated 7 October 2011 – Opening statement

11 Engineers Australia - 2010 Salary and Benefits Survey - Public Hearing dated 5 October 2011

12 Engineers Australia - Regulation of Engineers - Public Hearing dated 5 October 2011

13 Department of Defence – Additional information dated 9 August 2011

14 Department of Defence – Additional information dated 4 October 2011

Answers to questions on notice

5 and 7 October 2011

- Department of Defence – Public hearings dated 5 and 7 October – Answers to questions on notice
- Department of Defence – Public hearings dated 5 and 7 October – Answers to questions on notice

Appendix 4

Implementation of Defence Reviews

Department of Defence [1]

The Strategic Reform Program (SRP) and a number of recent reviews provide clear strategic direction to Defence, including the DMO, for the need to reform and improve its governance and accountability structures, and business processes. These reforms seek to improve the way in which Defence achieves its outcomes in support of Government's strategic objectives.

In his speech to the Australian Strategic Policy Institute (ASPI) on 19 July 2011, the Minister for Defence mapped out the gamut of Government measures and initiatives for Defence Reform, which are either linked or in addition to the ongoing SRP effort. The breadth of current and future Defence reforms are outlined below:

Current reforms (being implemented):

- Procurement and Sustainment;
- The Defence Budget;
- Minor Projects;
- Early Warnings and Indicators;
- Enhanced Gate Review Process;
- Projects of Concern;
- Defence Capability Plan;
- Linking the Defence Capability Plan to Defence Planning Guidance;
- Accountability issues as revealed in the Black Review; and
- The Rizzo Report.

Future reforms (to be implemented):

- Coles Review;
- Shared Services Review; and
- Force Posture Review.

PO Box 7900 Canberra BC ACT 2610 Telephone 02 626 52851 - Facsimile 02 6265 2375

1 Department of Defence, Additional information, received 4 October 2011.

The Government's and the Defence senior leadership's determination to reform Defence is clear and resolute.

Strategic Reform Program (Pappas)

The Defence Budget Audit or Pappas Review was an independent Audit of the Defence Budget, in keeping with the Government's pre-election commitment. The final report of the Audit was delivered to the Government in April 2009.

The Audit examined the state of the Defence Budget and its major cost drivers, with a view to finding potential for efficiency gains and reinvestment opportunities. The Audit also identified fundamental reforms that Defence should undertake in order to become a more accountable, transparent and efficient organisation. It made over 120 recommendations, the vast majority of which were accepted by the Government.

Mr Pappas' report was a frank assessment of the challenges faced by Defence and makes a strong case for deep and sustained reform. The Government's vehicle for that deep and sustained reform is the Strategic Reform Program (SRP), one of the most comprehensive programs of reform ever undertaken by Defence.

As the SRP evolves, so does its environment. The SRP is operating within a broader context of an expanding reform agenda, numerous Government and Defence initiated reviews, and a tight fiscal environment across Government. Effecting sustainable change, in particular culture change, in this context is a major challenge.

There are 15 SRP reform streams that will deliver savings of some $20bn over 10 years, as well as re-setting core business functions to deliver increased effectiveness and enhanced return on future effort. Cost reductions to date have been $797m in FY 2009-10, $1,016m in FY2010-11 and forecast savings of $1,283m in FY 11-12 and $1,992m in FY 12-13. These results have been achieved without any negative impacts to capability or safety and have been delivered through a mixture of innovative reforms, cost reductions, and reduced discretionary expenditure.

Black Review

The Minister for Defence announced the findings of the Black Review on 9 August 2011. The Department has commenced implementation of the Black Review recommendations. To date, this has resulted in:

- initial communication strategy and internal communications regarding the release and content of the Black Review;
- as an extension of SRP an overall implementation strategy for the Black Review has been prepared for consideration by the Defence Committee;
- the completion of the initial design draft of the five year horizon Defence Corporate Plan for consideration by the Defence Committee;
- the development and dissemination of the Defence Annual Plan;
- the advertising of the Associate Secretary (Capability) and the Associate Secretary (Chief Operating Officer) positions; and
- the Secretary's direction to undertake a review of Defence's capability business process as recommended in the Black Review.

