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The Parliament of the Commonwealth of Australia

# Review of the Defence Annual Report 2012-13

**Inquiry of the Defence Sub-Committee**

Joint Standing Committee on Foreign Affairs, Defence and Trade

October 2014  
Canberra

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# Contents

Foreword .....	vii
Membership of the Committee .....	ix
Membership of the Defence Sub-Committee.....	xi
Terms of reference .....	xiii
List of abbreviations .....	xv
List of recommendations .....	xix
<b>1 Introduction .....</b>	<b>1</b>
<b>Annual Report Review objectives and scope .....</b>	<b>2</b>
Focus areas .....	2
Conduct of the Review .....	2
<b>2 Asset Management and Capital Investment Program .....</b>	<b>3</b>
<b>Introduction .....</b>	<b>3</b>
<b>Base rationalisation .....</b>	<b>3</b>
Background .....	3
Enhancing the efficiency of base rationalisation.....	4
<b>Disposal of land .....</b>	<b>6</b>
<b>Defence Logistics Transformation Program.....</b>	<b>7</b>
School of Military Engineering.....	8
<b>Heritage buildings.....</b>	<b>8</b>
<b>Single LEAP Project.....</b>	<b>10</b>
<b>Contracts evaluated for success or failure.....</b>	<b>11</b>
Comprehensive Maintenance Service and Base Service contracts .....	11
Major capital facilities investment contracts .....	11

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Small and Medium Enterprise .....	12
Committee comment.....	15
<b>3 Defence Cooperation Program.....</b>	<b>17</b>
Introduction .....	17
Defence Cooperation Program priorities .....	17
Scholarships.....	19
Other activities/countries .....	20
Pacific Patrol Boat Program.....	20
Background.....	20
Program cost.....	21
Program effectiveness .....	22
Future options .....	23
Committee comment.....	27
<b>4 Navy Combat Capability.....</b>	<b>29</b>
Introduction .....	29
Submarine Capability .....	29
The Coles Report (November 2012) .....	29
International benchmark performance.....	35
Next generation submarines .....	39
Assurance of capability and delivery .....	39
Independent review.....	39
Performance management system .....	41
Air Warfare Destroyer .....	42
Committee Comment.....	45
<b>5 Defence Materiel Organisation and Capability Development Group.....</b>	<b>47</b>
Background .....	47
CDG's response to internal and external reviews.....	48
CDG Workforce .....	48
Mitigating risk in the DMO and CDG.....	50
Partnering Defence with industry .....	50
Transparency and accountability.....	51

Disclosure of dissenting views .....	52
Managing commercial risk .....	54
Compliance.....	54
SEA 1000.....	55
First Principles Review of Defence.....	56
Committee comment.....	57
<b>6 Air Combat Capability .....</b>	<b>61</b>
Introduction .....	61
F-35 Joint Strike Fighter .....	61
Background.....	61
JSF project overview.....	62
Costing.....	63
Ensuring consistency with Australia's capability needs.....	63
Independent and transparent reporting on the JSF project .....	64
Fifth-Generation air combat capability.....	66
Committee comment.....	68
<b>7 Other Issues.....</b>	<b>69</b>
Accounts management.....	69
Transaction processing.....	69
Cyber-Security.....	70
Committee comment.....	71
<b>Appendix A - Submissions .....</b>	<b>73</b>
<b>Appendix B – Witnesses.....</b>	<b>75</b>
<b>Appendix C - Leased land.....</b>	<b>77</b>

## **LIST OF TABLES**

Table 1	Defence Cooperation Program Funding.....	19
Table 2	Pacific Patrol Boat Sea Days 2013 .....	22





## Foreword

The *Review of the Defence Annual Report 2012-13* is the first undertaken by the Defence Sub-Committee in the 44<sup>th</sup> Parliament. Reviews of Defence annual reports, which the Sub-Committee has undertaken annually in successive Parliaments since 2002, is an oversight activity that the Sub-Committee considers to be a key part of its role.

The Sub-Committee resolved to focus on five main areas for its *Review of the Defence Annual Report 2012-13*:

- Asset management and Capital Investment Programs;
- Defence Cooperation Program;
- Naval combat capabilities;
- Air combat capability; and
- Defence Materiel Organisation and Capability Development Group.

The Sub-Committee considered estate issues ranging from the cost pressures associated with heritage listed buildings through to the efficacy of Defence contracts to ensure that small to medium enterprises were paid in a timely manner by prime contractors.

The Sub-Committee also considered the scope of the Defence Cooperation Program and options for a Whole of Government approach to supporting regional partners.

As the Sub-Committee examined the last three of the five focus areas, it became apparent that despite some very positive developments, Navy's Seaworthiness System being one, Defence's approach to capability management remains fragmented. There does not appear to be a single contiguous system which Defence can use to conduct capability-assurance from definition, through acquisition and service-life, to disposal. Such a system, perhaps reporting through the Vice Chief of the Defence Force, would facilitate more effective capability management across groups within Defence while increasing transparency and enhancing oversight by Government and the Parliament.

The Sub-Committee notes the positive outcomes from the SEA 1000 industry Integrated Project Team and encourages further development of this initiative. The Sub-Committee also believes that there is greater opportunity to leverage the expertise developed within the private sector at all stages of the capability development life cycle. Rather than contracting for specific packets of work, greater benefit could perhaps be gained by entering into a teaming arrangement as part of a whole-of-life approach to identifying and managing risk.

The Sub-Committee was disappointed to note however that:

- As at the date of the Committee's adoption of this report, no response had been received to the recommendations of the Committee's *Review of the Defence Annual Report 2011-2012*;
- A copy of the independent review of the Joint Strike Fighter program commissioned by the Defence Materiel Organisation, that was discussed during the public hearing on 6 June 2014, has still not been provided to the Sub-Committee; and
- The lack of detail in the *Defence Annual Report 2012-13* on the progress of implementation of all the Coles review recommendations.


The Sub-Committee expects these matters to be addressed.

The Sub-Committee appreciates the growing importance of the cyber dimension to national security. In this regard, the important work being done by Defence, specifically by the Australian Signals Directorate and the Defence Science and Technology Organisation, was noted.

The Sub-Committee acknowledges the dedication and commitment of the servicemen and women of the Australian Defence Force (ADF) and commends them on the outstanding service they provide to the nation. It is also recognised that the members of the ADF are supported by an enduring network of families, friends and loved ones and to these people we give our thanks. Finally, the Sub-Committee notes the loss of Lance Corporal Todd Chidgey during 2014. Our deepest condolences and thoughts are extended to his family and friends.

Senator David Fawcett  
Chair  
Defence Sub-Committee






## Membership of the Committee

Chair            The Hon Teresa Gambaro MP

Deputy  
Chair            Mr Nick Champion MP

Members	The Hon Michael Danby MP	Senator Mark Bishop (until 30 June 2014)
	The Hon David Feeney MP	Senator Sean Edwards (from 1 July 2014)
	Mr Laurie Ferguson MP	Senator Alan Eggleston (until 30 June 2014)
	The Hon Alan Griffin MP (until 5 September 2014)	Senator David Fawcett
	Mr Alex Hawke MP	Senator Mark Furner (until 30 June 2014)
	Dr Dennis Jensen MP	Senator Alex Gallacher (from 1 July 2014)
	Mr Ewen Jones MP	Senator Helen Kroger (until 30 June 2014)
	Mr Craig Kelly MP	Senator the Hon Joseph Ludwig (from 1 July 2014)
	The Hon Richard Marles MP	Senator the Hon Ian Macdonald
	Mr Andrew Nikolic AM, CSC, MP	Senator Anne McEwen
	The Hon Melissa Parke MP (from 23 September 2014)	Senator Bridget McKenzie (from 1 July 2014)
	The Hon Tanya Plibersek MP	Senator Deborah O'Neill (from 1 July 2014)
	Mr Don Randall MP	Senator Stephen Parry (until 30 June 2014)

Mr Wyatt Roy MP	Senator Linda Reynolds CSC (from 1 July 2014)
The Hon Philip Ruddock MP	Senator the Hon Lisa Singh
The Hon Bruce Scott MP	Senator the Hon Ursula Stephens (until 30 June 2014)
Mr Luke Simpkins MP (until 22 September 2014)	Senator Peter Whish-Wilson
The Hon Dr Sharman Stone MP	Senator Nick Xenophon
Mrs Jane Prentice MP (from 22 September 2014)	
Ms Maria Vamvakinou MP	



# Membership of the Defence Sub-Committee

**Chair**            Senator David Fawcett

**Deputy Chair**   The Hon Alan Griffin MP  
(until 5 September 2014)

Senator Deborah O'Neill  
(from 23 September 2014)

<b>Members</b>	Mr Nick Champion MP (ex officio)	Senator Sean Edwards (from 1 July 2014)
	The Hon Michael Danby MP	Senator the Hon Joseph Ludwig (from 1 July 2014)
	The Hon David Feeney MP	Senator the Hon Ian Macdonald
	The Hon Teresa Gambaro (ex officio)	Senator Bridget McKenzie (from 1 July 2014)
	Mr Alex Hawke MP	Senator Linda Reynolds CSC (from 1 July 2014)
	Dr Dennis Jensen MP	
	Mr Ewen Jones MP	
	Mr Craig Kelly MP	
	The Hon Richard Marles MP	
	Mr Andrew Nikolic AM, CSC, MP	

## Committee Secretariat

Secretary	Mr Jerome Brown
Defence Advisor	Lieutenant Colonel Lachlan Sinclair
Research Officers	Mr Rhys Merrett Ms Anne Caligari
Administrative Officers	Mrs Dorota Cooley Ms Karen Underwood



## Terms of reference

Pursuant to paragraph two of its resolution of appointment, the Joint Standing Committee on Foreign Affairs, Defence and Trade is empowered to consider and report on the annual reports of government agencies, in accordance with a schedule presented by the Speaker of the House of Representatives.<sup>1</sup>

The Speaker's schedule lists annual reports from agencies within the Defence and Foreign Affairs portfolios as being available for review by the Committee.<sup>2</sup>

On 19 March 2014, the Joint Standing Committee on Foreign Affairs, Defence and Trade authorised the Defence Sub-Committee to review the Department of Defence Annual Report 2012-13.

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- 1 Joint Standing Committee on Foreign Affairs, Defence and Trade, *Resolution of Appointment*, viewed 25 July 2014, <[http://www.aph.gov.au/Parliamentary\\_Business/Committees/Joint/~/link.aspx?\\_id=D70AAF162277482DB939202EE1B1C4D3&\\_z=z](http://www.aph.gov.au/Parliamentary_Business/Committees/Joint/~/link.aspx?_id=D70AAF162277482DB939202EE1B1C4D3&_z=z)>.
  - 2 Parliament of Australia, *44<sup>th</sup> Parliament Speaker's Schedule: Allocation to Committees of Annual Reports of Government Departments and Agencies*, p. 21.





## List of abbreviations

ADF	Australian Defence Force
ADMM-Plus	ASEAN Defence Minister's Meeting-Plus
ANAO	Australian National Audit Office
APS	Australian Public Service
ARF	ASEAN Regional Forum
ASEAN	Association of South East Asian Nations
ASPI	Australian Strategic Policy Institute
AWD	Air Warfare Destroyer
BS	Base Service
CDF	Chief of Defence Force
CDG	Capability Development Group
CDIP	Capability Development Improvement Plan
CHL	Commonwealth Heritage Listed
CMS	Comprehensive Maintenance Services
CTMC	Capability and technology Management College
COTS	Commercial-Off-The-Shelf

DCP	Defence Capability Plan (Note. DCP is also used to refer to the Defence Cooperation Program)
DMO	Defence Materiel Organisation
DLTP	Defence Logistic Transformation Program
DSTO	Defence Science and technology Organisation
EEZ	Economic Exclusion Zone
EZ	Exclusion Zone
F100	A class of ship based on the Spanish Álvaro de Bazán class design which is also known as the F100 class
FFA	Forum Fisheries Agency
FCD	Full-Cycle Docking
FPR	First Principles Review
GPS	Global positioning System
HADR	Humanitarian Assistance and Disaster Relief
IPT	Integrated Project Team
ISCMMS	Integrated Ship Control Management and Monitoring System
JSF	Lockheed Martin F-35 Joint Strike Fighter
KPI	Key Performance Indicator
LCH	Landing Craft Heavy
LTPA	Long-Term Partnering Agreement
MOTS	Military-Off-The-Shelf
NACC	New Air Combat Capability
NSC	National Security Committee of Cabinet
P3	Lockheed AP-3C Orion maritime patrol aircraft
PPB	Pacific Patrol Boat



QA	Quality Assurance
RAAF	Royal Australian Air Force
RAN	Royal Australian Navy
RMI	Republic of the Marshall Islands
Single LEAP	Single Living Environment and Accommodation Precinct
SME	Small to Medium Enterprise (Note. SME is also used to refer to Subject Matter Expert)
T&E	Test and Evaluation





## List of recommendations

### 2 Asset Management and Capital Investment Program

#### Recommendation 1

The Committee recommends that the Department of Defence review contract templates and procurement processes to ensure that, to the extent possible, payments flow to small and medium sized enterprises subcontracted by primes in a timely manner.

#### Recommendation 2

The Committee recommends that Government review the process by which Defence properties are placed on the Commonwealth Heritage List and ensure that, where properties are listed, they are suitably funded either by a specific appropriation or through a public private partnership.

### 4 Navy Combat Capability

#### Recommendation 3

The Committee recommends that the Department of Defence consider utilising independent subject matter experts in a system of Gate Reviews, starting with project conception in the Capability Development Group and continuing through life of type, as part of the Seaworthiness System.

#### Recommendation 4

The Committee recommends that the Department of Defence provide the Committee with a specific update on the implementation of each Coles review recommendation prior to the tabling of the Department's next Annual Report.

## **5 Defence Materiel Organisation and Capability Development Group**

### **Recommendation 5**

The Committee recommends that the Department of Defence increase the use of private sector expertise, particularly in the areas of test and evaluation, risk management, review and business case development, in order to enhance the capability development process and new capability proposals.

### **Recommendation 6**

The Committee recommends that the Vice Chief of the Defence Force own a process that harnesses and coordinates the oversight and review functions currently exercised by the Capability Development Group, the Defence Materiel Organisation and the Services in order to integrate a whole of life approach to capability assurance.

### **Recommendation 7**

The Committee recommends that the Department of Defence continue to build on the capabilities and processes that have been developed within the SEA 1000 industry Integrated Project Team (IPT) and ensure that the views of the IPT are transparently communicated to the National Security Committee of Cabinet as part of procurement decisions.

## **7 Other Issues**

### **Recommendation 8**

The Committee recommends that Defence Annual Reports include appropriately detailed information on the direction and development of the Department's cyber-security capabilities.

## Introduction

- 1.1 The 2012–13 financial year proved to be a significant time for Defence. Faced with tighter budget constraints, the Department continued to engage in military operations around the world whilst remaining committed to the long-term modernisation of the Australian Defence Force (ADF). These outcomes were achieved principally through reduction in the number of Australian Public Service (APS) and contracted personnel within the Department. Furthermore, cultural reforms in the areas of gender and personal accountability were also introduced. While the immediate effect of these measures has been positive, Defence is aware of the need to ensure these measures are efficiently maintained and complemented by innovation and improvement.<sup>1</sup>
- 1.2 The ADF concluded two operations. Operation Astute in Timor Leste ceased in April 2013 – 13 years after Australia’s initial deployment under International Force East Timor. Australia’s decade long-commitment to the Regional Assistance Mission to Solomon Islands, known as Operation Anode, also concluded in September 2012.<sup>2</sup>
- 1.3 As part of Australia’s withdrawal from Afghanistan, a key milestone was achieved in October 2012 when the four Australian-mentored Afghan National Army (ANA) infantry Kandaks assumed the lead for independent operations in Uruzgan.<sup>3</sup>

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1 *Defence Annual Report 2012–13*, p. 3.

2 *Defence Annual Report 2012–13*, p. 7.

3 *Defence Annual Report 2012–13*, p. 7.

## Annual Report Review objectives and scope

- 1.4 The review of the *Defence Annual Report* is an important task as it provides an opportunity for the Defence Sub-Committee of the Joint Standing Committee on Foreign Affairs, Defence and Trade to inquire into a broad range of Defence issues as part of the process of accountability of Government agencies to Parliament.

### Focus areas

- 1.5 The Sub-Committee decided to focus on five main areas for its review of the *Defence Annual Report 2012-13*. These issues and their chapters are:
- Asset management and Capital Investment Programs – addressed in Chapter Two;
  - Defence Cooperation Program – addressed in Chapter Three;
  - Navy combat capabilities – addressed in Chapter Four;
  - Defence Materiel Organisation and Capability Development Group, addressed in Chapter Five; and
  - Air combat capability – addressed in Chapter Six.

