

Maritime Capability and Procurement

Introduction

- 4.1 During 2007-08 it was clear that maritime assets would make up a large part of the Defence procurement program for the next decade or more. The 2009 Defence White Paper confirmed and strengthened the importance of maritime procurement by describing a leading role for the Royal Australian Navy (RAN) within Australia's defence posture.¹
- 4.2 In hearings for the *Review of the Defence Annual Report 2007-08*, the Committee engaged Defence on a number of topics, including procurement and force readiness.
- 4.3 In relation to the Air Warfare Destroyer (AWD) project, Defence told the Committee that building would be initiated in September of 2009,² and while the current order was for three ships, an absolute deadline to expand the order to four ships would not be reached until July 2009.³ The Committee notes that in a press release on 13 October 2009 the Government stated:

...Australia's \$8 billion Air Warfare Destroyer (AWD) project was progressing well and would commence hull construction in the next few months... The AWD Alliance has recently signed six contracts worth approximately \$18 million with Australian

1 Department of Defence 2009, *Defending Australia in the Asia Pacific Century: Force 2030*, viewed 2 May 2009, http://www.defence.gov.au/whitepaper/docs/defence_white_paper_2009.pdf.

2 Mr King, *Transcript*, Thursday 16 April 2009, p.48.

3 Mr King, *Transcript*, Thursday 16 April 2009, p.43.

companies for the supply of a wide range of services and equipment for the three Air Warfare Destroyers.⁴

- 4.4 The Committee raised its concerns regarding the tender process for the AWD in particular the viability of Australia's shipbuilding capacity noting that competition may be eroded and as a result 'Australian jobs will be lost, and Australian opportunity will be lost and we will be left with only one major shipbuilder in Australia.'⁵
- 4.5 In relation to the project to acquire Landing Helicopter Dock (LHD) amphibious ships, Defence told the Committee that the project was 'in good shape'. Delays that had arisen for ships built for the Spanish navy, and storm damage to the originating shipyards in Spain would not affect the construction of LHDs for the Australian order.⁶
- 4.6 Defence and the Committee engaged in more extensive discussion of three other topics, considered in this chapter, including:
- The provision of a new ship-based helicopter capability for the RAN's ANZAC class frigates, particularly in view of:
 - ⇒ the failure of the Seasprite project, and
 - ⇒ the RAN's need to find a replacement for its ageing Seahawk helicopters, and
 - The readiness for deployment of the present FFG (Guided Missile Frigate) fleet.

Seasprite - SEA 1411

Introduction

- 4.7 Helicopter capability plays an integral role in modern maritime warfare, providing Intelligence, Surveillance and Reconnaissance (ISR) facilities, and weapons platforms for air-to-ship and anti-submarine weapons. The increased altitude and mobility available to helicopters increases the range and reach of both sensing and weapons platform applications.

4 <http://www.minister.defence.gov.au/gregCombettpl.cfm?CurrentId=9581>, Press release 85/09 dated 13 October 2009.

5 The Hon. Bob Baldwin MP, *Transcript*, Friday 19 June 2009, p.16.

6 Mr King, *Transcript*, Thursday 16 April 2009, p.48.

- 4.8 The Seasprite project, cancelled in March 2008, sought to acquire a new ship-based helicopter capability for the RAN's 8 ANZAC class Frigates. The helicopter was to provide situational awareness for the frigates via sonar and radar, and to have the capacity to carry and deploy anti-ship and anti-submarine weapons.
- 4.9 A request for tender for the project was issued in 1995, and a contract with the preferred tenderer was signed mid-1997. 'Fully-compliant' deliveries were to have commenced in early 2001, but problems with software and systems integration led to delays.⁷
- 4.10 These delays were ultimately to prove intractable. In 2006, all RAN Seasprite helicopters were grounded due to concerns with the in-flight control system. Ultimately, concerns with software and systems integration resulted in the project's cancellation.
- 4.11 In 2008, announcing the decision to cancel the project, the Minister of Defence commented that the project represented \$1.3 billion of tax-payers' money 'down the drain'.⁸ A subsequent newspaper article suggested that as a result of an agreement with the prime contractor Australia stood to recoup \$40 million of this.⁹

Public Hearings

- 4.12 In hearings, Defence told the Committee that software and systems integration had played a large part in the failure of the Seasprite project:
- The biggest issue for integration, as you quite rightly point out – the biggest task – was understanding the risk and difficulties of integrating a complex software system into an older analogue airframe ... It was our ability to solve those that faced us with the greatest challenge, both in the tactical system for the combat system and in the flight control system.¹⁰
- 4.13 Defence told the Committee that further problems arose in connection with the process of certification for airworthiness. This brought the project to the point of failure:

7 Thomson, Mark, *Cost of Defence 2007-08*, p.172.

8 'Australia cancel Sea Sprite contract', 2008, *Radio Australia*, 5 March 2008, viewed 24/03/09 <http://www.abc.net.au/ra/news/stories/200803/s2181094.htm>.