Capability Review

In light of the Black Review's findings of challenges and weaknesses in Defence's end-to-end management of capability, a comprehensive end-to-end business process review of Defence's capability management will be undertaken. This review will address issues across the current capability management cycle including planning and development, acquisition, transition into service, sustainment and upgrade, and disposal.

The review will focus on both efficiency and effectiveness of the capability business process and will recommend required changes. Importantly the review will build on previous reports, such as Mortimer, and take a practical approach to further possible improvements. Significant improvements have already been made to many areas of capability acquisition and this is about further building on these improvements across the whole system of capability acquisition. Accordingly the review will encompass governance, resourcing, strategic control and decision making, the role and participation of various Defence entities, contestability, risk management, reporting and organisational structure. The review will also address relevant issues raised through other related reform initiatives, particularly the Strategic Reform Program; the Rizzo Review, together with other Chief Capability Development Group initiated process reviews, and in time the outcomes of the Coles Review. The review will also take account of the reforms announced by the Minister in May and August.

Mortimer Reforms

The implementation of the Mortimer Review recommendations is one of the Strategic Reform Program steams. An SES Band 3 / 3 Star committee provides oversight on implementation of the recommendations. The committee last met on 18 May 2011. As of that date, 32 process recommendations had been fully implemented and a further two had been transferred to another Strategic Reform Program Stream. Eleven recommendations remain on track for implementation by 2012. The below table is the list of Mortimer recommendations that are closed by process[1]:

Mortimer recommendations closed by process

	Current Process Status	Commentary
1.1 Linking Strategy to Capability	Completed	The 'strategy-led' measures of Strengthening the Capability Development Process are in place. These measures include the establishment of Five Yearly *White Paper* cycle (supported by annual *Defence Planning Guidance*), the establishment of the Force Structure Development Directorate, institutionalisation of the Force Structure Review process and the publication of *The Strategic Framework* that outlines the post White Paper approach to implementing a 'strategy-led' approach within Defence. This is now part of business as usual.
1.3 Assure Government of affordability of Defence Capability Plan (DCP)	Completed	A statement on DCP affordability was included in the Defence Capability Plan 2009.
1.4 Replace explicit cost bands in public DCP	Completed	An independent review was undertaken by the Australian Strategic Policy Institute (ASPI) on the availability of Defence capability planning information to industry. The public DCP content was amended to reflect the Government's response to the ASPI review.
2.1 Tailor two-pass process according to the specific project	Completed	The internal processes on tailoring of the two-pass process are described in the Interim Defence Capability Development handbook (DCDH).
2.2 Establish subordinate subcommittee to NSC	Completed	In its response to Mortimer, the Government proposed an alternative approach to reducing the NSC workload by increasing approval thresholds. New thresholds for project approvals have been implemented.
2.3 Support Off the Shelf (OTS) consideration with cost-benefit	Completed	The requirement to include OTS options for all procurements and associated enabling processes are described in the Interim DCDH.

[1] The report refers to the Interim Defence Capability Development Handbook (DCDH). The DCDH was published in Aug 2011 after the May meeting. No changes have occurred which impact this report.