### Conduct of the Review

- 1.6 The Review was announced via media release on 26 March 2014.
- 1.7 The Sub-Committee received submissions from the Australian Strategic Policy Institute (ASPI), Nova Systems and QinetiQ Australia. These submissions were published on the Committee's website, and are listed at Appendix A.
- 1.8 The Sub-Committee held a public hearing on 6 June 2014 and received evidence from the following witnesses:
- Senior Defence officials; and
  - Representatives from ASPI, Nova Systems and QinetiQ Australia.
- 1.9 The proceedings of these hearings were broadcast through the Parliament's website, providing interested parties with access to the proceedings as they occurred.

# Asset Management and Capital Investment Program

## Introduction

- 2.1 Defence manages approximately \$71.5 billion of total assets. During the 2012-13 financial year, Defence continued efforts to improve its financial and asset management capabilities. Some of the highlights mentioned in the *Defence Annual Report 2012-13* include moving to a shared service delivery model for asset accounting and a maturing data assurance network to swiftly identify and resolve asset management issues as they occur.<sup>1</sup>
- 2.2 The Approved Major Capital Investment Program consists of those projects that cost more than \$20 million and which, following approval, have been transferred from the Defence Capability Plan (DCP) to the Defence Materiel Organisation (DMO) for the management of their acquisition. During the 2012-13 financial year, a total of 27 projects were approved with a combined value of \$4.3 billion.<sup>2</sup>

## Base rationalisation

### Background

- 2.3 The management of Defence bases is conducted in accordance with the Government's strategic basing principles:

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<sup>1</sup> *Defence Annual Report 2012-13*, p. 149.

<sup>2</sup> *Defence Annual Report 2012-13*, p. 151.

- Australian Defence Force (ADF) base locations should align with Australia's strategic requirements and ensure critical capabilities are dispersed for security reasons;
- functions at Joint and Service levels should be aligned to consolidate units into fewer, larger and sustainable multi-user bases;
- bases should be positioned near industry and strategic infrastructure to maximise opportunities for industry support;
- to improve personnel retention, bases should be located in 'family friendly' areas wherever possible; and
- the urban and regional disposition of bases should facilitate the provision of reservist and cadet capabilities.<sup>3</sup>

2.4 In line with these principles, the 2012 Force Posture Review assessed whether the ADF was correctly positioned to meet the current and future strategic challenges facing Australia. The Review concluded that although Australia's strategic environment does not necessitate widespread changes in the location of ADF bases, some bases and training facilities needed to be upgraded. These upgrades were focused on improving the capacity of bases, facilities and training areas to support the future capabilities of the ADF.<sup>4</sup>

2.5 Addressing the concerns raised in the 2012 Force Posture Review, the 2013 *Defence White Paper* proposed a reduction in the number of inefficient defence bases and facilities that required constant maintenance and support. The 2013 *Defence White Paper* further stated that:

The Government has directed Defence to pursue estate consolidation in accordance with the broad plan developed by the Defence Estate Consolidation Project. Defence will consult fully with stakeholders in implementing these plans and in bringing forward individual proposals for Government consideration. Defence will also continue to remediate its ageing bases and facilities, prioritising estate works based on safety of personnel and support to capability.<sup>5</sup>

## Enhancing the efficiency of base rationalisation

2.6 Speaking to the Committee on base rationalisation, Defence reaffirmed its ongoing consolidation of capability units into super-bases such as RAAF Base Amberley, RAAF Base Edinburgh and Gallipoli Barracks. These

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3 *The Strategic Reform Program 2009: Delivering Force 2030*, p. 23.

4 *2013 Defence White Paper*, p. 47.

5 *2013 Defence White Paper*, p. 52.



efforts have been designed to ensure the cost-effective delivery and sustainment of ADF capability. Defence also acknowledged that it has been considering a different approach to base rationalisation that places greater emphasis on cost-effectiveness as opposed to force structure.<sup>6</sup>

2.7 The Committee noted that most of Defence's recent base activity has occurred in the northern parts of Australia. The Committee questioned whether the lack of potential respite postings in more temperate areas was an issue for staff and personnel.

2.8 Defence stated that there were differing perspectives on this issue across all three services. For Navy, there is an ongoing difficulty to try and move personnel from postings in the north of Australia to the South. Defence also discussed the general perspective of the Army on this issue:

From Army's perspective two things have occurred that provide relief from tropical postings – Townsville and/or Darwin, and Darwin in particular. There is the building up of Edinburgh in South Australia; 7RAR are moving down there and other elements of the 1st Brigade. I was up at 1st Brigade only about three weeks ago. They are still working out exactly what the mix is in the headquarters element that is down there, and the administrative element, but you are getting a better division now. So the 1st Brigade split between Darwin and Townsville needs to settle, but there are at least opportunities now for people to move between those two locations. We have not had an infantry battalion in South Australia for a long time – when 3RAR came to Holsworthy back in the eighties – so I think that has been of help.

The second aspect would be Plan BEERSHEBA turning the three brigades, which are quite dissimilar in capability, into similar brigades. That will spread the armoured corps in particular further around the country – down into Brisbane – particularly the armoured capability tanks. I think that as that settles down over time there will be more opportunity for people to move around at least four major army bases. Two of those are out of the tropics and two will be in the tropics.<sup>7</sup>

2.9 With this in mind, the Committee queried the rationale behind the recent reduction of Paterson Barracks in Tasmania given the small distribution of defence capability and bases already within the state. Defence remarked

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6 Mr Richardson, Department of Defence, *Transcript*, 6 June 2014, p. 22.

7 Gen Hurley, Australian Defence Force, *Transcript*, 6 June 2014, p. 23.

that this constituted part of the Army's broader base rationalisation to reposition their reserve and regular units.<sup>8</sup>

## Disposal of land

2.10 The Committee enquired as to how Defence manages the disposal of its land assets.

2.11 Defence responded that the nature of land disposal is case-specific for each property. When questioned over the length of time for the disposal process once the Department of Finance has authorised the disposal, Defence stated that sign-off generally occurs towards the end of the process. Defence elaborated that this can sometimes be a protracted process:

For example, if it is a priority sale to a local government there can be extended negotiations about the value that would be involved in that sale. Sometimes priority sales are at market value but sometimes they are not at market value, and that would be an agreement through government. I would say that usually within a few months of Finance sign-off we should be well into the market in terms of selling processes.<sup>9</sup>

2.12 Defence told the Committee that there is a disposal list which is regularly updated and reviewed. When a Defence asset is to be disposed of, the Australian Valuation Office provides an initial quantitative evaluation as a basis from which to negotiate with potential sellers. If a property is to be sold on the open market, Defence then informs the professional selling agency of the target selling price. When questioned further on the tendering process and structure, Defence stated that:

It could be varied but, if I look at the way we sold Fortuna Villa in Bendigo at the beginning of last year, that was through an open market tender process, using a local real estate agent with instructions to maximise the value to the Commonwealth from that sale.<sup>10</sup>

2.13 Defence told the Committee that it also engages with local government and state authorities over properties likely to be disposed. It is openly approached by local governments with expressions of interest and

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8 Mr Grzeskowiak, Department of Defence, *Transcript*, 6 June 2014, p. 23.

9 Mr Grzeskowiak, Department of Defence, *Transcript*, 6 June 2014, p. 24.

10 Mr Grzeskowiak, Department of Defence, *Transcript*, 6 June 2014, p. 24.

preliminary requests for priority sale agreements for properties open for disposal.<sup>11</sup>

- 2.14 The Committee asked how much land had been gifted, assigned or transferred on peppercorn lease arrangements, and to which organisations since 1 January 2007. Defence offered the following remarks:

Defence has gifted 120 000 square metres of the former Jezzine Barracks in Townsville, Queensland, to the Townsville City Council for community use and heritage protection.

Defence has identified 82 774 845 square metres of land (where figures are readily available) that is currently leased under peppercorn arrangements (defined as \$1 per annum if and when demanded).<sup>12</sup>

- 2.15 Defence provided a list of organisations that currently lease this land on a peppercorn basis. This list can be found in Appendix C.

## Defence Logistics Transformation Program

- 2.16 The Defence Logistics Transformation Program (DLTP) makes up part of a broader collection of reforms known as the Strategic Reform Program. This program is designed to improve the efficiency and effectiveness of Defence logistics network. The *Defence Annual Report 2012-13* noted that DLTP remains on track to deliver on its stated intent.

- 2.17 The *Defence Annual Report 2012-13* mentions that the Parliamentary Standing Committee on Public Works approved \$752 million in new logistics facilities. Additionally, a significant milestone was achieved with the signing of the Land Material Maintenance contract with Transfield Services (Australia). This agreement consolidates the delivery of equipment maintenance services from three separate contracts into one.<sup>13</sup>

- 2.18 In regards to the DLTP, the Committee sought comment from Defence on the National Storage and Distribution Centre at Moorebank currently nearing completion. Defence responded:

The project is on schedule, particularly if we focus on Moorebank, which is one of the bigger pieces of that project. We are anticipating being in a position to move out of the old storage facilities that we have around Moorebank in the first half of next

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11 Mr Grzeskowiak, Department of Defence, *Transcript*, 6 June 2014, p. 24.

12 Department of Defence, *Submission No. 4*, pp. 2-4.

13 *Defence Annual Report 2012-13*, p. 111.

year and to move into the new facilities, which will come online around that time.<sup>14</sup>

- 2.19 Defence confirmed that it is undertaking a significant rationalisation of inventory in new warehouses such as Moorebank in order to reduce the storage of out-dated and old stock. Where possible, Defence ensures as much of this stock is sold on the market.<sup>15</sup>

## School of Military Engineering

- 2.20 The Committee requested an update on the School of Military Engineering presently under construction in Holsworthy. Defence stated:

We are essentially closing down Steele Barracks, which is the existing school of military engineering, to facilitate the government's intermodal terminal, which will be built in that area. We are moving that school onto Holsworthy Barracks and, as part of that process, taking the opportunity to do some redevelopment of the barracks there. We are completing a complete new school of military engineering with all of the facilities that you would expect. It is almost like building a small town in the barracks. The project is currently on schedule. The 2016 course will go into that school rather than the existing school.<sup>16</sup>

- 2.21 Regarding the current School of Military Engineering at Steele Barracks, the Committee was interested to hear how much the land was valued at by the Department. Defence responded that 333.5 hectares was valued at approximately \$261.7 million. It was noted, however, that this valuation does not take into account the actual asset value of the buildings on the site.<sup>17</sup>

## Heritage buildings

- 2.22 Defence currently has in excess of 2,000 heritage property structures spread across the Defence estate. These structures occur on both Commonwealth Heritage Listed (CHL) properties and on other Defence properties known also to contain heritage buildings which have not been

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14 Mr Grzeskowiak, Department of Defence, *Transcript*, 6 June 2014, p. 25.

15 Mr Grzeskowiak, Department of Defence, *Transcript*, 6 June 2014, p. 25.

16 Mr Grzeskowiak, Department of Defence, *Transcript*, 6 June 2014, p. 26.

17 Department of Defence, *Submission No. 4*, p. 3.

- formally assessed under the CHL (including former Register of the National Estate sites).<sup>18</sup>
- 2.23 Developments to the Defence estate which impact on heritage values also carry additional costs related to heritage approvals and management requirements.<sup>19</sup>
- 2.24 One of the main costs associated with the management of heritage buildings is maintenance and upkeep. Defence finds the process for removing properties from the heritage list to be a much more difficult experience than to simply add properties to the list. Costs for maintaining heritage properties as part of the Defence estate are funded through the overall estate management budget allocation. There is no separately identifiable amount relating to the properties that are heritage listed.<sup>20</sup>
- 2.25 Defence also noted their need to comply with the *Environment Protection and Conservation Biodiversity Act 1999*. This means that all property disposals are required to undergo an environment assessment. As part of this process, a heritage assessment is also conducted. The Department of the Environment then decides whether there are environmental or heritage issues, and if so, the type of action that must be taken in accordance with the aforementioned act. Defence clarified this process through an example:
- A good example at the moment ... would be the deconstruction of the hammerhead crane in Garden Island in Sydney. Although it is not a heritage listed structure, it has heritage interest and significance, so we had to go through that heritage and environment process. As a result of that, there are some constraints on how we deconstruct the crane and some of the documentation we have to put in place ... to preserve the images of that crane.<sup>21</sup>
- 2.26 Defence explained that this example highlighted the inherent complexity and delays involved in attempts to fulfill both federal and state legislative requirements.<sup>22</sup>
- 2.27 The Committee asked Defence whether there were any initiatives in place to gauge the interest of the corporate sector, or encourage Public-Private Partnerships to help fund the maintenance or upgrade of heritage buildings. The Committee was also interested in hearing whether such

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18 Department of Defence, *Submission No. 4*, p. 7.

19 Department of Defence, *Submission No. 4*, p. 7.

20 Department of Defence, *Submission No. 4*, p. 7.

21 Mr Grzeskowiak, Department of Defence, *Transcript*, 6 June 2014, p. 24.

22 Mr Richardson, Department of Defence, *Transcript*, 6 June 2014, p. 24.

initiatives had been used to enhance the versatility of heritage buildings in term of their uses.

2.28 Defence admitted that it had not undertaken a lot work in that area:

We have not done a lot of work in that context. Some of our heritage assets are used. If you go to many of our bases, there will be museums on the bases. They are very often in older heritage listed parts of the base. They are not run by Defence; they are run by volunteers or local organisations. So we do try to reuse those sorts of assets where possible. Maybe we could do more, but a lot of our heritage assets are very old and not really in a usable condition. We just maintain them at absolute minimum investment.<sup>23</sup>

## Single LEAP Project

2.29 The ADF's Single Living Environment and Accommodation Precinct (LEAP) project is a multi-phase project to deliver up to 6,400 permanent living-in accommodation units as part of the strategy to replace substandard living-in accommodation for single ADF personnel with new accommodation that meets contemporary standards.

2.30 Phase 2 of LEAP commenced construction in September 2011 and completion of the final package is scheduled for February 2014. The *Defence Annual Report 2012-13* states that the project has achieved its targets for 2012-13 and construction remains on schedule to complete the facilities on or before contracted dates.<sup>24</sup>

2.31 The Committee requested an up-date, to which Defence responded that Single LEAP phase two was now complete:

At the moment we are looking at what the requirements are for the next round of accommodation improvements. Single LEAP was all about on-base single people; there are parts of the estate where our single accommodation is not up to scratch, and so it is a question of looking at what is the next move. As we do base redevelopments, the living-in accommodation is always one of the places that is considered for improvement, and there are options between building and owning ourselves or refurbishing what we

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23 Mr Grzeskowiak, Department of Defence, *Transcript*, 6 June 2014, p. 28.

24 *Defence Annual Report 2012-13*, p. 152.

already own, or going again to something like a public-private partnership. That is being worked through at the moment.<sup>25</sup>

## Contracts evaluated for success or failure

2.32 The Committee invited evidence from Defence on the manner in which contracts are evaluated for success or failure, particularly in regards to key performance indicators and associated penalties for not meeting deadlines.

## Comprehensive Maintenance Service and Base Service contracts

2.33 For Comprehensive Maintenance Services (CMS) and Base Service (BS) contracts which deliver regional estate management services, Defence noted that these contracts were assessed through a performance management framework that includes strategic, compliance and performance indicators.

2.34 In the case where contracts fail to meet the indicators contained within the performance management framework, Defence told the Committee that this would result in reduction in performance based payments to the contractors involved. The penalty and reduction in payments depends upon the nature of the contract, and could be anywhere up to twelve percent of the scheduled monthly service fee.<sup>26</sup>

## Major capital facilities investment contracts

2.35 For contracts concerning major capital facilities and investment, contractors are required to implement appropriate management strategies that account for all of their activities. These activities include:

- Methodology;
- Quality assurance;
- Work health and safety;
- Site and environmental management;
- Time and cost control;
- Commissioning and handover;
- Whole-of-life cost of facilities from development to disposal;
- Employment and training opportunities for indigenous Australians;

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25 Mr Grzeskowiak, Department of Defence, *Transcript*, 6 June 2014, p. 29.

26 Department of Defence, *Submission No. 4*, p. 16.

- Increasing the participation of women; and
- Adding and retaining trainees and apprentices.<sup>27</sup>

2.36 Defence expanded further on the evaluation of these contracts:

These aspects are evaluated as part of the tender process and achievement of them is monitored on a regular basis by Defence through the term of the project. In the case of Head Contracts, if the deadline is not met, the contractor is normally subject to the application of liquidated damages, i.e. a genuine pre-estimate of the losses Defence would suffer as a result of the contractor's default.

In the case of Managing Contractor contracts, a similar process is undertaken. However, liquidated damages do not apply and key performance indicators (KPIs) tailored for each project are used in conjunction with financial incentives. If the KPIs are met, the contractor is eligible for payment from the incentive pool.

Any breach of contract by either type of contractor can result in the payment of damages to Defence.<sup>28</sup>

## Small and Medium Enterprise

2.37 The Committee asked Defence to explain the extent to which small and medium enterprises (SME) are involved in the tendering process for Commonwealth infrastructure projects.