9 'Seasprite saga ends, salvaging \$40m', 2008, *The Australian*, March 20, 2008, viewed 24/03/09 <http://www.theaustralian.news.com.au/story/0,25197,23407856-601,00.html>.

10 Major General Fraser, *Transcript*, Thursday 16 April 2009, pp.4,6.

The issue was just trying to integrate and certify to Australian standards. Our expectations changed, the contemporary standards changed over that period of time, informed by the two major helicopter accidents that we had during that period of time. So the Australian appetite – both the military and public perception – was for a greater degree of certainty about the certification and other issues for the aircraft.¹¹

4.14 Defence told the Committee that in this instance it had initiated the project without a ‘true assessment’ of these difficulties.¹²

4.15 The Committee asked Defence whether the unique, ‘one-off’ nature of the project had contributed to its risk of failure, to which Defence agreed. In view of this, the Committee asked Defence about its criteria for when military equipment should be ‘customised’ or ‘Australianised’. Defence told the Committee that there was now a heightened imperative for Defence to procure off-the-shelf equipment ‘where we possibly can’.¹³

4.16 To support this, Defence cited the example of another helicopter, the Chinook, currently in use by the ADF. This had been kept to a ‘US-standard configuration as closely as possible’. Modifications were kept to a minimum, and such changes as were adopted were driven by the ADF’s need to use helicopters in a wider variety of roles, as compared to other countries with greater numbers of helicopters at their disposal.¹⁴

4.17 Defence told the Committee that reforms in procurement reduced the likelihood of a repetition of the difficulties Defence experienced with the Seasprite project:

Since then, and since the formation of DMO in 2000, we have had the Kinnaird review and the implementation of that from 2003 onwards. Indeed, the Mortimer review will strengthen that to make sure that we truly understand what those risks are and, where necessary, still take an appropriate level of risk but make sure that appropriate resources, schedule and cost are apportioned to the risk reduction requirements for the introduction of that equipment.¹⁵

11 Major General Fraser, *Transcript*, Thursday 16 April 2009, p.6.

12 Major General Fraser, *Transcript*, Thursday 16 April 2009, p.4.

13 Major General Fraser, *Transcript*, Thursday 16 April 2009, p.4.

14 Major General Fraser, *Transcript*, Thursday 16 April 2009, p.4.

15 Major General Fraser, *Transcript*, Thursday 16 April 2009, p.4.

- 4.18 In relation to recovery of some costs on the failed Seasprite project, Defence advised the Committee that this was being pursued through prospective sales of whole aircraft and spare parts:

What we negotiated between command and ourselves was that command would take ownership of the aircraft and equipment to try and resell them and provide us with some funding back. That was subject to US government approval. That US government approval was obtained on 6 February this year, and the transfer was exchanged for bank guarantees on 12 February this year. Command are actively marketing the aircraft and equipment at this point in time, and we have started to get some flow of sale from some of those parts. It is a small amount at this point in time, but we are comfortable that they are at least trying to sell them. We are working cooperatively with command to maximise the best possible sale value, but command is taking the liability and the warranty issues, to rectify the issues that we were not able to bring the aircraft into service for. It was \$39.5 million, just to clarify.¹⁶

Committee comment

- 4.19 In the Committee's view, the failure of the Seasprite project is a powerful indicator of the risks Defence takes on when it attempts to acquire unique equipment. All of the key elements that contributed to the collapse of this project – specialised software development, systems integration and difficulties with certification – are common factors in project risk, which are exacerbated where procurements are unique or unusual.
- 4.20 For the Committee, the low level of cost recovery for Seasprite underscores this point. To date, a very low proportion of the project outlay is expected to be recovered.
- 4.21 At the same time, in the Committee's view, the true cost of the project's failure is not only to be counted in dollar terms. It is also to be counted in terms of capability not available to the ADF, where it may in fact be needed.
- 4.22 The Committee is encouraged by Defence's assurances that the Kinnaird and Mortimer reviews have had a positive impact on the process of defence procurement, in that there is a higher expectation that

16 Major General Fraser, *Transcript*, Thursday 16 April 2009, p.5.

procurements will be off-the-shelf, and in the sense that there is both a better appreciation of risk and means to mitigate project risk.

- 4.23 But in the Committee's view there is a need for Defence to continue to press forward with this message so that it can achieve, to a full extent, what amounts to a very significant change in the culture of Defence procurement. Such projects as Seasprite, which manifest very substantial delays and increased project costs, will ultimately undermine public support for Defence procurement if they continue.

Seahawk replacement

- 4.24 The Committee asked Defence about its plans to replace the Seahawk helicopter, which currently provides a helicopter capability on RAN ships.

- 4.25 Defence told the Committee that this procurement was planned under Project AIR 9000 phase 8, and that more information about this procurement would be forthcoming in the 2009 Defence White Paper.