analysis for each project		The Interim DCDH states that where an OTS option exists for Defence's capability requirements, it will be presented for Government consideration and will be the benchmark against which a rigorous cost-benefit analysis of the military effects and schedule aspects of the other options will be undertaken; and when an off-the-shelf option is judged not to exist, this will be explained in the submission to Government.
2.4 More rigorous project submission to support entry into DCP	Completed	The Interim DCDH requires relevant experts to provide cost, schedule and risk information.
2.5 Develop draft Materiel Acquisition Agreement (MAA) at project entry to DCP	Completed	The Interim DCDH states that a draft MAA is to be developed for DCP entry, detailing the responsibilities and expectations of the stakeholders. This draft MAA forms part of the Initial Capability Definition Statement.
2.6 Endorsement of capability submission by Capability Managers	Completed	Capability Manager endorsement is currently achieved through representation on capability committees. Requirement for Capability Manager sign-off of submissions is to be considered by the Capability Manager Working Group.
2.7 DMO to be responsible for the equipment acquisition strategy	Completed	The Interim DCDH states that DMO is responsible for the equipment acquisition strategy throughout the capability development process. The Cabinet Submission template has been reviewed to allow CEO DMO's agreement and sign-off of the acquisition strategy.
2.8 Devoting sufficient resources and skills in Capability Development Group (CDG)	Completed	Increases in CDG's workforce were approved as part of the development of the 2009 White Paper. CDG training aspects of this recommendation are to be addressed primarily via the Desk Officer Skilling Program.
2.10 CEO DMO to provide independent expert commercial advice to Government	Completed	The CEO DMO provides independent advice to Government on cost, schedule, risk and commercial aspects of all major capital equipment acquisitions.
3.1 Capability Managers to sign Materiel Acquisition Agreements (MAAs)	Completed	Capability managers formally agree to the scope and schedule of the acquisition activity and confirm the baseline for the delivery of equipment by signing MAAs. All new MAAs are signed by CMs. All existing MAAs are being migrated to new format and signed by Capability Managers.
3.5 Project Charters	Completed	Complex and demanding projects have been defined as ACAT I and ACAT II projects. Project Manager Charters have been instituted for all current ACAT I and ACAT II projects. In total, over 70 project charters have been signed.
3.6 Independent Project Performance Office	Completed	An Independent Project Performance Office has been established in the DMO under General Manager Programs. It manages the Projects of Concern and Project Gate Reviews.
3.7 Align contracting with commercial practice	Completed	General Manager Commercial has worked with industry to identify key procurement and contracting issues that do not align with commercial practice, and made agreed changes to templates and policy.
3.8 Public-Private Partnerships (PPP)	Completed	On a project by project basis DMO is applying the Defence PPP checklist to evaluate capabilities suitable for acquisition under PPP arrangements. DMO liaises with the PPP centre of excellence in Defence Support Group in relation to PPP opportunities.
3.9 Public-Private Partnership Assessment	Completed	As per 3.8
3.10 Skills Shortage	Completed	On 15 Nov 08, the Minister for Defence announced the Industry Skilling Program Enhancement (ISPE) package. The ISPE contains 14 initiatives designed to address skill shortages in defence industry. Implementation of the package has progressed well. Major achievements included: • establishing the Defence Industry Innovation Centre (launched in Sep 09); • establishing three Defence Industry School Pathways Programs;

		• funding an industry component to the Defence Technical Scholarships Program; • funding an Engineering Scholarship Program; • expanding the DMO Institute; • expanding the Masters of Military Systems Integration; • introducing a Masters of Systems Support Engineering; • instituting an Industry Downturn Response Strategy; and • funding a Defence Industry Sector Branding Strategy. The package also assists potential defence industry workers by increasing their knowledge of the career pathways available in defence industry and works hand-in-hand with the Skilling Australia's Defence Industry (SADI) program. Under the SADI program, 7,500 training opportunities are expected to be created over the period 2009-2015. In 2009/10, almost 1,400 training opportunities were funded under SADI with approximately 1,500 expected per annum over the next four years. The majority of ISPE initiatives have been implemented or are in the final stages of negotiation. The three school pathways programs have been established in SA, WA and the Hunter Region of NSW. The Advanced Manufacturing Industry Schools Pathways Program in the Hunter saw approximately 350 students participate in the ME Pilot Program in 2010. The framework to facilitate industry access to DMO Institute courses has been developed with selected courses offered to industry from late 2010. A media release was issued by the Minister for Defence Materiel on 30 August 2011 announcing 109 companies would share in almost $14m for more than 4,000 training places to boost the skills of the Defence industry workforce. This includes up to $1.4 million to support approx 250 apprentices in trades like aerospace skills, engineering fabrication and electro technology.
3.11 Joint Industry Training Task Force	Completed	Many of the recommendations contained in the report of the Joint Training Task Force (JTTF) were incorporated into the ISPE proposal (see above), these included: • the establishment of a standing team to identify and leverage downturns in other industries; • the development of a strategic brand for defence industry; and • the replication of the Queensland Aerospace project (school pathway Programs) in WA, SA and Hunter Region. It is intended that the Defence and Industry Skills Taskforce will now replace the JTTF and provide advice, analysis, ideas, and strategies with particular reference to: • ensuring a critical mass of skills relevant to the Defence sector and the future sustainment of these skills; • identifying and growing the skills to deliver and sustain the capabilities and equipment of the ADF as detailed in the 2009 White Paper, Defence Capability Plan and Priority Industry Capabilities; and • building the skills required in Defenec and defence industry to deliver the Defence Strategic Reform Program, and specifically the SMART Sustainment and Logistics streams. Given the success of the ISPE initiatives in achieving the JTTF recommendations and its subsequent replacement with the D&I Skills Taskforce with attendant change in focus, the status of this item was changed to completed.
3.13 Disciplined Process for Scope Change	Completed	The Interim DCDH states proposed changes to the capability baseline must be cleared by CCDG, in consultation with Strategic Policy Division and the Capability Manager, before the acquisition agency approves any