2.38 Defence responded that its spend of \$1.2 billion per year makes up less than one per cent of construction activity in Australia. To promote competition in the open market, Defence is required to use a range of tendering mechanism processes:

We tend to use contracts that either appoint a prime contractor at a fixed price for a piece of work or appoint a project management contractor. They would earn a fee for managing the project on our behalf and then tender packages of work within a contract. ... The majority of my team's work is spent operating what you would call the government process side of the business, working out what the requirement is, working on approvals through government and the like and running a competition in the market to place contracts which are either a fixed price to go and build

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27 Department of Defence, *Submission No. 4*, p. 16.

28 Department of Defence, *Submission No. 4*, p. 16.



something or a design and then a contract to build. So we rely very heavily on the expertise of the market.<sup>29</sup>

- 2.39 Defence explained that they adopt a tendering model before engaging the market. There is a tendency for relatively uncomplicated projects to be managed by a prime contractor. For more complex projects, Defence appoints a project management agency which then subcontracts the work out to SMEs and primes. Ultimately, the level of risk involved in a project dictates the extent of Defence involvement in the subcontracting process.<sup>30</sup>
- 2.40 The Committee questioned how accessible the tendering process was for SMEs in attempting to compete with primes and ensuring equal access. Noting that all Defence projects are contracted through AusTender, Defence told the Committee it ensures full visibility to the market through:
- An annual procurement list documenting contracts likely for tendering in the next 12-month period;
  - An annual conference with the Defence construction sector; and
  - Facilitating ongoing discussion and engagement with the construction industry.<sup>31</sup>
- 2.41 Defence acknowledged that its ability to support SMEs depended on the type of contract on tender. CMS and BS contracts which deliver regional estate management services:
- ...have a mandated requirement in contract terms and conditions to engage a minimum of 10% Small and Medium Enterprises in sub-contracting. CMS contractors are required to provide quarterly reports on SME engagement. A review of quarterly reports indicates that all contractors are achieving the minimum SME engagement rate of 10% with some achieving a rate of up to 83%.<sup>32</sup>
- 2.42 However, these arrangements differed for major capital construction projects that go beyond the capacity of SMEs in the construction industry:
- To assist SMEs in gaining Defence capital facilities work, Defence utilises a Managing Contractor methodology whereby delivery of components of the project are undertaken by the mandatory engagement of subcontractors. Tendering this sub-contract work, which is primarily undertaken by SMEs, is done on an open-book basis with total visibility by Defence. The Managing Contractor's

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29 Mr Grzeskowiak, Department of Defence, *Transcript*, 6 June 2014, p. 27.

30 Mr Grzeskowiak, Department of Defence, *Transcript*, 6 June 2014, p. 27.

31 Mr Grzeskowiak, Department of Defence, *Transcript*, 6 June 2014, p. 27.

32 Department of Defence, *Submission No. 4*, p. 17.

tendering process is required to mirror the Commonwealth Procurement Rules, including competitive tendering.<sup>33</sup>

2.43 Furthermore, SMEs and primes that are unsuccessful in their bids for tender are offered debriefs from Defence.<sup>34</sup>

2.44 In the case where a prime is awarded a contract, the Committee asked whether Defence imposed any obligations on the prime to ensure that the flow of payments to sub-contracted SMEs is protected.

2.45 Defence informed the Committee that they have standard contracting templates that provide a range of obligations pertaining to the flow of payments. In addition, Defence requires that prime contractors sign statutory declarations on payment procedures. However, Defence acknowledged that there remain some difficulties with the process:

We have had cases like that, and they normally occur where a subcontractor has for whatever reason gone out of business and a sub-sub-contractor then writes to us and says, 'But we haven't been paid', and yet we have a statutory declaration from a subcontractor that went out of business that they had made all due payments. It is a difficult area because generally once we are down at that third-tier subcontractor level Defence has no contractual relationship with that subcontractor. Our contractual relationship is with the prime or the head contract, and below that they are not relationships that we have in a legal sense.<sup>35</sup>

2.46 Defence informed the Committee that it was not aware of any outstanding payments to sub-contractors of CMS and BS. In relation to the Major Capital Facilities Program, Defence acknowledged three cases where the relevant prime contractor had become either insolvent, placed in voluntary administration or had payments due to sub-contractors:

On investigation, the outstanding payments are normally for work undertaken post the payment of monies which were due and payable under the relevant sub-contract. Subject to the applicable State or Territory legislation, any monies due to the contractor are paid to the administrator or liquidator for distribution to the creditors.<sup>36</sup>

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33 Department of Defence, *Submission No. 4*, p. 17.

34 Mr Grzeskowiak, Department of Defence, *Transcript*, 6 June 2014, p. 27.

35 Mr Grzeskowiak, Department of Defence, *Transcript*, 6 June 2014, p. 28.

36 Department of Defence, *Submission No. 4*, p. 18.

- 2.47 Defence stated that they are looking at other more effective mechanisms to ensure the flow of payments is maintained from Defence to the prime to the subcontracted SMEs.<sup>37</sup>

## Committee comment

- 2.48 The Committee notes the apparent inconsistency between the basing principles (outlined in paragraph 2.3) and the approach (outlined in paragraph 2.6) being considered which may place greater emphasis on cost-effectiveness over force structure considerations. The Committee is concerned to understand if budget pressures are causing Defence to take measures not focussed on optimising capability.
- 2.49 The Committee considers that the impact of funding constraints on the management of the Defence estate is not well explained or reported to the Parliament via Senate Estimates or the Defence Annual Report review process. As a means of encouraging better informed public discussion, the Committee believes Defence should improve the accessibility of information on the impact of real cost pressures in estate management. This should highlight any cases where such cost pressures lead to regular use of safety risk management for operational assets, such as fuel farms. This may assist in informing the Parliament of the upkeep and maintenance costs associated with the sustainment of capabilities and forces.
- 2.50 The Committee is concerned that more could be done to ensure effective use of taxpayer's money in respect to heritage property assets within the Defence estate. If there is not sufficient public value placed on the buildings to attract funding via a specific appropriation or even a public private partnership, the Committee questions why Defence should have to divert funds away from estate maintenance that directly supports operationally relevant assets.
- 2.51 In regards to the involvement of SMEs in Defence tendering processes, the Committee believes Defence should consider further initiatives to facilitate and enhance the involvement of Australia's defence SMEs in the procurement process. The Committee also reaffirms the importance of ensuring that there is a consistent flow of payments from primes to subcontracted SMEs for those projects where a prime has been awarded a tender.

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37 Mr Grzeskowiak, Department of Defence, *Transcript*, 6 June 2014, p. 28.

**Recommendation 1**

The Committee recommends that the Department of Defence review contract templates and procurement processes to ensure that, to the extent possible, payments flow to small and medium sized enterprises subcontracted by primes in a timely manner.

**Recommendation 2**

The Committee recommends that Government review the process by which Defence properties are placed on the Commonwealth Heritage List and ensure that, where properties are listed, they are suitably funded either by a specific appropriation or through a public private partnership.

## Defence Cooperation Program

### Introduction

- 3.1 The Defence Cooperation Program (DCP)<sup>1</sup> is a 'core part of how the ADF engages with militaries via joint exercises, training and officer exchanges in our immediate neighbourhood'.<sup>2</sup> The DCP has the broad aim of enhancing defence-related capabilities of regional partner nations. During the 2012–13 financial year, approximately \$79 million was spent on the program.<sup>3</sup>

### Defence Cooperation Program priorities

- 3.2 The Committee enquired as to whether priorities and funding for the DCP had changed as a result of operational force adjustments, notably moves out of Afghanistan, East Timor and Solomon Islands. Defence stated:

Overall, I would say that it has not. The vast majority of the DCP program has, for a number of years, been spent in the South Pacific – particularly if you include Papua New Guinea in the term South Pacific – centred around the support provided to the Pacific Patrol Boat Program, and in Southeast Asia. But overall, the DCP

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1 The Defence Cooperation Program is known as the DCP, but this can sometimes be confused with Defence Capability Plan which is also referred to as the DCP. For this chapter, DCP will refer to the Defence Cooperation Program unless stated otherwise.

2 Australian Strategic Policy Institute, *Submission No. 2*, p. 11.

3 *Defence Annual Report 2012-13: Supplementary Online Content*, Ch 3.

itself has not really changed in terms of the overall nature of it and where it is spent.<sup>4</sup>

3.3 Defence also stated:

Our priorities have not changed in terms of the DCP. It has always remained focused largely on the Asia-Pacific region. The relevancy of the step down in Afghanistan has been the additional effort being put into the engagement in the Pacific and in particular in Southeast Asia.

I think the CDF has spoken publicly about this and certainly there are very significant things that we are doing of an enhanced nature in Southeast Asia, which enables us to take advantage of the step down in Afghanistan. We will be doing a lot more over the next few years. You will see that in an increased intensity in exercising. You will see that in an increased intensity in senior level engagement and the like. There are no changes in the priorities for the DCP as such, but there will be a lot more intense engagement in the region.<sup>5</sup>

3.4 In terms of determining priorities and spending, Defence stated that the level of engagement is largely determined by three factors:

I think there are three key ingredients to how we end up with the levels of expenditure that we have on certain countries, one being the interests that we are seeking to pursue through those relationships and so the activities that we are undertaking there. Second would be what priorities we mutually agree with that country through defence talks with them about areas where both countries see it being in their mutual benefit to engage. Then, thirdly, there is the capacity of that country and the nature of either its security or defence force – given that a number of countries that we engage with through the Defence Cooperation Program do not actually have defence forces but we are engaging with the police forces, particularly the police maritime wings – and their ability to undertake and to absorb activities.<sup>6</sup>

3.5 The DCP projected funding allocation for the top five recipient countries for FY 2014-15<sup>7</sup> is listed in the table below with historical spends for FY 2012-13.<sup>8</sup>

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4 Mr Birrer, Department of Defence, *Transcript*, 6 June 2014, p. 30.

5 Mr Richardson, Department of Defence, *Transcript*, 6 June 2014, p. 30.

6 Mr Birrer, Department of Defence, *Transcript*, 6 June 2014, p. 30.

7 Mr Birrer, Department of Defence, *Transcript*, 6 June 2014, p. 31.

8 *Defence Annual Report 2012-13: Supplementary Online Content*, Ch 3.

Table 1 Defence Cooperation Program Funding

Nation	Historical funding Financial Year 2012–13	Projected funding Financial Year 2014–15
Papua New Guinea	\$20 million	\$26 million
Tonga	\$2.7 million	\$4.9 million
Indonesia	\$3.4 million	\$3.8 million
Timor Leste	\$4.2 million	\$3.7 million
Malaysia	\$3.6 million	\$3.2 million

### 3.6 ASPI noted that:

...the level of DCP spending has been falling as a proportion of total Defence spending. However, this might not be an accurate reflection of the situation, as other forms of defence regional engagement have increased. The emphasis of the DCP has shifted from assisting regional states to build their own defence forces towards education exchanges, and cooperative regional security efforts, such as Humanitarian Assistance and Disaster Relief (HADR), counter-terrorism and counter-improvised explosive devices. The cost of these activities are not attributed against the DCP.<sup>9</sup>

## Scholarships

### 3.7 The Committee noted the high level of education activities and English language training undertaken as part of the DCP. The Committee enquired about the scholarship programs. Defence responded:

In 2014, we had a total of 61 scholarships accepted across countries funded by the Defence Cooperation Program. They very much vary between countries and depend a bit on the capacity of the people in either the defence force or the ministry of defence in that country to undertake postgraduate studies in Australia – generally masters degrees. That is an arm of our engagement and often we find that it is linked very much to their capacity to undertake studies in Australia – in English, of course. It is focused on priority countries but it does have that human dimension that they need to

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9 Australian Strategic Policy Institute, *Submission No. 2*, p. 12.

have, the human capital, to be able to undertake the scholarship successfully.<sup>10</sup>

## **Other activities/countries**

- 3.8 Defence continued to work closely on security cooperation with partner countries in the region, specifically Brunei, Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand and Vietnam. Priority areas for cooperation included counter-terrorism, peacekeeping, maritime security, defence reform and English language training. Defence continued to provide support to regional multilateral security institutions such as the Association of South East Asian Nations (ASEAN) Defence Minister's Meeting-Plus (ADMM-Plus) and the ASEAN Regional Forum.<sup>11</sup>

## **Pacific Patrol Boat Program**

### **Background**

- 3.9 The Pacific Patrol Boat (PPB) Program is a key element of Australia's defence engagement in the Pacific region and provides financial, technical, logistics, maintenance, training and other support to 22 patrol boats gifted to 12 Pacific island countries (including Fiji). The boats are the sovereign assets of the Pacific nations and are used principally for maritime surveillance and law enforcement tasks. Defence's support is underpinned by 26 Navy maritime surveillance and technical advisers located across the Pacific (two of whom are Royal New Zealand Navy personnel). In June 2013, a new training contract was established for the provision of training services in support of the program.<sup>12</sup>
- 3.10 Defence further elaborated on the background to the PPB Program:
- The Pacific Patrol Boat Program consists of 22 patrol boats that Australia gifted to 12 Pacific island countries between 1987 and 1999. Those boats are very much a sovereign asset of the country they were gifted to. But one of the unique aspects of the Defence Cooperation Program is our sustained cooperation with the recipients following the provision of the boats, in terms of providing technical advisers in country. There are Royal

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10 Mr Birrer, Department of Defence, *Transcript*, 6 June 2014, p. 31.

11 *Defence Annual Report 2012-13: Supplementary Online Content*, Ch 3.

12 *Defence Annual Report 2012-13: Supplementary Online Content*, Ch 3.



Australian Navy personnel and in one case, in the instance of the Cook Islands, there are New Zealand naval personnel who provide in-country technical support. We provide support to the maintenance and operation of the boats, given that these countries have very limited capacity to maintain the boats in service. We also provide comprehensive training to the crews at the Australian Maritime College in Launceston under contract to the Department of Defence. We are continuing to engage with all those countries, except for Fiji, where cooperation was suspended following the coup in 2006.

Another aspect of the assistance that we provide is in the coordination of maritime surveillance and response, including through the Forum Fisheries Agency that is hosted in Honiara in the Solomon Islands, where we have also posted an officer to assist with regional coordination, and there is another officer undertaking a similar role in Port Moresby. There is a total of 24 officers posted out into the region.<sup>13</sup>

## Program cost

- 3.11 The Committee sought information on the cost and the effectiveness of the PPB Program. As to the refit costs of the PPB Program, Defence responded:

We are now at the stage of going through the third refit program, which commenced in 2011, to extend the life of the boats from 2018 to 2027. Those refits are approximately \$2.5 million per boat. That varies a lot depending on the condition of the boat as it enters into the third refit. We are part way through that process now.<sup>14</sup>

- 3.12 The Committee noted that some of the PPB refits cost significantly more than the \$2.5 million and sought clarification on this point. Defence replied:

Defence contractor, DMS Maritime, has conducted Half Life Refits on four Pacific Patrol Boats to date. The cost has ranged from \$3,599,000 to \$7,555,000.<sup>15</sup>

- 3.13 Defence also noted that, in anticipation of full re-engagement with Fiji, the cost of refitting the three Fijian PPBs remains unknown until a detailed survey of the boats can be undertaken.<sup>16</sup>

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13 Mr Birrer, Department of Defence, *Transcript*, 6 June 2014, p. 32.

14 Mr Birrer, Department of Defence, *Transcript*, 6 June 2014, p. 32.

15 Department of Defence, *Submission No. 4*, p. 8.

16 Mr Birrer, Department of Defence, *Transcript*, 6 June 2014, p. 32.

## Program effectiveness

3.14 The Committee enquired as to the effectiveness of the PPB Program and the number of sea days achieved by each nation. In effect, the Committee sought to determine the value for money of the PPB Program. Defence provided details contained in the following table.<sup>17</sup>

Table 2 Pacific Patrol Boat Sea Days 2013

Pacific Patrol Boat Sea Days 2013		
PPB Name	Country	Sea Days Achieved
CIPPB TE KUKUPA	Cook Islands	62
MV NAFANUA	Samoa	61
HMTSS TE MATAILI	Tuvalu	75
RKS TEANOAI	Kiribati	52
RVS TUKURO	Vanuatu	48
RMIS LOMOR	RMI	88
PSS PRESIDENT REMELIIK	Palau	68
FSS PALIKIR	Federated States of Micronesia	66
FSS MICRONESIA	Federated States of Micronesia	139
FSS INDEPENDENCE	Federated States of Micronesia	90
VOEA NEIAFU	Tonga	13
VOEA PANGAI	Tonga	61
VOEA SAVEA	Tonga	62
RSIPV LATA	Solomon Islands	133
RSIPV AUKI	Solomon Islands	9
HMPNGS RABAU	Papua New Guinea	27
HMPNGS DREGER	Papua New Guinea	31
HMPNGS SEEDLER	Papua New Guinea	22
HMPNGS MORESBY	Papua New Guinea	3
RFNS KULA	Fiji	<i>Cessation of support under PPB Program following suspension of defence engagement.</i>
RFNS KIKAU	Fiji	
RFNS KIRO	Fiji	

3.15 The Committee sought further detail relating to Economic Exclusion Zone (EEZ) monitoring and enforcement missions performed by the PPBs; however, Defence advised it was unable to provide specific details.<sup>18</sup>

<sup>17</sup> Department of Defence, *Submission No. 4*, p. 9.

