# **Chapter 1**

## **Introduction and conduct of the inquiry**

#### Referral of the inquiry

1.1 On 10 November 2005, the Senate referred the matter of Australia's naval shipbuilding and repair industry to the Senate Foreign Affairs, Defence and Trade References Committee for inquiry and report by the last sitting day of 2006. On 11 September 2006, the Senate committee system was restructured and the newly constituted Senate Standing Committee on Foreign Affairs, Defence and Trade assumed responsibility for the inquiry with the same terms of reference and tabling date.<sup>1</sup>

#### Terms of reference

- 1.2 The terms of reference focus on the future of Australia's naval shipbuilding and repair industry, its capacity, its economic viability, and the broader economic implications stemming from the construction of large naval vessels in Australia. The terms of reference required the committee to inquire into and report upon the scope and opportunity for naval shipbuilding in Australia and in particular:
  - (a) the capacity of the Australian industrial base to construct large Naval vessels over the long term and on a sustainable basis;
  - (b) the comparative economic productivity of the Australian shipbuilding industrial base and associated activity with other shipbuilding nations;
  - (c) the comparative economic costs of maintaining, repairing and refitting large naval vessels throughout their useful lives when constructed in Australia vice overseas;
  - (d) the broader economic development and associated benefits accrued from undertaking the construction of large naval vessels.
- 1.3 The committee's terms of reference focus on 'large naval vessels'. Although witnesses gave varying definitions of a large vessel, for the purposes of this inquiry, the committee was guided by Defence's classification:

<sup>1</sup> Under Standing Order 25(4) the committee shall inquire into and report upon matters referred to its predecessor committees and not disposed of by those committees, and in considering those matters may consider the evidence and records of those committees relating to those matters.

- ...a 'large naval vessel' is something above a patrol boat and hydrographic ship size and includes frigates, destroyers, tankers, afloat support ships and amphibious ships.<sup>2</sup>
- 1.4 In addressing the terms of reference, the committee also took account of the growing sophistication and complexity of modern warships and included minesweepers and submarines in its consideration.

#### **Conduct of the inquiry**

- 1.5 The committee sought views from a range of people interested in the future of Australia's naval shipbuilding and repair industry. In particular, it wrote to, and invited, submissions from shipbuilders, suppliers, unions, professional associations and individuals engaged in the shipbuilding industry such as engineers and architects as well as academics including economists. It also sought contributions from state governments and relevant Commonwealth government departments.
- 1.6 The committee advertised the terms of reference and called for submissions in *The Australian* on numerous occasions leading up to the close of submissions in mid-February 2006.
- 1.7 Two-thirds of the way through the inquiry, the committee published a discussion paper, which identified the main themes emerging from the evidence. It released this paper to stimulate debate in areas where evidence before the committee was sketchy or contradictory or where it needed clarification in order to formulate recommendations. The committee invited submitters and witnesses to respond to the issues raised. A summary of this paper, together with the main discussion points, is at Appendix 6.

#### **Submissions**

- 1.8 The committee received and published 41 submissions which are listed at Appendix 1. The Department of Defence lodged its submission on 24 March 2006 just days before it was to give evidence before the committee on 28 March. The committee voiced its disappointment with the Department for what it deemed to be an inadequate coverage of the terms of reference.
- 1.9 This dissatisfaction was compounded when only one departmental officer appeared at the public hearing to represent Defence. The committee was expecting to hear from a team of senior experts drawn from Defence and DMO officers who had detailed and specific knowledge of particular naval acquisition programs and recent

Department of Defence, answers to questions on notice, 28 March 2006 (received 9 May 2006), p. 15. Rear Admiral (Ret'd) W.R. Rourke, suggested that the term large naval vessels might reasonably include vessels of some 1200 tons and more, and could extend to vessels of some 25000 tons or more. *Submission 1*, p. 3. See also, Aerospace, Industrial and Marine Technology Pty Ltd, *Submission 15*, p. 1.

hands-on experience with various key projects. It was also seeking evidence from experienced officers who had a thorough understanding of industry's capability across all aspects of naval shipbuilding, specialists in relevant economic analysis and modelling, and high-ranking personnel with the knowledge to speak authoritatively on broader issues. These issues included Defence's strategic priorities, its procurement policies and practices and other matters far too numerous to mention here. Clearly no one person could have met these requirements.

- 1.10 To obtain information from Defence, the committee, on the following day, forwarded to the Department a list of 62 written questions on notice. It should be noted that Defence's response was comprehensive and greatly assisted the committee in conducting its inquiry. Furthermore, at its second appearance before the committee, a team of defence specialists led by Dr Stephen Gumley, Chief Executive Officer, Defence Materiel Organisation, and Lieutenant General David Hurley, Chief, Capability Development Group, Department of Defence, represented Defence.
- 1.11 The committee had to expend much time and effort in extracting information from Defence. Even then, it suspects that studies and analysis conducted by, or for, Defence, that may have been central to its inquiry, were not made available to it. The committee is particularly concerned about the lack of information on the comparative costs and productivity of major naval acquisitions. This matter is discussed in chapters 9 and 10.