		engineering change proposal, contract change proposal, waiver or deviation that affects the approved baseline. When applicable the Project Directive and Materiel Acquisition Agreement must be amended accordingly. CCDG is responsible for recommending and obtaining Defence or Government approval for any changes to the project's scope, cost or schedule that are outside the tolerances approved for the project. Changes that affect the acquisition baseline require the approval of Government before they can be implemented
4.1 Net Personnel Operating Costs (NPOC) to be updated annually	Completed	The supporting guidance to the Interim DCDH states that the NPOC program, supported by updated Workforce Estimates, is to be updated annually by FASCIR. The updates are prepared by CS Div Desk Officers (endorsed by the CM, DMO and stakeholders) and reviewed by CAB in time for Budget Estimates.
4.3 Independent Sustainment Efficiency Office	Completed	The Sustainment Reinvestment Office was established to integrate, coordinate and oversee delivery of the Smart Sustainment Program. It supported delivery of the program by DMO Divisions and Defence through the development of tools, training and guidance material and through facilitation and information sharing. The Smart Sustainment Program is intended to deliver significant improvements in the delivery of sustainment services.
4.4 Establish correct basis for capability decisions	Completed	The Key Defence Asset Review process is used to progress this action.
4.6 Product Charters	Completed	Product Manager Charters (equivalent to Project Manager Charters) are now in place.
4.7 Retain majority of current Functional Split	Transfer management to Logistics stream	Responsibility for delivering this recommendation was transferred to the Logistics Stream within the Strategic Reform Program (SRP). This Stream is responsible for delivering SRP savings targets in relation to inventory management. The decision on the responsibility for vehicle maintenance is being held in abeyance until resolution of existing contractual obligations. A decision on vehicle maintenance is unlikely before mid 2012.
4.8 Freight and warehousing cost visibility	Transfer management to Logistics stream	Responsibility for providing visibility of costs associated with freight, warehousing and disposal was transferred to the Logistics Stream within the SRP. Visibility of costs will be an important tool in this activity.
5.3 CEO DMO experience	Completed	Advertisement Aug 2011 for the new CEO states: Potential applicants should have substantial management experience at the senior executive level gained in a large and complex operating environment. Direct exposure to the successful management of complex projects including – but not exclusively – in the Defence context, is a core requirement as is a proven track record in managing risks and delivering reform outcomes. Thorough knowledge of the Defence industry, the complexity of government operations and the importance of working within teams will be advantages.
5.4 Appropriate directly to DMO funds for equipment acquisition	Completed	The Government agreed not to directly appropriate acquisition funding to DMO.
5.5 Direct Appropriation of Service Fee to DMO	Completed	Changes to the direct appropriation model were implemented as part of the 2009-10 Budget.
5.6 Real Cost Increases	Completed	Government has not set an RCI target. However, Government has capped the Defence budget which requires RCI's to be internally funded. The Early Indicators and Warnings process is also being developed to support early identification of project cost issues should these occur.
5.7 Defence Procurement Advisory Board	Completed	The Defence Strategic Reform Advisory Board (DSRAB) was established in Oct 09. The Board is chaired by a person from the private sector. The Board membership includes a balance of internal and external members including the Secretaries of the Department of Prime Minister and Cabinet, the Treasury, the Department of Finance and Deregulation, the Secretary of Defence, the Chief of the Defence Force and the CEO DMO. Meetings of the board are held periodically.

5.9 Remuneration and performance of DMO Workforce	Completed	The powers and functions devolved to CEO DMO and the autonomy CEO DMO has in exercising the powers over his organisation have been codified. The Government agreed that CEO DMO can manage DMO's workforce under a total labour cost model on 25 Jun 09.
5.10 Commercial orientation and performance of DMO	Completed	The General Manager Commercial position was filled on 25 Feb 10.