<sup>18</sup> Mr Birrer, Department of Defence, *Transcript*, 6 June 2014, p. 33 and Department of Defence, *Submission No. 4*, p. 10.

- 3.16 In relation to the effectiveness of EEZ enforcement more broadly, Defence noted that:

The Forum Fisheries Agency in Honiara provides an ability to monitor licensed fishing vessels through the vessel monitoring system, which is a transmitter system that allows them to monitor and identify licensed vessels. That can be married up with other surveillance data which detects vessels that are operating outside of areas they are licensed or that are unlicensed. But the Forum Fisheries Agency also assists in coordinating responses between countries. We have a number of arrangements now in place where countries can help enforce each other's EEZs and coordinate patrols and enforcement activities. That provides, in addition to the actual prosecutions achieved, very much a deterrent effect amongst those who would otherwise undertake illegal fishing activities.<sup>19</sup>

## Future options

- 3.17 The Committee considered future options for the PPB Program and the vessels themselves, noting lessons learned to date. The Committee examined which agency would be best positioned to take the lead in the future iteration of the program noting that it has become a multi-agency activity. The Committee also considered what the recipient countries needed from their PPBs and what the region needed in terms of a broader coordinated approach.

- 3.18 In terms of the lead agency, Defence advised:

I think that there is a strong case for us to continue to take the lead. But, quite obviously, what we do in respect of the Pacific Patrol Boat Program, or indeed, any other – our DCP generally – must be contextualised within a broader strategic and broader relationship context. Yes, we should take the lead on it; yes, we should drive it, in my view; but, obviously, it needs to be consistent with and complementary to what other arms of government are doing in any particular relationship.<sup>20</sup>

- 3.19 Further to this, Defence advised it was taking a more holistic approach to the future of the Program and the replacement PPB vessels.

If you look at the break up of boats, 10 of them belong to defence forces and 12 of them belong to non-defence forces, so police, customs or whatever. So if you want one head it is either all

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19 Mr Birrer, Department of Defence, *Transcript*, 6 June 2014, p. 33.

20 Mr Richardson, Department of Defence, *Transcript*, 6 June 2014, p. 34.

defence or all non-defence because of the mixture of boats in there. When we first ventured into looking to where we go from the Pacific patrol boat into the future, we tried all the innovative ideas you would expect from the ADF – how do we share assets, how do we have bigger boats or smaller boats, how do we mix, could you move your boats over to someone else’s EZ to help out at this time of year and so forth. There is a strong sense of ownership of these boats. It is very hard at times to break through that. We have tried to come at it in a different way in terms of coordinating the assets rather than looking at a mix of fleets and so forth because, frankly, some of the countries out there do not need patrol boats. They need LCHs or a multipurpose vessel that can carry things plus do patrols.

Then you have speed issues, so we have looked at ship design and boat design to see what you could offer. We keep coming back to a similar construct to what we have got. If that is where we are going to land... how do we utilise it better and what are the other assets we have to bring in, who are the other agencies we have to bring in, what exists out there at the present time, what can be introduced and what can be improved upon?

So that is where we are in the patrol boat replacement program at the moment, acknowledging that there really is a strong sense of sovereignty about the assets. We will keep working this, but I think it will be more the integrated, coordinated, user Forum Fisheries Agency and so forth to try to get everyone in the right place. It is a big step to go from where they are now to where we might want to take them. If the next step is seen to be successful, they will get a sense that their fisheries are being protected – and many countries, like Tonga, lose hundreds of millions; an opportunity cost every year just disappears out of their waters. They want to prevent it and we have to get them all to that point where we can help them get there.<sup>21</sup>

## Pacific Maritime Security Program

3.20 The Committee sought further detail about the Pacific Maritime Security Program (PMSP). Defence responded:

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21 Gen Hurley, Department of Defence, *Transcript*, 6 June 2014, pp. 34-35.

The maritime program is more about coordinated maritime surveillance and response in the region – using the assets more interconnectedly between the various nations and knitting them into the Forum Fisheries Agency in Honiara. The idea is to develop situational awareness and the capability to target and understand, for example, the habitual paths of fishing vessels, their seasonal usage and where they should go. You then knit that into programs that the ADF runs, like Operation Solonia, in which we send P3s out to the region, and into Kura Kura, which is the maritime surveillance exercise.

We want to lift it up to that level, but that takes a fair bit of discussion, frankly. One of the ways we have approached that is by inaugurating the South Pacific Defence Ministers Meetings and the Asia-Pacific Chiefs of Defence Force Meeting last year to see if we can get a broader view of everyone's programs. Chile is involved, as is Papua New Guinea, the French, New Zealand, Australia and Tonga. Vanuatu will come as an observer... and we will get Fiji in when she comes alongside. The aim is to lift all that up and say: 'Here are all the exercises we are doing. Here are all the assets we have in the region. How do we coordinate that now?' – with the aim of getting exactly the outcome you are pointing to as the required return on our investment of dollars.

Even going beyond that, the aim is to coordinate better in HADR situations, particularly how France, Australia and New Zealand, as the major players, coordinate better with the assets we know are in each of the islands. We are really trying to lift the whole view of what we are doing in the Pacific, integrate assets and get far better outcomes for the dollar and for the people in the region. That is the next big step.<sup>22</sup>

- 3.21 Defence advised that it is developing advice to Government on the Pacific Maritime Security Program for consideration in 2014.<sup>23</sup>

### **Pacific Patrol Boat replacement**

- 3.22 ASPI noted that the PPBs will need replacing between 2018 and 2028. However, in a period where Defence is facing significant budgetary constraints, there is concern that a least-cost solution will be implemented

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22 Gen Hurley, Department of Defence, *Transcript*, 6 June 2014, p. 33.

23 Department of Defence, *Submission No. 4*, p. 11.

which will not be in the best interests of Australia or Pacific Island states.<sup>24</sup> The Committee requested an update on progress of the replacement process. Defence replied:

This morning [6 June 2014] the Minister made an announcement that the government has brought forward a competition with Australian industry to construct more than 20 replacement Pacific patrol boats and that there will be additional work around the selection of the design and the shipyards that would be involved in the replacement Pacific patrol boats.<sup>25</sup>

- 3.23 Defence noted that it was integrating design of the replacement boats with the various components of the Pacific Maritime Security Program; however, a lesson from the current PPB was that a simple design offered several advantages.

...one of the aspects and ingredients of the success we have had in terms of sustainment and the ability of the countries to operate them largely by themselves is the simplicity of the design. They are very much based upon fairly simple, commercially derived designs rather than more sophisticated platforms, and it is also a common design so we do not have other versions out there. The fleet maintenance aspect, the fleet sustainment aspect, has been an important ingredient in the success of the program.<sup>26</sup>

- 3.24 The Committee asked whether consideration was being given to providing smaller vessels, in addition to the PPB, to facilitate increasing patrolling sea-days as well as a potential development and progression stream given manning difficulties experienced by some countries. Defence advised:

We have very much done that in the past, in Vanuatu specifically, but also in other countries we have gifted to them smaller inshore boats – similar to the design of a recreational type boat. Part of that too is their broader skill set. If you train a police officer to become a mechanic in Australia, he or she can then use those skills in helping to maintain vehicles for the police force or whatever. So there is the broader skills development but what you mentioned about crew numbers, like a lot of countries do have problems with maintaining sufficient crew numbers.<sup>27</sup>

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24 Australian Strategic Policy Institute, *Submission No. 2*, p. 11.

25 Mr Birrer, Department of Defence, *Transcript*, 6 June 2014, p. 35.

26 Mr Birrer, Department of Defence, *Transcript*, 6 June 2014, p. 35.

27 Mr Birrer, Department of Defence, *Transcript*, 6 June 2014, p. 35.

## Committee comment

- 3.25 The Committee notes ASPI's comment regarding the DCP's shift of emphasis towards cooperative regional security efforts without attribution of costs of the relevant activities to the DCP. In order to accurately reflect the level of Defence cooperation with regional nations, Defence's annual reporting of the DCP could include an annotation noting the value of cooperative regional security activities.
- 3.26 The Committee notes the complexities of achieving a structured and coordinated regional security effect and it commends Defence on the development of a future framework. However, the Committee notes that a mature Pacific Maritime Security Program framework may take several years to develop and Australia needs to ensure it is achieving value for money with the Defence Cooperation Program and specifically, the PPB Program.
- 3.27 While noting Defence's desire to continue to head up the Pacific Maritime Security Program, the Committee considers that the Program has the potential to see a more integrated whole-of-government approach, whereby assets and contracts held by various departments could be utilised to provide cost effective improvements to the outcomes envisaged by the Program.
- 3.28 The Committee encourages Defence to refine the goals it sets for PPB Program outcomes and ensure they assist with the transition to the future PMSP.
- 3.29 The Committee recognises the RAAF's recent contribution to maritime surveillance in the Pacific as part of Operation Island Chief 2014. Working with members of the Quadrilateral Defence Coordinating Group; New Zealand, France and the US, and coordinated through the Regional Fisheries Surveillance Centre, Pacific Island Forum Fisheries Agency Secretariat in Honiara, the Committee regards Operation Island Chief to be an important contribution to maritime surveillance in the Pacific.





## Navy Combat Capability

### Introduction

- 4.1 The Royal Australian Navy (RAN) supports the ADF through its provision of maritime force to perform maritime patrol and response, protect trade, shipping and offshore territories and resources, collect and evaluate intelligence, conduct hydrographic and oceanographic operations and escort duties, and perform humanitarian assistance, disaster relief and maritime search and rescue.<sup>1</sup>
- 4.2 For the 2012–13 financial year, the *Defence Annual Report 2012–13* notes that the RAN effectively satisfied the preparedness, sustainment and leadership of assigned forces requirements through improvements in the availability of amphibious units and submarines.<sup>2</sup>

### Submarine Capability

#### The Coles Report (November 2012)

- 4.3 As part of continued efforts to improve the performance, availability and maintenance of Australia's submarine capability, former Defence Minister the Hon Stephen Smith MP launched an independent review of Australia's Collins Class Submarines in 2011. Led by Mr John Coles, the ensuing *Study into the business of sustaining Australia's strategic Collins Class submarine capability* (the Coles report) was released in December 2012.<sup>3</sup>

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1 *Defence Annual Report 2012–13*, p. 41.

2 *Defence Annual Report 2012–13*, p. 41.

3 *Defence Annual Report 2012–13*, p. 42.

## Key Recommendations from the Coles report

- 4.4 Defence accepted all of the recommendations from the Coles Report.<sup>4</sup> Key recommendations included:
- Accepting that sustainment of the Collins Class had fallen far short of what was required due to systemic failures attributable to logistic support arrangements not being put in place initially, or through life of type;
  - Setting realistic performance targets that will progressively improve performance over the next three years;
  - Clearly defining roles, responsibilities and authority in submarine sustainment; and
  - Moving quickly to bed-down the new In Service Support Contract between the Defence Materiel Organisation (DMO) and ASC Pty Ltd (ASC) to deliver more efficient and effective sustainment.<sup>5</sup>
- 4.5 The *Defence Annual Report 2012–13* states that a number of recommendations from the Coles report have been implemented. To ensure Australia's submarine availability is at optimal capacity, the *Defence Annual Report 2012–13* notes that the RAN will continue to work closely with the DMO and ASC (formerly Australian Submarine Corporation).<sup>6</sup>

## Current status

- 4.6 Defence informed the Committee that since the release of the Coles report in 2012, Australia's submarine capability has improved significantly. Defence supported this claim by referring to Mr Coles' forwarding letter from his final report:

It has been an enormous pleasure to observe the astonishing turnaround of a seriously failing project to one that should, within just two years, achieve or better International Benchmark performance. This has been achieved with decisive leadership that has provided a clear direction of travel, clarity of roles and responsibilities, and empowered those charged within Industry and the Commonwealth to deliver the program. They have all

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4 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 41.

5 *Coles Report: Study into the business of sustaining Australia's strategic Collins Class submarine capability*, November 2012, Report issued by Mr John Coles (Review team: John Coles, Paul Greenfield and Arthur Fisher) p. 112.

6 *Defence Annual Report 2012–13*, p. 42.

risen to and above the challenge, releasing the latent talent and dormant energy and directing it to achieve the common goal.<sup>7</sup>

- 4.7 While acknowledging the positive outcomes arising from this review, Defence is aware that there are still significant challenges to be addressed. There still remains more than a routine level of risk to ensure that Defence is able to satisfy the benchmark performance indicators for 2016–17.<sup>8</sup>

### Implementation update of the Coles report recommendations

- 4.8 Defence informed the Committee that appropriate action has been taken to address all 25 recommendations contained with the Coles report:

There are 11 which are completed and 13 which are underway. And a lot of those are underway because they are continuing activities, like implementing a new usage and upkeep cycle—it does not actually have an end; it has a start date, but it goes on for the life of the submarine. Some of these things will be on a continuing basis for as long as we have the submarines.<sup>9</sup>

- 4.9 The Committee requested an update on the implementation of recommendations 7, 12, 21 and 25.

### Recommendation 7 – Co-ordinate existing initiatives, accept recommendations from the Phase 3 Report and co-ordinate implementation according to the Implementation Strategy

- 4.10 The Committee noted that recommendation 7 addresses the advice and initiatives presented in the Phase 3 Report of the Coles review. The Phase 3 Report considered the international benchmarking standards of comparator navies, the Collins service life evaluation program and details of initiative programs of the RAN, DMO and ASC.

- 4.11 The Report identified a number of recommendations and initiatives concerning the Collins Class submarines that had not been completed or had not started.

- 4.12 The Committee questioned the status of those recommendations and if there were any that Defence did not support. Defence responded by saying:

We accept all of the recommendations. There is one which I will come to ...where, on an agreed basis, we have changed the recommendation slightly, but the spirit is still there. It is to do with how you deal with the defects which arise during the testing period after a docking. That is because John Coles'

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7 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 36.

8 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 36.

9 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 41.

recommendation was based on the way in which the UK contracts for these things, which is not the way in which we do it here. We had to adapt it slightly.<sup>10</sup>

#### **Recommendation 12 – Develop an asset management strategy for sustainment**

4.13 The Committee requested an update on the asset management strategy for sustainment.

4.14 Defence informed the Committee of the sustainment strategy breakdown:

The strategy is at the high level in Navy and DMO, but the actual detailed plan to manage the asset is really in the hands of ASC because they are the ones who have to manage the upkeep cycle to make sure the two-year and the one-year docking periods actually work and actually deliver the submarines that they are supposed to deliver.<sup>11</sup>

4.15 Defence also explained that the Chief of Navy is responsible for the verification of the safety of the submarines and the safety of the outputs from those docking periods.

#### **Recommendation 21 – Develop and implement a workforce strategy to specifically address skills shortages at the management level**

4.16 The Committee was concerned that little had been done to mitigate the risk associated with the strategic workforce plan of DMO.

4.17 Defence refuted this claim by stating that it has begun to address this issue. However, Defence acknowledged that it is likely to remain a long-term challenge for the Department:

Tactically, we are dealing with individual roles and people. Strategically, we do still have that work to do. It will involve a different mix of people between industry, Navy and DMO, and also a different way of managing those people through careers in the future. That is going to be quite a challenge.<sup>12</sup>

#### **Recommendation 25 – Develop a cost baseline/model and supporting processes for the sustainment program**

4.18 The Committee requested an update on the status of recommendation 25, which refers to the development of a cost-baseline model and supporting processes for the sustainment program, in regards to an identifiable owner and assurer of the cost model moving forward.

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10 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 41.

11 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 41.

12 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 40.

- 4.19 Defence confirmed that the Financial Advisor to the General Manager Submarines in DMO is the owner and assurer of the cost model.<sup>13</sup>
- 4.20 The Committee enquired about the level of detail sought in terms of the ongoing assurance of the submarine enterprise. Having identified an orphan process, the Committee wanted to know if Defence has looked across the broader enterprise to ensure that there is an advocate, an owner or an accountable person for each element.
- 4.21 Defence assured the Committee that they have responded to Mr Coles' observation that the model has been established and codified, but not populated:
- If you go back into the phase 3 report from John Coles, there was the 'value chain' which identified the correct distribution of roles and defined them across DMO, Navy, ASC and the rest of industry. That has been populated. I am now in the process of verifying that those roles are properly populated right across the board. I believe they are, but we now have a specific person in there to make sure that is the case.<sup>14</sup>
- 4.22 Defence noted that the main problem is developing strategies to ensure that the right people are in the right places in those roles. That is the next task Defence will have to attend to.<sup>15</sup>

## Progress with 'actual conduct' of Collins Class submarine capability

### Full-cycle docking

- 4.23 The Committee requested an update on the status of progress on the full-cycle docking (FCD).
- 4.24 In the phase 3 report, Mr Coles recommended that, in order to get the time down on the FCD, there should be a staged process. Defence noted:
- We went from a three-year, to a two-and-a-half year, to a two-point-three, to a two... [John Coles] did not have a lot of data available. That was just his feeling that that would be the right way to do it.<sup>16</sup>
- 4.25 Defence explained the time constraints which still remain for the six submarines:
- We have got to the point where we have started the first of the two-year full-cycle dockings, and that is a very good achievement

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13 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 40.