- 4.26 In the meantime, Defence told the Committee, there would be limited upgrades to the existing Seahawk fleet, sufficient to keep them in service until their nominated end-of-life in 2025.¹⁷ This is 'a capability assurance program to make sure we retain the level of capability in the Seahawk until the end of its life'.¹⁸

- 4.27 The Committee expressed concern as to the amount of time left to Defence to acquire a replacement for the Seahawk. Again, Defence told the Committee that reforms arising from the Kinnaird Report had resulted in a better procurement process, capable of delivering such a capability within the necessary time-frame. In describing this change, Defence described procurement processes before the advent of the reform process:

Kinnaird talked about spending time and effort and, importantly, money, to get your facts right before you go to government and second pass. That is really important. In the bad old days, 10 or more years ago, we went to government to get its agreement before we knew what the requirements were and before we knew what were the costs or the risks. In the old days they would claim that you got approval from government very quickly. But then we

17 Vice Admiral Tripovich, Major General Fraser, *Transcript*, Thursday 16 April 2009, p.12.

18 Vice Admiral Tripovich, *Transcript*, Thursday 16 April 2009, p.12.

were doing a lot of stuff that we should have been doing before we went to government.¹⁹

- 4.28 Defence went on to contrast this with the way procurement works now that reforms have begun to take hold:

Now we frontload all that effort and it takes a long time to get to second pass. The theory is that you have a request for tender or an offer from an FMS case, or a foreign military sales case, and you know the risks, the costs and the schedule, and you have sufficient provision. Theoretically, shortly after the government gives approval you can come back and sign a contract and get going. The decision point has moved further out but the action you have to take to activate the government's approval can happen relatively quickly.²⁰

- 4.29 Defence noted that the rapidity with which procurements can be conducted then rests on the degree to which the chosen solution is off-the-shelf:

Once again, it depends on the maturity of the solution and whether or not any more work has to be done. With the C17 you are literally buying them off the shelf.²¹

Committee comment

- 4.30 The Committee will continue to take an interest in this project, particularly in view of RAN ship procurements currently underway, which will require embarked helicopters to fulfil their intended capability. This is heightened in view of the increased priority on maritime capability adopted in the 2009 Defence White Paper.

Operational readiness of the FFG fleet

- 4.31 The Committee engaged Defence on the preparedness of the RAN's FFG fleet for operations. The Committee asked Defence to advise on the progress of the current FFG upgrade, Project SEA 1390. In particular, the Committee asked if the readiness to be deployed in support of operations

19 Vice Admiral Tripovich, *Transcript*, Thursday 16 April 2009, p.13.

20 Vice Admiral Tripovich, *Transcript*, Thursday 16 April 2009, p.13.

21 Vice Admiral Tripovich, *Transcript*, Thursday 16 April 2009, p.13.

near the Persian Gulf would be compromised by the progress of the upgrade.²²

- 4.32 Defence told the Committee that the FFG upgrade was currently in an advanced stage:

The vast majority of the upgrade work has been completed. We have a missile upgrade program that goes with it, but it is a collateral program. The electronic systems measures system and some of the torpedo detection systems are the last two major areas of concern in terms of the contractor meeting requirements for the ships to be accepted.²³

- 4.33 Upgrade to three out of four ships would be complete by the middle of 2009, and the fourth would be completed by December 2009. For the ships that were approaching the completion of the upgrade, Defence told the Committee that the 'core upgrade [had] met all its testing'.²⁴

- 4.34 Defence told the Committee, however, that questions of operational readiness of vessels for a particular theatre or application were a separate question. DMO can 'make sure that it meets the technical requirements', but questions of operational readiness are dependent on the capabilities of the vessel and the demands of the theatre and operations under consideration.²⁵

- 4.35 Defence told the Committee that the RAN then conducts its own tests, against its own criteria, to determine operational readiness against the characteristics of the envisaged scope of operations:

At the end of the day after the DMO says here it is to the Chief of Navy he will know the bits that he now has to test. He will then determine in what theatres it can be released to operate. Is there a submarine or not? In that scenario that will determine how important ASW is. Is there an electronic threat, yes or no, will determine how important that electronic support measure is to the scenario. It is very much likely scenario driven.²⁶

22 Various, *Transcript*, Thursday 16 April 2009, pp.45-47.

23 Mr King, *Transcript*, Thursday 16 April 2009, p.46.

24 Mr King, *Transcript*, Thursday 16 April 2009, p.46.

25 Mr King, *Transcript*, Thursday 16 April 2009, pp.46-47.

26 Vice Admiral Tripovich, *Transcript*, Thursday 16 April 2009, p.48.

4.36 Consistent with this principle, for deployment to the Persian Gulf Defence told the Committee that there are particular environmental characteristics to which a ship should be ready to respond:

... in taking a ship to the gulf – and the Chief of Navy is concerned about certain threats that exist there – it is important to have the ESM system. In his determining that a ship is ready to do that, not only do you have to have the system performance, you also have to have the people performance and everything else.²⁷

27 Mr King, *Transcript*, Thursday 16 April 2009, p.49.