14 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 40.

15 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 40.

16 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 42.

to have that happen on time and on schedule, but keeping to that schedule will be tough, because we have never done one in two years before.<sup>17</sup>

- 4.26 Defence advised that it has found a less risky way of doing the FCD; to switch the order in which the submarines were being docked. This conclusion was reached through an inspection of the submarines in their current state. The ASC also looked carefully at their workforce and skills planning in order to reach this decision.<sup>18</sup>
- 4.27 Defence brought HMAS Farncomb in, as the first submarine to do a FCD, and went straight to the two-year docking with that boat.
- 4.28 Defence also used Collins to carry out procedural tests that would be used in a two-year FCD, in particular:
- Replacing subsystems from a pool of ready items rather than taking the subsystems off each submarine, refurbishing off the submarine and then putting them back on, which obviously makes the subsystem refurbishment, potentially, the critical path item.<sup>19</sup>
- 4.29 When Mr Coles went back to review the progress made, Defence noted he was content the Department had developed a 'good plan'.<sup>20</sup>

#### Hull cut for Collins

- 4.30 In terms of the actual hull cut for Collins, the Committee asked Defence if it had reached its own benchmark standards.
- 4.31 Defence stated that it had decided to shift away from the original recommendations presented by Mr Coles and implement its own strategy for hull cut:

When you talk to the welders and the metallurgists about hull cuts they are very confident, whether they come from Barrow, Cherbourg or indeed Adelaide. They know what they are doing. I have seen the first hull cut which is the one above the diesels and what they have done is pretty impressive. They have braced the structure so it does not distort while the top section is away, which is a good technique, and they are about to do the circumferential cut at the back of the boat... The submarine is designed with that in mind; we just had not done it. I think you can typify it:

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17 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 37.

18 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 42.

19 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 42.

20 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 42.

countries that have to make hull cuts do and some countries have such reliable equipment, they do not have to.<sup>21</sup>

## International benchmark performance

4.32 Since the RAN implemented the recommendations contained within the Coles report the performance of the Collins Class program has improved against the international benchmark performance (IBP) set by the Coles study, including submarine availability.<sup>22</sup>

4.33 Defence noted the 'astonishing turnaround of a seriously failing project to one that should, within just two years, achieve or better International Benchmark Performance.'<sup>23</sup>

4.34 Further, Defence highlighted the efforts behind this major turnaround:

This has been achieved with decisive leadership that has provided a clear direction of travel, clarity of roles and responsibilities, and empowered those charged within Industry and the Commonwealth to deliver the program. They have all risen to and above the challenge, releasing the latent talent and dormant energy and directing it to achieve the common goal.<sup>24</sup>

4.35 However, Defence also informed the Committee of the pressure and difficulty in getting all six submarines up to the same standard:

We have a lot of work to do on HMAS Collins herself, because we need six boats operational at the same standard to have the resilience to guarantee that we can achieve benchmark performance over a long period of time. And of course we have the normal routine maintenance, reliability and obsolescence management to go through.<sup>25</sup>

## Availability

4.36 The Committee asked what is still required in order to reach IBP and was informed that:

The fundamental requirement is to have the right number of available assets. The benchmark is based on what you should be able to achieve from a fleet of six submarines. If most of those

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21 Mr King, Department of Defence, *Transcript*, 6 June 2014, p. 42.

22 *Defence Annual Report 2012-13*, p. 42.

23 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 36.

24 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 36.

25 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 36.

submarines, or half of those submarines, are in dry dock or some such almost all of the time, you cannot get there.<sup>26</sup>

- 4.37 In order to have three submarines routinely available, Defence stated that it must have a functioning two-year FCD to ensure the Collins are in a deployable state:

That then gives you the potential – and we have seen this when we have had brief periods of that – to actually get a good, regular output in terms of available submarines.<sup>27</sup>

- 4.38 Defence identified the need to fundamentally change the usage and upkeep cycle of the submarines so that, on the whole, there is one submarine planned to be in full-cycle dock at any one time:

That means getting it down to two years, if you do the arithmetic: six 10 -year cycles, two submarines – you have to do it that way. One is in a mid-cycle dock – basically being recertified for the next five-year part of the cycle; then you have a third doing some kind of planned maintenance at the time.<sup>28</sup>

#### 'Availability' is not the same as 'Deployability'

- 4.39 The Committee asked if Defence was aware of any fleets that manage to achieve half of fleet availability at one time.

- 4.40 Defence responded that the benchmark fleets were in the Netherlands, France and Germany – which it was claimed achieve this standard.<sup>29</sup>

- 4.41 Defence noted, however, that the meaning of 'availability' can be misunderstood:

You have to be a bit careful about what people mean by 'availability' because you get a bit of confusion about availability and deployability – they are not the same thing. If you are deploying at distance, having something deployed doing useful work, the third might be a better benchmark. But that is not the same as it being available – including for things like crew training. I always come back to continuous at-sea deterrence for the UK – you need four boats. You may need the fourth one for two per cent of the time, but to absolutely guarantee it, you need four.<sup>30</sup>

- 4.42 The Chief of Navy noted a general rule:

26 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 38.

27 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 38.

28 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 38.

29 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 39.

30 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 39.



If you want a submarine on station all the time, it is four to one. That is the ratio.<sup>31</sup>

## Reliability

4.43 Defence advised that the second key requirement to achieve IBP is improved reliability. Defence advised the steps that are being take to achieve this:

We are going through a systematic process of looking at the failure modes of the key subsystems in the submarine to see whether we need to revise the maintenance in some way, or to make some modification to them to improve reliability when the submarines are actually in service.<sup>32</sup>

## Upgrade

4.44 A third key requirement relates to upgrading of parts and systems as they become obsolete:

[T]he third thing is upgrade. There is inherent obsolescence in the submarines and we are managing that item-by-item. There are various techniques, as I am sure you will understand, to deal with obsolescence – you can replace, you can life-of-type buy, you can find analogous items and so forth. There is also a certain degree of upgrade; particularly, for example, in submarine communications, where we need to insert new technology and new capability into the submarine simply to keep its equivalent capability up to where it needs to be, because things change over time.<sup>33</sup>

## Future focus

4.45 Defence highlighted the three main areas they ‘need to focus on in the next two years as well as just doing the first two-year full-cycle docking,’ in order to reach international benchmark performance.<sup>34</sup>

4.46 The first of the three focus areas is ‘the resilience of the manpower and the skills in the overall enterprise.’<sup>35</sup> Defence explained this in detail:

If I can reflect for a moment, John Coles is a man of enormous experience in all aspects of submarine and surface competent design, build and maintenance. And in his day we were able to

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31 Vice Adm Griggs, Department of Defence, *Transcript*, 6 June 2014, p. 39.

32 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 38.

33 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, pp. 38, 39.

34 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 36.

35 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 36.

produce someone like that in a single organisation because you had single organisation that did all of those things. We no longer have that. So we actually have to work out how we can produce what John Coles did and people down the chain in the future without having a single organisation within which to do it. We will need to move people around in industry and through the Public Service and they need to get the experience and detailed understanding of what they are doing.<sup>36</sup>

4.47 The second focus area is 'the information systems that support the submarine enterprise.'<sup>37</sup> Defence noted the reasons for this direction:

We are not going to embark on a new all-singing, all-dancing, bespoke brand-new IT system to do that, because, in my experience, that is a pretty good way of ensuring that you do not achieve the outcome. What we will do is network together the existing systems and make sure that, in each system, there is a single set of standards for the data for each system, so we do not have conflicting standards in there and we bring them together so that they are networked. That is planned and will be underway.<sup>38</sup>

4.48 The third focus area is the skill sets and experience of 'public sector people.'<sup>39</sup> Defence explained:

We will always need people on the Commonwealth side who really do understand the systems they are working on because they have to take the high-level decisions on what to do when problems arise in the future. So we will need some new models to do that. We already are doing that in the SEA 1000 program where the bulk of our internal expertise on new submarine design actually is coming from the private sector. We will need new models on bringing private sector expertise in to what we do and also cycling public sector people through the private sector parts of the supply chain to give them the experience and understanding for the future. That is probably the biggest challenge we have in actually seeing this thing through to success.<sup>40</sup>

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36 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 37.

37 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 36.

38 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 37.

39 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 37.

40 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 37.

## Next generation submarines

- 4.49 The Committee asked if the Chinese aircraft carriers would have any impact on the choice for the next generation of submarines.<sup>41</sup>
- 4.50 According to Defence, it would not necessarily effect the decision:  
The size of Chinese aircraft carriers and the like would not necessarily be at the forefront of our minds in terms of looking at our own submarine capabilities.<sup>42</sup>
- 4.51 Defence elaborated, by clarifying that the:  
Speed and choke points are relevant regardless of who might have what, and are relevant regardless of size of aircraft carrier... Speed of surface vessels and speed of submarines – I am sure all of that is taken into account in looking at capability needs.<sup>43</sup>
- 4.52 As to the status of the submarine replacement, Defence advised that it is still examining the options, but that:  
... announcements were made last year in terms of where off-the-shelf and modified off-the-shelf were parked. It was announced that the work going forward would be evolve Collins and an entirely new design. That work has continued. Of course, it is on the public record that we have also been talking with the Japanese.<sup>44</sup>

## Assurance of capability and delivery

### Independent review

- 4.53 The Committee queried how Defence will prevent a future decline in capability and whether there is a role for an independent expert review on a regular basis, rather than when there is a collapse in a capability.
- 4.54 Dr Thomson, from the Australian Strategic Policy Institute (ASPI), highlighted the oversight and management issues on a number of capabilities, such as submarines and the amphibious and afloat support capability. These issues resulted in needing to have an external body

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41 South China Morning Post, 'Work under way on China's second aircraft carrier at Dalian yard,' 19 January 2014, <<http://www.scmp.com/news/china/article/1408728/work-under-way-chinas-second-aircraft-carrier-dalian-yard>> viewed 29 July 2014.

42 Mr Richardson, Department of Defence, *Transcript*, 6 June 2014, p. 39.

43 Mr Richardson, Department of Defence, *Transcript*, 6 June 2014, p. 39.

44 Mr Richardson, Department of Defence, *Transcript*, 6 June 2014, p. 40.

conduct an independent expert review and give recommendations on the way forward.<sup>45</sup>

- 4.55 Dr Thomson highlighted the reason Mr Coles was brought in to review the submarine capability:

We have had a capability which has been more or less moribund for a period of years, if not a decade or more. We had to bring in someone from outside to kick the tyres and tell us to do the obvious, and I think this reflects some underlying problems with the management and oversight of Defence. Probably the same sorts of comments could be made about the amphibious and afloat support capability within Navy, where once again someone had to be brought in from the outside to tell people to do the obvious.

- 4.56 Dr Thomson also noted the underlying issues with oversight and management of this navy capability:

I think it is fair to say that there have been some very encouraging developments, at least in terms of the reporting that has come out from the government and from the department. What I think is interesting about it is that they reflect not so much surmounting previous insurmountable technical problems, but rather fundamental issues with the management of what I think is recognised as a very important capability for Australia. I think it is hard to be charitable looking back at the situation we have now.<sup>46</sup>

- 4.57 On a similar note, QinetiQ submitted that the assurance of capability and delivery could benefit from a single independent review process that spans the capability upkeep cycle, commencing from project start-up to system disposal.<sup>47</sup>

- 4.58 In response to this proposal, Mr Gould said:

My personal view is that having a sort of permanent reviewer, more people looking over your shoulder, is not actually the right way to do this. The right way to do it is to make sure you have good performance management systems embedded in what you do. You certainly do need and we shall need outside expertise to help us with specific problems, but really we should be making sure that the performance management system we have across the enterprise, so the same performance management metrics for the industry side and ourselves and all of us looking at that, is actually the right way to do this. I cannot speak for what was in place

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45 Dr Thomson, Australian Strategic Policy Institute, *Transcript*, 6 June 2014, p. 1.

46 Dr Thomson, Australian Strategic Policy Institute, *Transcript*, 6 June 2014, p. 1.

47 QinetiQ Australia, *Submission No. 1*, p. 2.

before I arrived here, but certainly my own experience in working in all kinds of areas of equipment support in previous jobs has been that the key to it is making sure you have good metrics, good performance management measurement systems and good predictive techniques in there in the future.<sup>48</sup>

## Performance management system

4.59 The Committee asked Defence how it would be possible to integrate the different elements of performance management into a single reporting system, noting the role of the Department of Finance in overseeing ASC.

4.60 Defence responded by explaining:

Department of Finance is part of the enterprise, so when we do the enterprise board meeting, Department of Finance, as the owner of ASC, is there so that they are not separated from that overall review as things stand today. ...the challenge for us is to look further down into the supply chain so that we do not just have a common set of performance metrics with ASC as to what we are doing, but also some of the key subsystem suppliers who are in there for the sonar and the combat system are also involved in that process. I think that is where the challenge lies for this.<sup>49</sup>

4.61 Vice Admiral Griggs went on to clarify the part taken in the improvement of the submarine capability support mechanism by the Seaworthiness Management System:

It was not the seaworthiness board that did it, it was the Seaworthiness Management System. I think that is a very important distinction because the seaworthiness board is part of the overall assurance process and for me that is in part an independent reviewer. Yes, it is an internal one but it does give me great confidence in the material state of capability and the overall seaworthiness of the capability.<sup>50</sup>

4.62 Defence explained the importance in the development of the Seaworthiness Management System, to both Navy and DMO, has been:

The fact that we now own the running system and if you look at the initial seaworthiness boards before we had the Seaworthiness Management System in place they were trying to solve world poverty on their own. Once they saw that there was a running system developing they changed their focus more towards where

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48 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 37.

49 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 37.

50 Vice Adm Griggs, Department of Defence, *Transcript*, 6 June 2014, p. 38.

the mature airworthiness board would be focusing: how are you ensuring us the system is working? I think that was what was missing before. There was no running system. We did not own the system in the same way that we do now and really in only a couple of years I think it has developed very well and we have taken a lot of lessons from the Airworthiness Management System and tried to accelerate as much of the learning that we could from that, down to having seaworthiness convocations and things like that.<sup>51</sup>

- 4.63 The Chief of Navy went on to highlight the benefits that have stemmed from the Seaworthiness Management System:

I feel much more comfortable about the state of the capability. I feel much more comfortable about the level of information that I get. I get much more regular information from DMO than I did three years ago and Mr King and I have worked on that extensively over the last couple of years. I think the Rizzo process was very useful in terms of getting that asset management total lifecycle focus back into the capability managers area, not just thinking that was DMO issue. And the other key feature is the head of naval engineering as the Naval Flag Authority, again us taking back some decision making. If you look at some of the third-party organisations, like class societies, there had been a view that, 'Oh well, the classification society will handle that,' when in fact that is not what they were doing. And again, we are now owning those decisions.<sup>52</sup>

- 4.64 The Committee noted progress made, but highlighted a point from Mr Coles' report that it is a fragile recovery path if the appropriate reporting mechanisms are not put in place.

## **Air Warfare Destroyer**

- 4.65 The Committee requested an update on the Air-Warfare Destroyer (AWD) program, including comment on its current cost schedule.

- 4.66 Defence provided the following information on the AWD program:

It is an \$8 billion project. It is conducted under an alliance based arrangement. I stress that because there is a bit of confusion. It is not a pure alliance; the three parties – ASC, who lead shipbuilding,

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51 Vice Adm Griggs, Department of Defence, *Transcript*, 6 June 2014, p. 38.

52 Vice Adm Griggs, Department of Defence, *Transcript*, 6 June 2014, p. 38.

Raytheon, who lead combat system integration, and DMO – work collaboratively in this arrangement. Very clearly under that arrangement the industry participants are to deliver the goods and services for what is called the 'target cost' price, or 'target cost estimate'. The good news is that Aegis, being supplied by DMO from the USN, is on budget and on schedule. The combat system element at this time is on budget and on schedule. That is probably more than half the ship value, so it is not a trivial thing to just say that. It is not like a stick-on.<sup>53</sup>

- 4.67 Defence is conscious that the AWD program is currently running over budget. The shipbuilding element of the program alone is approximately \$360 million over the target cost estimate. While this has not been ideal for the long-term development of the AWD, Defence stated that this should not be considered a project 'blow-out' as is sometimes perceived. The Chief Executive Officer of DMO, Warren King, explained:

Under the alliance based arrangements, for every dollar we overspend above the target cost estimate, industry forgo 50 cents of profit and DMO puts in 50 cents towards those costs. When I sign off on a project I have to sign off that we have covered the contingent liability that government may face in any contract we have entered into – the unexpected. I was the project manager at the time that this achieved second pass, and knowing that to be the case I did a number of risk assessments at the time and put in adequate contingency to cover this case. I am not saying it is good, but what I am saying is that the approved budget for the project covers this eventuality.<sup>54</sup>

- 4.68 Defence identified a number of contributing factors to explain why the AWD program is running over budget:

One is that we underestimated the extent to which shipbuilding capability had run down so quickly after the completion of the ANZAC ship project. It was not that many years previously that we were building ANZAC ships using world's best practice. In fact, we were building them as cheaply as you could buy them anywhere in the world. That points to the fact that there is no structural reason why we cannot have a competitive shipbuilding industry. There are a lot of reasons why we may not, but there is no structural reason. If you look around the world you will see that, for example, labour rates are not significantly different. The

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53 Mr King, Department of Defence, *Transcript*, 6 June 2014, p. 48.

54 Mr King, Department of Defence, *Transcript*, 6 June 2014, p. 48.

investment in the infrastructure that we have is quite good. The infrastructure in Adelaide, particularly, but also in Melbourne and Newcastle, to a lesser extent, is good and suitable. In fact, some yards around the world are nowhere near as well equipped.

So it is not a labour rates thing. It comes down to production efficiency. Some of the things that contribute to that are start-up – in other words, the skills have dissipated. I am not talking about specific welding skills or running cables, or something like that. I am talking about the skills that allow you to do that efficiently in a shipyard, because it is different – supervisory skills, work planning skills, material availability skills. So we had the rundown in that.<sup>55</sup>

- 4.69 Mr King refuted claims that DMO underestimated the cost and schedule of the AWD program. It was acknowledged, however, that Defence paid industry partners \$255 million from the first to second pass approval phases to evaluate the costing and schedule of either a new AWD design or the re-use of the F100 design:

We allowed more budget and more schedule than any of those projects. So my response to that is: I clearly did not allow enough because we have this cost, but should I have allowed anymore?

That is my position; it is not necessarily supported by everybody.<sup>56</sup>

- 4.70 Defence offered further comment on the construction of the AWD in Australia and identified some factors that hindered the full capacity of productivity:

We also had a distributed block build program, which means that we put blocks for construction in New South Wales and Victoria, some blocks in Adelaide and then the consolidation of the ship in Adelaide. In hindsight I would say that that probably was one site more than we should have had. While distributing it shares the work and shares the risk of that, it also means that you have an increased management – where you have to provide drawings, provide oversight and QA. I think all of that led to it. But, at the end of the day, the shipbuilding enterprise is not anywhere near as productive as it should be or could be, even given all those factors.

We have a company called First Marine International that I contracted. It is an internationally renowned company that benchmarks shipyards around the world, including the US Navy. Since 2010, annually I have had them review each yard and

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55 Mr King, Department of Defence, *Transcript*, 6 June 2014, p. 48.

56 Mr King, Department of Defence, *Transcript*, 6 June 2014, p. 48.



provide to each yard a review of their productivity – which is falling – and a review of their processes, what they achieving and what they call ‘observations’. For productivity, they compared a measure against what is called ‘compensated gross tonnage’. That is a way of comparing the number of man hours that go into building a tonne of the ship, but recognising that a tonne of a frigate is much more complicated than a tonne of a supertanker. So you balance that out. A tonne of the submarine is even more complicated.<sup>57</sup>

## Committee Comment

- 4.71 The Committee was encouraged to see the Progress Review update of the Coles report in March this year. The Committee notes, however, that ongoing effort and oversight will be required to stay on this recovery path.
- 4.72 The Committee notes with concern that despite the statement that all recommendations had been accepted, the *Defence Annual Report 2012–13* did not clearly indicate the incomplete implementation of the recommendations and initiatives. The Committee is of the view that this should have been highlighted to readers of the Report.
- 4.73 The Committee applauds Defence on the positive step taken to develop a Seaworthiness System, including oversight by an independent board, which is anticipated to provide valuable insight into the management of Defence’s naval capabilities.
- 4.74 The Committee is keen to see that Defence learns from the experiences with the Collins Class submarine for future major builds or projects. The use of the independent review by Mr Coles has clearly been an invaluable aspect of the recovery of Australia’s submarine capability and the development of an effective and robust through life support program. For this reason, the Committee is persuaded that the incorporation of independent subject matter experts into a system of Gate Reviews, starting with project conception in CDG and continuing through life of type as part of the Seaworthiness System, warrants close consideration.

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57 Mr King, Department of Defence, *Transcript*, 6 June 2014, p. 48.

**Recommendation 3**

The Committee recommends that the Department of Defence consider utilising independent subject matter experts in a system of Gate Reviews, starting with project conception in the Capability Development Group and continuing through life of type, as part of the Seaworthiness System.

**Recommendation 4**

The Committee recommends that the Department of Defence provide the Committee with a specific update on the implementation of each Coles review recommendation prior to the tabling of the Department's next Annual Report.

## Defence Materiel Organisation and Capability Development Group

### Background

- 5.1 The Defence Materiel Organisation (DMO) supports the Australian Defence Force (ADF) through the provision of acquisition and sustainment services for specialist military equipment. It uses a purchaser-provider model, underpinned by service agreements, to deliver commercial, engineering, logistics and project management services.<sup>1</sup>
- 5.2 The Capability Development Group (CDG) delivers and manages the Government's plans for future defence capability as outlined in the Defence Capability Plan (DCP). It is responsible for developing capability proposals, funding guidance, legislation and policy for consideration and approval by Government.<sup>2</sup>
- 5.3 In January 2012, CDG launched its Capability Development Improvement Plan (CDIP). The CDIP sets out a range of initiatives to improve the performance and efficiency of the capability development process. These include the introduction of rigorous portfolio management, simplified documentation, enhanced project initiation board, improved committee effectiveness, costing policy agreement with central agencies, avenues for early industry input in the Defence Capability Plan (DCP), increased capacity and expertise through industry support, process and information management alignment, and the ongoing professionalisation of the capability development workforce.<sup>3</sup>

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1 *Defence Annual Report 2012–13*, p. 177.

2 *Defence Annual Report 2012–13*, p. 73.

3 *Defence Capability Development Handbook*, Department of Defence, 2012.

## CDG's response to internal and external reviews

- 5.4 Since 2012, the DMO and CDG have been subject to two external reviews. The Senate Standing Committee on Foreign Affairs, Defence and Trade tabled its report into procurement procedures for Defence capital projects in 2012. The response from Government was tabled in October of the same year.
- 5.5 The Australian National Audit Office (ANAO) also conducted a review into capability development reform as part of its performance audit for the 2013-14 financial year.<sup>4</sup>
- 5.6 The Senate inquiry and ANAO audit produced a total of 221 recommendations. In addition to these, Defence also considered further recommendations from its own internal reviews on the Strategic Reform Program and Capability Development Improvement Program.<sup>5</sup>
- 5.7 Defence informed the Committee that it has currently addressed 81 per cent of recommendations from its internal reviews, the Senate inquiry and ANAO audit.<sup>6</sup>
- 5.8 A common theme of these recommendations was the need for Defence to streamline the internal process of capability development. Through the implementation of the CDIP, Defence has sought to improve the internal process by reducing the number of committees and adopting the Project Initiation and Review Board.<sup>7</sup>
- 5.9 In reference to the ANAO audit, Defence clarified that recommendations 5, 6 and 7, which related to reporting and accountability have been addressed; recommendations 1 and 4, which related to workforce skills and transparency remain open, and recommendations 2 and 3, which related to assessment process, have submitted closure cases.<sup>8</sup>

## CDG Workforce

- 5.10 Representatives from the Australian Strategic Policy Institute (ASPI) voiced concern over the current workforce structure of the CDG:

Defence's Capability Development Group continues to be staffed predominately by military personnel with short tenures and

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4 ANAO Audit Report No.6 2013-14: *Capability Development Reform*, October 2013.

5 Vice Adm Jones, Department of Defence, *Transcript*, 6 June 2014, p. 42.

6 Vice Adm Jones, Department of Defence, *Transcript*, 6 June 2014, p. 42.

7 Vice Adm Jones, Department of Defence, *Transcript*, 6 June 2014, p. 43.

8 Department of Defence, *Submission No. 4*, p. 14.

limited experience in capability development – despite successive recommendations to the contrary.<sup>9</sup>

- 5.11 While recognising the importance for military expertise to inform the CDG of the operational realities of defence technologies, ASPI believes CDG should develop initiatives to diversify its workforce. Specifically, it should look towards accommodating staff skilled in the defence acquisition proposal process and civilian analysts to offer non-military perspectives.<sup>10</sup>
- 5.12 ASPI elaborated on this point at the public hearing:
- Capability Development Group is...acting as a service provider for the services – the services tell them what they want them to do and Capability Development Group goes forward and develops proposals to that end. It is not entirely clear to me that a model where the ideas come from the services and are implemented through Capability Development Group necessarily assumes that the development of the ADF is in line with broader strategic imperatives.<sup>11</sup>
- 5.13 In light of projections for capital investment in defence, ASPI also stated that CDG and DMO will be managing a range of complex Defence acquisition projects in the future. In order to effectively meet the challenges associated with these projects, ASPI recommended that there should be longer tenure for military officers and civilian employees working within the CDG.<sup>12</sup>
- 5.14 Defence sought to address concerns raised by ASPI by detailing the current structure of the CDG workforce. Two statistics were presented:
- Of the 322 members of the CDG, 51 per cent are military personnel and 49 per cent are public servants; and
  - 38 per cent of the CDG workforce has served in the organisation more than once.<sup>13</sup>
- 5.15 To ensure it is well versed in the skills necessary for efficient capability development, the CDG encourages its workforce to complete a one year master's course in capability technology management at the Capability and Technology Management College (CTMC). This is an area CDG hopes to streamline further into its workforce structure.<sup>14</sup>

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9 Australian Strategic Policy Institute, *Submission No. 2*, p. 4.

10 Australian Strategic Policy Institute, *Submission No. 2*, p. 5.

11 Dr Thomson, Australian Strategic Policy Institute, *Transcript*, 6 June 2014, p. 2.

12 Dr Thomson, Australian Strategic Policy Institute, *Transcript*, 6 June 2014, p. 2.

13 Vice Adm Jones, Department of Defence, *Transcript*, 6 June 2014, p. 43.

14 Vice Adm Jones, Department of Defence, *Transcript*, 6 June 2014, p. 43.

## Mitigating risk in the DMO and CDG

### Partnering Defence with industry

- 5.16 Since the release of the CDIP in 2012, Defence has sought to strengthen its relations with the private sector through CDG Industry Partnerships.
- 5.17 One company involved in the CDG Industry Partnership has been the Australian-owned professional service provider Nova Systems. In their submission to the Committee, Nova Systems noted that they have worked with CDG on over 150 prospective tasks. This has resulted in approximately 100 contracted activities in areas such as cost estimation, scheduling, capability development documentation authoring Australian Defence Test & Evaluation Office trials management support, risk management and training needs analysis.<sup>15</sup>
- 5.18 In their evidence to the Committee, representatives from Nova Systems noted that a common problem for private industry when partnering with Defence was the relatively short notice given for support requests, and a lack of sufficient forward resource planning. However, Nova Systems was optimistic:

Sometimes the tasking was quite short notice. That is certainly an improving facet and a maturing of the relationship between CDG and support organisations. I think there are always improvements to be made there; because the more forward notice that we can receive the better we can secure resources in a more timely manner to satisfy their needs. It is definitely an improving area of the partnership.<sup>16</sup>

### Test and Evaluation

- 5.19 Test and Evaluation (T&E) plays a key role in ensuring that all ADF capabilities are fit to perform to their required standard throughout their lifecycle. An important feature of T&E process is its ability to identify, prepare and adjust to any risk associated with the development of complex capabilities.
- 5.20 Based on their own experiences, Nova Systems highlighted the importance of having a rigorous T&E process throughout the lifecycle of a capability. In particular, they noted that Defence does not always implement T&E in the early stages of capability development.

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15 Nova Systems, *Submission No. 3*, p. 3.

16 Mr Robinson, Nova Systems, *Transcript*, 6 June 2014, p. 16.

One of the lessons that we keep learning is that, if a rigorous test and evaluation process is at least planned early, issues not only associated with operational capability but also associated with sustainment, logistics and engineering can be addressed early... Certainly, our belief is that ADTEO, the Australian Defence Test and Evaluation Office, appreciates that and is doing its best to increase that culture through Defence and hopefully address many of the issues associated with a lack of thorough T&E early in the process.<sup>17</sup>

5.21 The Committee was interested to hear whether industry should be playing a greater role in T&E procedures for Australia's defence capabilities. While disclosing their commercial interest, representatives from Nova Systems felt industry could play a greater role in T&E given their high level of capability and expertise.<sup>18</sup>

5.22 This view was shared by witnesses representing QinetiQ:

I believe that taking a similar partnership to the running of test and evaluation facilities can reduce the direct costs to Defence, improve delivery efficiency and, again, guarantee the availability of sovereign niche skills.<sup>19</sup>

5.23 QinetiQ reaffirmed the importance for Australia of possessing a sovereign T&E capability in order to ensure that all potential risks associated with capability procurement are identified in the early stages of development.<sup>20</sup>

## Transparency and accountability

5.24 One concern brought to the Committee's attention was transparency and accountability throughout the life cycle of a capability project. Witnesses representing QinetiQ recognised that while there are individual reviews and boards in place to evaluate the progress of capability projects, there needs to be a single common organisation at the macro level that assesses progress across the entire life cycle of a capability.<sup>21</sup>

5.25 The Committee sought to explore the recommendation made by QinetiQ in having external players in the form of review boards and individual experts involved in the long-term review of capability projects. QinetiQ clarified this recommendation:

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17 Mr Robson, Nova Systems, *Transcript*, 6 June 2014, p. 16.

18 Mr Whalley, Nova Systems, *Transcript*, 6 June 2014, p. 17.

19 Mr Woolford, QinetiQ, *Transcript*, 6 June 2014, p. 10.

20 Mr Whalley, Nova Systems, *Transcript*, 6 June 2014, p. 17.

21 Mr Woolford, QinetiQ, *Transcript*, 6 June 2014, p. 11.

I believe there is a place for external support to play inside those project teams, to support those project teams across all parts of the capability life cycle. This is partly because there happens to be a national and, in some cases, international shortage of niche skills and the availability of them at any particular point of time, but also to create greater continuity that is not affected and impacted by the posting cycle – for example, for uniformed staff. Looking at the layer above that, at the independent scrutiny level, I think the key word there is ‘independent’, associated with scrutiny. That could be across the entirety of the enterprise. In my mind, it is more likely to be associated with key projects, high-value projects, high-risk projects, and complex projects and programs, but it could be applied across the entirety of the enterprise.<sup>22</sup>

- 5.26 The Committee mentioned the role of bodies such as the Australian Defence Test and Evaluation Office which reports through the CDG. When asked whether this kind of body should be involved in the long-term oversight and accountability of a capability project, QinetiQ stressed the importance of an independent reporting and review line.<sup>23</sup>

## Disclosure of dissenting views

- 5.27 The Committee questioned how CDG takes into account alternative points of view when undertaking an informed decision on capability development. The Committee was particularly interested to understand whether dissenting views, even where discounted by Defence, were disclosed to policy-makers.
- 5.28 Defence responded:
- Yes. There are occasions where people will have a dissenting view and, indeed, where organisations will have a dissenting view. In some of those cases...I then bring that forward to the secretary. We will bring projects to the Defence Capability and Investment Committee, the high-level committee, to have it out there, if you like, in a constructive way.<sup>24</sup>
- 5.29 Defence went on to explain that they are developing a culture of transparency and open discussion. This has contributed to a strong sense of accountability within the CDG.<sup>25</sup>

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22 Mr Woolford, QinetiQ, *Transcript*, 6 June 2014, p. 11.

23 Mr Woolford, QinetiQ, *Transcript*, 6 June 2014, p. 11.

24 Vice Adm Jones, Department of Defence, *Transcript*, 6 June 2014, p. 44.

25 Vice Adm Jones, Department of Defence, *Transcript*, 6 June 2014, p. 44.



5.30 While noting the self-assessment presented by Defence, the Committee referred to Seasprite and Multi-Role Tanker Transport as cases where the high risk associated with their development was not adequately considered by CDG, nor presented to key decision makers including Government, despite evidence from other organisations within Defence and external parties. Defence responded:

The vast majority of projects progress forward with a medium risk and schedule, a medium risk on cost and a medium technical risk. We do have some projects which go with a high risk. Probably a case in point which would make sense would be ANZAC Anti-Ship Missile Defence. There was a developmental radar which went with a high risk, but it was accompanied by a mitigation strategy of how that risk would be treated because the prize of getting a world-leading radar in a ship was worth that. But there was a very transparent discussion. So I would say certainly CDS [Chief Defence Scientist] would have had a red in his report, and that has to go to government.<sup>26</sup>

5.31 Defence also made it clear that there needs to be realistic expectations that take into account the various complexities involved in the acquisition of large military capabilities. The Secretary of the Department offered the following comments:

I do not think you could expect the CDF and myself and others to have visibility on all dissenting views; the organisation is too big. If you were to expect to have transparency of all dissenting views, you would probably have difficulty whether there are dissenting views that are of such an order that they ought to be brought to attention. Sometimes that happens; at other times, I think we could probably do better.<sup>27</sup>

5.32 In terms of accountability within the capability acquisition process, Defence acknowledged that this remains an area for improvement:

I think we struggle with individual accountability... But the lead times involved on some of these projects are so big that it is simply unrealistic to expect that 15 years into a project, when you discover something that might have gone wrong, people have moved on. And that is just inherent when you are dealing with projects that can take 20 years from conception through materielisation of final operating capability.<sup>28</sup>

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26 Vice Adm Jones, Department of Defence, *Transcript*, 6 June 2014, p. 45.

27 Mr Richardson, Department of Defence, *Transcript*, 6 June 2014, p. 46.

28 Mr Richardson, Department of Defence, *Transcript*, 6 June 2014, p. 46.

## Managing commercial risk

- 5.33 One of the risks associated with the commercial procurement of defence capability is the potential for defence materiel providers to produce technologies that do not meet Defence's capability requirements. ASPI noted that the failure of firms to meet Defence's delivery or capability expectations has a negative impact on the image of DMO.<sup>29</sup>
- 5.34 ASPI offered the following recommendation to better bridge DMO with commercial firms:
- To my mind, each and every procurement should have a contracting approach calibrated to the nature of the procurement. In some instances, it may well be both prudent and possible to transfer risk to the supplier.
- What you really want in contracting is a balance which provides sufficient incentives for the supplier to be efficient and to deliver on time and to specification. But that does not present an unrealistic of transfer risk.<sup>30</sup>
- 5.35 The Committee asked Defence what engineering practices, quality assurance systems, risk management strategies and contractual mechanisms the DMO has to identify, assess, mitigate or counter commercial risk.
- 5.36 Defence offered the following response:
- In every platform we have those obsolescence management programs going on. Remember, of course, that in many cases those platforms came to us from an overseas supplier. Collins is a case in point, where we have obsolescence management programs.<sup>31</sup>
- 5.37 While commercial off-the-shelf acquisitions have the potential to reduce costs, the Committee was concerned about the risk of having insufficient opportunities for engineering graduates to develop competence across the range of disciplines required to sustain a sovereign capability management and design assurance.

## Compliance

- 5.38 As a means of maintaining efficiency and consistency, it is critical that CDG projects comply with existing policy frameworks. The Committee
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29 Dr Thomson, Australian Strategic Policy Institute, *Transcript*, 6 June 2014, p. 1.

30 Dr Thomson, Australian Strategic Policy Institute, *Transcript*, 6 June 2014, p. 7.

31 Mr King, Department of Defence, *Transcript*, 6 June 2014, p. 50.

sought insight into the internal checks and balances that are in place to ensure policy compliance.

- 5.39 Defence acknowledged that this remains an area for improvement. It stated that one of its goals is to ensure a more formal basis for compliance exists so that CDG projects are aligned with policy frameworks:

This is something that ANAO picked up more broadly when they said that the capability development process is in a handbook when it should be in a manual so there is a clear compliance requirement. The same went for T&E. That was agreed, so we are now in the final throes of prepublication for the capability development manual.<sup>32</sup>

- 5.40 Following their internal analysis of various projects, Defence informed the Committee that it is working to ensure that compliance is more effectively integrated in the capability development process before it progresses through the first pass and second pass approval stages.<sup>33</sup>

## SEA 1000

- 5.41 SEA 1000 is a long-term project seeking to modernise Australia's standing fleet of submarines. The Government was presented with four options to consider:

- Option 1: Military-Off-The-Shelf;
- Option 2: Modified Military-Off-The-Shelf;
- Option 3: Evolved Military-Off-The-Shelf; and
- Option 4: New Design Submarine.

- 5.42 In providing an update on the current status of SEA 1000, Defence informed the Committee that work on Option 1 and Option 2 had been suspended or set aside. Instead, Defence is pursuing Option 3, which is to evolve the Collins Class submarine in cooperation with Swedish-based ThyssenKrupp Marine Systems, and Option 4, which is the design of a new submarine capability.<sup>34</sup>

- 5.43 Defence acknowledged that they have limited choices for Military-Off-The-Shelf conventional submarines currently available on the market. For this reason, Defence described Australia's situation similar to that of the United States and the United Kingdom:

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32 Vice Adm Jones, Department of Defence, *Transcript*, 6 June 2014, p. 45.

33 Vice Adm Jones, Department of Defence, *Transcript*, 6 June 2014, p. 45.

34 Mr King, Department of Defence, *Transcript*, 6 June 2014, p. 46.

On this project we have to deal a lot more with what I would say friends of ours – the UK and the USA, for example – have to deal with all the time. They do not have the luxury that there is someone that has a product out there they can buy. They have to take on that risk. They have to develop something for themselves. For us, solving the submarine problem is much more akin to that.<sup>35</sup>

- 5.44 To properly advise government on a submarine capability relevant to Australia's strategic circumstances, Defence has established a Defence and industry Integrated Project Team (IPT) made up of experts to inform the development of SEA 1000:

They are working on two things, fundamentally. The team is about 80 strong now... They are doing two things: they are producing a design brief for a future submarine that matches the functional requirements to the capability... and they are looking at what potential industrial and commercial industries there might be... for executing a project along those lines.

The design brief has three potential uses and any of them could be the one that we use it for. One is it could be the basis of a concept design for a new submarine. It could simply be a yardstick by which to which you measure the difference between that that set of functional requirements and capability requirements would do and what an off-shelf solution might do, so you really understand where you are. In doing that we then create an internal capability to do the design approval authority's safety certification and all of those tasks in the future.<sup>36</sup>

- 5.45 Defence reaffirmed that there has been no change of direction in SEA 1000 as a result of the change of government.<sup>37</sup>

## **First Principles Review of Defence**

- 5.46 The Government will undertake a First Principles Review of Defence (FPR) commencing in 2014. Covering all the major elements of Defence, the FPR will identify areas where greater efficiency improvements can be made, such as the streamlining of services and removal of overlapping bureaucratic competencies.

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35 Mr King, Department of Defence, *Transcript*, 6 June 2014, p. 47.

36 Mr Gould, Department of Defence, *Transcript*, 6 June 2014, p. 47.

37 Mr Richardson, Department of Defence, *Transcript*, 6 June 2014, p. 47.

- 5.47 ASPI told the Committee that the FPR will need to evaluate the future role and structure of the DMO as an institution of Defence, particularly if consideration is given to a commercially-operated model:

One of the big questions that the first principle review will have to look at is whether a more radical approach to DMO is required. A government-owned, commercially-operated model has been floated. There may be some merit in that, but I am sceptical that there is a one-size-fits-all solution. To outsource your acquisition would require you to know with a high degree of precision ahead of time exactly what you wanted...However, very often that is not the case. The future submarine would be the archetype example, where the actual project itself is a voyage of discovery, refinement and progressive definition of what is required, and that is not something that you can outsource.<sup>38</sup>

- 5.48 Defence advised the Committee that there is currently a 'tension of competing objectives' within the Department in regards to its internal structure and functioning. To effectively address and prioritise these competing objectives, it was noted that the FPR is likely to have significant implications for DMO in terms of its internal structure, processes and location within the broader business chain of Defence. The Chief Executive Officer of DMO noted that any structural reform of DMO will be guided by the outcomes of the FPR:

But at the moment it is most important that this review is done, in my opinion, and that the direction is clearly established. Then we can make sure that our people are the right mix and the right balance...<sup>39</sup>

## Committee comment

- 5.49 The Committee does not believe that the disclosure of dissenting views of stakeholder organisations in the acquisition process of large capabilities is unachievable. Defence will receive feedback from internal reports and/or professional service providers involved with the project management or oversight functions. Where there is a documented concern with the current approach, Defence must either address the concern to the satisfaction of the relevant stakeholder or make a conscious decision not to. Where the stakeholder concerns are not addressed, decision makers at

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38 Dr Thomson, Australian Strategic Policy Institute, *Transcript*, 6 June 2014, pp. 1-2.

39 Mr King, Department of Defence, *Transcript*, 6 June 2014, p. 41.

all levels through to the Minister should be advised of who the stakeholder was, their concern and why Defence chose not to address it.

- 5.50 The Committee is of the view that there should be one compliance/assurance process within Defence which follows the particular capability through its whole life cycle from CDG through acquisition, service and disposal. Currently these functions are spread across agencies using different procedures.
- 5.51 The Committee commends Defence for its establishment of the Defence and industry Integrated Project Team (IPT) to inform and support the development of SEA 1000. In the context of paragraph 5.50 above, this is a classic case where the views of the IPT must be communicated to decision makers in the National Security Committee of Cabinet (NSC) in a timely and transparent manner.
- 5.52 The Committee is aware of the important challenges facing Defence. Although defence funding is increasing, it will never match all the demands posed by sustainment of current infrastructure, current capabilities and the long-term capability development. The Committee notes that Defence is implementing additional measures to train and a skill the CDG workforce.
- 5.53 The Committee notes the current CDG and DMO initiatives to engage the technical expertise residing in the private sector. The Committee is of the view that these initiatives could be expanded to, particularly in relation to risk identification and management and T&E. The level of private sector involvement in the ADF's capability development process contrasts with the experience of other countries of which the Committee is aware. The Committee believes more could be done to improve new capability proposals through the utilisation of external and independent contributions.
- 5.54 In relation to the FPR, the Committee notes that Defence has been reluctant to implement structural changes that have been recommended by previous reviews. The Committee urges the Government to be prepared to make 'first principle' changes in response to the recommendations from the FPR.

**Recommendation 5**

The Committee recommends that the Department of Defence increase the use of private sector expertise, particularly in the areas of test and evaluation, risk management, review and business case development, in order to enhance the capability development process and new capability proposals.

**Recommendation 6**

The Committee recommends that the Vice Chief of the Defence Force own a process that harnesses and coordinates the oversight and review functions currently exercised by the Capability Development Group, the Defence Materiel Organisation and the Services in order to integrate a whole of life approach to capability assurance.

**Recommendation 7**

The Committee recommends that the Department of Defence continue to build on the capabilities and processes that have been developed within the SEA 1000 industry Integrated Project Team (IPT) and ensure that the views of the IPT are transparently communicated to the National Security Committee of Cabinet as part of procurement decisions.





## Air Combat Capability

### Introduction

- 6.1 The Royal Australian Airforce (RAAF) is tasked with the provision of responsive air power options for the Government. These options include air control, precision strikes, air mobility, force protection, surveillance, intelligence and reconnaissance. During the 2012–13 financial year, the RAAF provided support to a range of regional and global operations. These included sovereign border protection, operations in the Middle East and support to the Bundaberg floods.<sup>1</sup>
- 6.2 In line with the continued modernisation of ADF capabilities, the *Defence Annual Report* notes that the RAAF had successfully met the operational tasking, preparedness, safety and airworthiness targets set for the 2012–13 financial year. The implementation of reforms, including change programs supporting the development of cost-conscious behaviours, also enabled the RAAF to operate within budget and deliver savings.<sup>2</sup>

### F-35 Joint Strike Fighter

#### Background

- 6.3 The New Air Combat Capability (NACC) Project (AIR 6000) aims to ensure the RAAF acquires a modern air force capability suitable to the future air combat needs of Australia. The Government is planning to replace the RAAF's 4<sup>th</sup> generation F/A-18s with the Lockheed Martin F-35

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1 *Defence Annual Report 2012–13*, p. 49.

2 *Defence Annual Report 2012–13*, p. 49.

Joint Strike Fighter (JSF). The JSF is a 5<sup>th</sup> generation aircraft with air-to-air and strike capabilities relevant to air combat needs of the RAAF.

- 6.4 Since its inception, the JSF project has encountered significant delays and cost overruns. The concurrent development and construction approach adopted by Lockheed Martin has resulted in project delays, mismanagement and increased construction costs. This has been exacerbated further by the technological complexity of the project. As a consequence, a revised scheduling timetable for the JSF project was announced in March 2012.<sup>3</sup>

### JSF project overview

- 6.5 The *Defence Annual Report 2012-13* states that the production of Australia's first two JSF aircraft is on schedule for a 2014 delivery and 2015 commencement of training, despite delays in the contracting processes, of which Australia is a part, between the United States Government and Lockheed Martin.<sup>4</sup>
- 6.6 The *Defence Annual Report 2012-13* also notes that the JSF development and test program made slow and steady progress at a pace likely to support Australia's operating capability requirements for 2020.<sup>5</sup>
- 6.7 Defence acknowledged that the JSF project has suffered from development issues as a consequence of its technical complexity. This was not considered irregular, however, with Defence noting that complex aircraft projects have a tendency to encounter issues as they proceed through their development stage.<sup>6</sup>
- 6.8 When asked about the near-term future risks in relation to Australia's acquisition of the JSF, the Chief of Air Force stated:

As far as I am concerned with the JSF, while there are still issues with the project, the big job for Air Force is to actually run down the F-18 capability while we ramp up the JSF capability. There is the whole training of not only air crew, pilots and maintainers; I would argue there is a whole lot of work to be done in the intelligence community as well, because this aeroplane requires more data than our previous generations of aircraft. Given a lot of the supporting elements the JSF requires, I would argue for some mindset changes as well, if we are to get the best capability out of

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3 Davies, D. & White, H. *Taking Wing: Time to decide on the F-35 Joint Strike Fighter*, ASPI Strategic Insights, March 2014, p. 7.

4 *Defence Annual Report 2012-13*, p. 186.

5 *Defence Annual Report 2012-13*, p. 186.

6 Air Mshl Brown, Department of Defence, *Transcript*, 6 June 2014, p. 51.

it. Certainly, bringing it into service is no simple matter – and it is not just with Air Force; it is with a lot of the supporting structure around it.<sup>7</sup>

## Costing

- 6.9 Defence confirmed that the price for the first two JSF is \$126.7 million per aircraft. They also projected the average cost for the remaining 70 JSF aircraft amounting to \$90 million per aircraft over the 30 year production period.<sup>8</sup>
- 6.10 The Committee was informed that these progressive reductions in cost correspond to the projected figures anticipated by Defence.<sup>9</sup>

## Ensuring consistency with Australia's capability needs

- 6.11 The Committee queried how Defence was able to ensure that the rationale, reasoning and development guiding the acquisition of the JSFs remain consistent with Australia's capability needs. In particular, the Committee questioned how these capability needs took precedence over other interests linked to JSF project, such as Australia's relationship with the United States Government and Lockheed Martin.
- 6.12 In response, Defence explained that the decision to acquire the JSF arose following a professional assessment of Australia's future capability need. Defence noted that other interests lie at the periphery of the decision making process:
- The decision with respect to the JSF related to capability need and related to a professional assessment of how we go forward. I am not aware that our relationship with the US was central at all to the question of whether we order further JSFs. It is relevant; you would need to take it into account, but I would not see that as being a central point in decision making at all.<sup>10</sup>
- 6.13 Regarding the Defence Materiel Organisation's (DMO) relationship with Lockheed Martin, Defence made it clear that the extent of its relationship with Lockheed Martin was through the US Department of Defense Joint Program Office:
- The only relationship that we have with Lockheed Martin, in the sense of a direct relationship, is the industry program where we – that is DMO – have signed a heads of agreement with Lockheed

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7 Air Mshl Brown, Department of Defence, *Transcript*, 6 June 2014, p. 51.

8 Air Cdre Roberts, Department of Defence, *Transcript*, 6 June 2014, 52.

9 Mr King, Department of Defence, *Transcript*, 6 June 2014, p. 51.

10 Mr Richardson, Department of Defence, *Transcript*, 6 June 2014, p. 51.

Martin about developing options for Australian industry to participate in the program. To be clear, there is no relationship in the sense of a commercial relationship. Obviously, we work with Lockheed Martin and so on, but the business relationship is with the Joint Program Office.<sup>11</sup>

## Independent and transparent reporting on the JSF project

6.14 The *Defence Annual Report 2012–13* mentions that an independent review of the JSF development and test program was performed. The review confirmed that the acquisition of the JSF F-35A and corresponding weapons and support systems is likely to meet Australia’s planned 2020 initial operational capability requirements.<sup>12</sup>

6.15 DMO Chief Executive Officer Mr Warren King stated that:

There is a chance in projects of this scale, scope and long duration that the project office can get trapped, not in the commercial sense, but in the sense of getting caught in the view that the project is going fine and may miss issues that might be substantial because you are so focused on delivering the project. So I asked then Air Vice Marshal Col Thorne, supported by a group of people including representatives from DSTO and a representative from a company that specialised in test and evaluation, to do an independent review of where the program was at, what the risks were, were we adequately assessing those risks and, in particular, would we be ready to meet the IOC criteria – what was the risk rating of that. That work was done in March and April, I believe, 2013. They made a whole lot of recommendations, reports, observations and so on.<sup>13</sup>

6.16 The Committee’s views on JSF transparency reflected concerns regarding the level of independent scrutiny processes within Defence more broadly. As stated in Chapter 5, representatives from QinetiQ Australia spoke of the need for independent scrutiny processes within Defence that clearly outlines the risks, costs and schedule overruns for major capability projects.<sup>14</sup>

6.17 These views were further supported by the Australian Strategic Policy Institute (ASPI), which identified two problems with Defence’s approach to reporting:

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11 Mr King, Department of Defence, *Transcript*, 6 June 2014, p. 53.

12 *Defence Annual Report 2012–13*, p. 186.

13 Mr King, Department of Defence, *Transcript*, 6 June 2014, p. 53.

14 Mr Woolford, QinetiQ Australia, *Transcript*, 6 June 2014, p. 9

One is that there are issues of security, which sometimes quite legitimately limits what can be disclosed. Sometimes, though, I think that is used as a veil to otherwise avoid external scrutiny. The second thing is that all of Defence's assessment is self-assessment. I am not going to impugn the honesty of anyone in Defence, but there is a conflict of interest if you are the person assessing your own performance.<sup>15</sup>

- 6.18 While acknowledging the need for greater transparency, ASPI believed that there were opportunities for broader reporting processes with Defence that circumvent the problems of self-assessment.<sup>16</sup>
- 6.19 Defence responded to these concern by explaining its limitations in publically disseminating information on the JSF program given that most of the data comes from the United States:

... one of the important aspects of course is the relationship between Australia and the US, and our ability for the US to be able to share with us because of our ability to be able to limit the exposure of that information, so it is not released beyond any area they do not want it released to. One of the reasons that we could stand this team up and be given clear and open information is because of that relationship, and is because of the way we treat the information we get out of that.<sup>17</sup>

- 6.20 The Committee responded by highlighting that the American public have access to unclassified reviews that extensively discuss issues of risk. The Committee questioned why the Australian Parliament does not have access to the same level of detail regarding identified risk within the JSF project.
- 6.21 Given that the independent review undertaken on the JSF project has not been publicly released, Defence sought to reassure the Committee that the review was undertaken to confirm that projected targets were likely to be met in the future. Mr King stated that:

To be honest, it [the independent review] was a little bit contentious internally, because I have got a dedicated project team and I basically said by my actions, 'I'm not confident that I'm getting objective evidence that isn't tainted by a conspiracy of optimism.' ... But I just want to make the point: it is not that I did not release it because it was cloak and dagger; I just did it for myself. You have asked me: can I release it? I will go and look at

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15 Dr Thomson, Australian Strategic Policy Institute, *Transcript*, 6 June 2014, p. 3.

16 Dr Thomson, Australian Strategic Policy Institute, *Transcript*, 6 June 2014, p. 4.

17 Mr King, Department of Defence, *Transcript*, 6 June 2014, p. 54.

that for you. But I never intended it for release. It was just a piece of work I had commissioned for my benefit.<sup>18</sup>

- 6.22 Defence later informed the Committee that while the final report is classified and cannot be tabled as a public document, they are in the process of seeking agreement from the US Joint Project Office to release the findings of the review.<sup>19</sup>

### Fifth-Generation air combat capability

- 6.23 The production of the JSF is being carried out simultaneously with ground and flight testing. Given this concurrent model of production, the Committee asked Defence whether their initial standards for the JSF had needed to be adjusted or lowered as the development of the aircraft had progressed.

- 6.24 Defence stated that the most significant factor distinguishing the JSF from fourth-generation aircraft was the level of situational awareness it provides through its multispectral capability. Air Marshal Geoff Brown put this in context:

I would always argue that situational awareness was the biggest factor in success in air combat. I have struggled to actually articulate what situational awareness is. If I were to give a layman's analogy of it, I would use the example of driving a motor car at night time. If you are in a fourth-generation fighter, you are effectively driving this manual motor car on low beam, talking on the mobile phone and adjusting a GPS at the same time. With JSF and F22 type technologies, you are not driving on low beam. You probably have four times what you can see out there, and you are driving an automatic. All the information is laid out in front of you, plus you actually have a 360-degree view of what is going on in the motor car. That is probably the simplest explanation that I can give as to the differences between fourth-generation, 4½- and fifth-generation.<sup>20</sup>

- 6.25 Referring to comments made by United States General Michael Hostage on the role of F-22s in securing air superiority for F-35 JSF, the Committee asked Defence whether the absence of an F-22 fleet undermines the capabilities of the JSF. Defence sought to contextualise this statement by providing the Committee with an additional set of comments made by General Hostage clarifying what he meant:

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18 Mr King, Department of Defence, *Transcript*, 6 June 2014, p. 55.

19 Department of Defence, *Submission No. 4*, p. 15.

20 Air Mshl Brown, Department of Defence, *Transcript*, 6 June 2014, p. 52.

I was asked why I needed to upgrade the F-22 if I had the F-35. I said, in that context, a reduced USAF fleet of 1763 F-35s (we had just finished a conversation about how I needed 1 763 F-35s, and not a single aircraft less) would not provide the air combat capability necessary without the additional 180+ F-22s. The question answered was about the F-22, not the F-35. Of note, I used the reference to the F-35 to emphasize the importance of the F-22, and not to denigrate the F-35. And it was in the context of independent US major combat operations with a near-peer competitor.<sup>21</sup>

- 6.26 Defence highlighted the importance of single-role strike platforms being reinforced by dedicated air and escort support. Within the Australian context, Defence was optimistic that the JSF would be in a position to perform air and escort support without relying upon additional capability:

This escort role ... may be equally performed by an F35 or F22 aircraft. In Australia's context, we will intelligently stack our packages as a direct result of the threat that we fight on any given day. Dedicated strike assets require dedicated air support. The F35 will do both.<sup>22</sup>

## Runways

- 6.27 The runway at the RAAF Base Williamtown is being lengthened to 10,000-feet. Defence provided two reasons for this:

It is to do with the performance of the F-35 versus the F-18. And the other one is noise – it will allow us to take off without using the afterburner in the F-35 and, again, when you look at the noise footprint around Williamtown, we have done a lot of work to make sure that we can keep the ANEFs [Australian Noise Exposure Forecasts] within certain boundaries.<sup>23</sup>

- 6.28 Questioned further about the take-off/landing capability of the JSF, Defence stated that the JSF can operate off an 8,000 foot runway. They reaffirmed that the primary reason for the Williamtown extension was due to noise. Furthermore, the RAAF Base Williamtown is planned to be the main training base for the RAAF.<sup>24</sup>

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21 *Exhibit 1*, p.1.

22 Air Mshl Brown, Department of Defence, *Transcript*, 6 June 2014, p. 56.

23 Air Mshl Brown, Department of Defence, *Transcript*, 6 June 2014, p. 59.

24 Air Mshl Brown, Department of Defence, *Transcript*, 6 June 2014, p. 59.

## Committee comment

- 6.29 The Committee understands the significant cost, planning and risks associated with the development of the JSF.
- 6.30 The Committee is of the view that the *Defence Annual Report 2012-13* does not provide sufficient detail on the JSF program. Whilst welcoming the independent review conducted by DMO, the Committee is concerned at the lack of transparency and reporting available to the Australian Parliament in regards to the JSF program, particularly in relation to risk mitigation. The Committee is also concerned with the lack of information within the *Defence Annual Report 2012-13* on the NACC program given its significance and value.
- 6.31 Given the delays in production and the public disclosure by the US Government relating to schedule and technical risk, the Committee remains concerned as to whether Australia's planned acquisition of the JSF remain on schedule and within the funding parameters set by Defence. The absence of any substantiated reporting to support the one line summary presented in the *Defence Annual Report 2012-13* is of concern. The Committee also notes that it has still not received a confidential copy of the "independent review" conducted by DMO as at the date of the adoption of this report, five months after the hearing at which it was requested.



## Other Issues

- 7.1 During the course of the Review, a number of other issues were covered that did not fit into the broad subject areas the Committee resolved to examine during its consideration of the *Defence Annual Report 2012–13*. This chapter will consider these issues.
- 7.2 These issues are:
- Accounts Management; and
  - Cyber-Security

### Accounts management

#### Transaction processing

- 7.3 The Committee requested information on account management and transaction processing, particularly in regards to credit cards issued by the Department.
- 7.4 Defence told the Committee that its credit card centre in Hobart manages approximately 67,000 travel credit cards and 6,000 purchasing credit cards which are used to purchase items used in the regular day-to-day operations of the Department. In total, Defence manages approximately 70 per cent of all credit cards issued across the Commonwealth.<sup>1</sup>
- 7.5 Defence provided further information on the credit card centre in Hobart:
- A staff of about 15 people manage those credit cards... Their roles include issuing credit cards, the following up of lost and

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<sup>1</sup> Mr Prior, Department of Defence, *Transcript*, 6 June 2014, p. 60.

misplaced credit cards for our staff... and dealing directly with credit card companies in terms of transaction files.<sup>2</sup>

- 7.6 The Committee was interested to hear if there was any scope for interagency rationalisation in terms of managing Commonwealth issued credit cards. Given Defence already manages 70 per cent of all credit cards issue, the Committee enquired whether Defence should be taking a lead role in this area.
- 7.7 Defence responded by acknowledging that the Commission of Audit has made several recommendations on this topic which are currently being followed up the Department of Finance. However, Defence felt that it was not in a position to comment on the roles of other Government agencies in their management of credit card accounts and transactions.<sup>3</sup>
- 7.8 Defence reaffirmed that any future attempts to centralise the Government's interagency management of credit cards falls is still subject to the Commission of Audit.<sup>4</sup>

## Cyber-Security

- 7.9 One issue brought to the Committee's attention was the lack of detail within the *Defence Annual Report 2012-13* dedicated to the issues of cyber-security in Australia.
- 7.10 In their submission, QinetiQ Australia stated that there are three particular areas in the realm of cyber-security that need to be considered by Defence:
- A need to understand the overlap between cyber issues and conventional military operations;
  - A need to recognise that the cyber-domain crosses the civil-military boundary in the same way it crosses conventional military domain boundaries; and
  - Recognise the human element in cyber security.<sup>5</sup>
- 7.11 Representatives from QinetiQ Australia clarified their point on the human element within cyber security during the public hearing:
- I believe there is much more to be done in recognising the vulnerability to cyber-attack, especially from insider threat...  
There is much that industry can do in this human factors domain

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2 Mr Prior, Department of Defence, *Transcript*, 6 June 2014, p. 60.

3 Mr Prior, Department of Defence, *Transcript*, 6 June 2014, p. 61.

4 Mr Richardson, Department of Defence, *Transcript*, 6 June 2014, p. 61.

5 QinetiQ Australia, *Submission No. 2*, p. 6.

including working jointly with the department and academia to address the identification of risk factors, potential risk behaviours and to height security cultures through psychology and sociology research, training and monitoring.<sup>6</sup>

7.12 The Committee asked for QinetiQ Australia's opinion on the level of competency exhibited by the Australian Defence Force (ADF) in terms of understanding the link between cyber issues and conventional military operations.

7.13 QinetiQ clarified their point by stating that the ADF tends to focus its resources on its defensive posture as opposed to using its resources to encourage the commercial sector and academia to address home defence issues:

I am delighted to see and, indeed, be a part of DSTO's very strong new focus on research associated with cyber-warfare and cyber-defence...The area I have been pushing for within that with the Chief Defence Scientist and his team is to make sure that research does not just look at the 0s and 1s – the technology – but also looks at the human factor aspect as well.<sup>7</sup>

7.14 Drawing from their own experience, QinetiQ Australia informed the Committee that the United Kingdom announced plans in 2013 to establish a "Joint Cyber Reserve" in order to maintain a standing work-force of technical expertise available to the British Ministry of Defence. QinetiQ recommends the need for a similar body in Australia.<sup>8</sup>

## Committee comment

7.15 The Committee acknowledges the growing significance of cyber-security as a new frontier for Defence. While cyber connectivity has generated significant technological advancements, the Committee is aware that this will continue to present new challenges for Australia's security environment.

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6 Mr Woolford, QinetiQ Australia, *Transcript*, 6 June 2014, p. 10.

7 Mr Woolford, QinetiQ Australia, *Transcript*, 6 June 2014, p. 13.

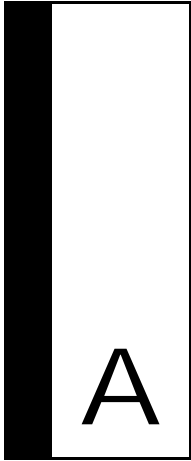
8 QinetiQ Australia, *Submission No. 2*, p. 7.

**Recommendation 8**

**The Committee recommends that Defence Annual Reports include appropriately detailed information on the direction and development of the Department's cyber-security capabilities.**

Senator David Fawcett  
Chair  
Defence Sub-Committee

The Hon Teresa Gambaro MP  
Chair  
Joint Standing Committee on Foreign  
Affairs, Defence and Trade



## Appendix A - Submissions

- 1 QinetiQ Australia
- 2 Australian Strategic Policy Institute
- 3 Nova Systems
- 4 Department of Defence - Answers to Questions on Notice





## Appendix B – Witnesses

**Canberra, 6 June 2014**

Department of Defence

Mr Chris Birrer, Acting Deputy Secretary Strategy

Mr David Gould, General Manage Submarines, Defence Materiel Organisation

Mr Steven Grzeskowiak, Deputy Secretary Defence Support and Reform

Mr Warren King, Chief Executive Officer, Defence Materiel Organisation

Mr Phillip Prior, Chief Financial Officer

Mr Dennis Richardson, Secretary of Defence

Australian Defence Force

Air Marshall Geoff Brown, Chief of Air Force

Air Vice Marshall Chris Deeble, Program Manager Joint Strike Fighter

Vice Admiral Ray Griggs, Chief of Navy

General David Hurley, Chief of Defence Force

Vice Admiral Peter Jones, Chief Capability Development Group

Air Commodore Cath Roberts, NACC Integrated Project Team

Australian Strategic Policy Institute

Dr Mark Thomson, Senior Analyst

QinetiQ Australia

Mr Will Taylor, Senior Strategy and Business Development Manager

Mr Gilbert Watters, Senior Strategy and Business Development Manager

Mr Alan Woolford, Chief Executive Officer

**Nova Systems**

Mr Steven Robinson, General Manager – Defence

Mr Alan Whalley, Chief Executive Officer and Director





## Appendix C - Leased land

The following table lists the organisations that are currently leased land on peppercorn lease arrangements through Defence.

Tales Australia
Airservices Australia
Territory & Municipal Services
Australian Federal Police
Mr Graham Heanes
Canberra Airport
Aust Rail Track Corp Ltd
Australian Customs & Border Protection
Charters Towers Reg Council
Townsville City Council
Queensland Police Service
BAE Systems Australia
Bureau of Meteorology
NT Police Fire & Emergency Services
Northrop Grumman Service Corp
Dept Lands & Planning
Department of Climate Change
Coolibah Crocodile Farm P/L
Corowa Shire Council
Shoalhaven City Council
The City of Whyalla
Port Augusta City Council
Envestra (SA) Ltd
ETSA Utilities
ORIGIN Energy Retail Limited
Ausco Modular
Renewal SA

ELGAS Ltd
Howdeen Pastoral Company
Woomera R.D. Catholic Parish
Woomera Golf Club
SA Country Fire Service
SA Ambulance Service
Dept Transport Energy & Infrastructure
Queensland Rail
Broadcast Australia
Dept of Transport & Main Roads
Dept of Immigration & Border Protection
BAE Systems Australia Limited
Mr Stracey Elliott & Elliott
CSIRO
Melbourne Water
BirdLife Australia Ltd
Australian Red Cross Blood Service
Dept of Environment & Primary Industries
Attorney-General's Department
Victoria Police
Puckapunyal Adult Riding Club
Molec Electrical Contractors
Energy Australia
Defence Housing Authority (Parramatta)
NSW Maritime
DMS Maritime Pty Ltd
Sydney Water Corporation
HL & J Kennett
Surf Life Saving NSW Inc.
Mr John Dunbabin
A L Fehlberg Pty Ltd
J E Thompson and Partners
Mr LA Wilson
Sam Tropiano
Mr Derek Henderson
Water Corporation
Dept Immigration & Citizenship
Council of East Fremantle
K & M Spurge
Colin W Fleay
Dept Enviro & Consv ( Exmouth)
Shire Of Swan