## Public hearings and site inspections

- 1.12 The committee held ten public hearings in Canberra, Perth, Adelaide, Melbourne, Hobart and Sydney. A list of the committee's public hearings, together with the names of witnesses who appeared, is at Appendix 3.
- 1.13 As part of the inquiry process, committee members inspected a number of Australian shipbuilding sites including Henderson in Western Australia, Osborne in South Australia, Williamstown in Victoria, the Incat yard in Tasmania and the Australian Defence Industries (ADI) facility at Garden Island in Sydney. Committee members found these visits invaluable in gaining an insight into the industry, how it operates, the challenges it faces and some of the solutions that industry is putting forward to improve efficiency and competitiveness. The program for these visits is at Appendix 4.

## **Overseas delegation**

1.14 The committee was particularly interested in the rapid advances in technology and the shipbuilding industry's response to these changes. It was very much aware of the influences that global trends and international business alliances were having on Australian industry. To gain a better understanding of the industry, the Prime Minister gave his approval for the committee to go on an extra parliamentary delegation to inspect overseas shipyards.

- 1.15 In the second half of September 2006, the delegation visited South Korea and the United States to inspect shipyards and associated sites and to talk to a range of people involved in the shipbuilding and repair industry. This visit provided the committee with the opportunity to study first hand the developments taking place in South Korea and the U.S. It equipped committee members with a greater appreciation of global developments and trends and helped them enormously in assessing the evidence before the inquiry and in formulating recommendations. Indeed, the visit was an integral part of the inquiry process.
- 1.16 The committee acknowledges the assistance of the Prime Minister and the Minister for Defence in allowing the committee to undertake the overseas visit. Committee members appreciated this support.
- 1.17 The delegation report was tabled in the Senate on 29 November 2006. The program for the delegation visits is at Appendix 5.

#### Visit to South Korea



The delegation visited DSME's shipbuilding site at Okpo Bay, Geoje Island on the southeastern tip of the Korean Peninsula. Transport to the site was provided in DSME's helicopter, affording a good view of Okpo bay and the scale of DSME's shipping operation.



The delegation visited Hyundai Heavy Industries' shipyard at Ulsan and inspected HHI's engine manufacturing plant. An engine block hangs from the hall roof behind the delegation.

## Visit to the United States of America



The delegation with representatives of Lockheed Martin.



The delegation viewed a combat system demonstration at Raytheon.

# Site visit in Australia



The committee visited Tenix's Module Hall at Williamstown on 27 April 2006. Senator George Campbell (far left), Senator Russell Trood (centre) and Senator Concetta Fierravanti-Wells (right).

#### **Structure of the report**

#### 1.18 The report is divided into four broad parts:

Part I—Background to naval shipbuilding—provides context for the assessment of Australian industry by looking at trends in naval shipbuilding both overseas and in Australia.

Part II—Australia's capacity to produce large naval vessels—considers the four main elements of Australia's naval shipbuilding industry in the context of their capability to build large naval vessels—the prime shipbuilders, the network of suppliers that make up the broader industrial base of the naval shipbuilding sector, infrastructure and workforce.

Part III—Productivity of the Australian naval shipbuilding and repair industry—examines the comparative economic productivity of the Australian shipbuilding industrial base including the comparative economic costs of maintaining, repairing and refitting large naval vessels throughout their useful lives when constructed in Australia vice overseas. It also takes account of the broader economic benefits that accrue from building ships in Australia as well as the role of Australia's national security in influencing procurement decisions. Having examined Australia's capacity to produce large naval vessels and the productivity of Australia's naval shipbuilding and repair industry, the committee concludes Part III with its main finding on the industry in Australia.

Part IV—The role of governments—draws together and discusses the major themes that emerged in the body of the report, with the focus on how governments generally, and Defence more specifically, can assist the industry become more efficient and productive.

## Acknowledgments

1.19 The committee thanks all those who contributed to the inquiry by making submissions, providing additional information, hosting site visits or appearing before it to give evidence.

## Part I

# Background—developments in the shipbuilding and repair industry overseas and in Australia

Part I of the report provides the necessary context for understanding developments in the shipbuilding industry in Australia and the likely challenges ahead for the industry. Firstly, it looks at overseas trends and in particular focuses on the shipbuilding industry in the United States and Europe particularly the United Kingdom. It is concerned with the demand for naval vessels, advances in technology, changes to the way ships are built, the skills needed in the construction of a modern naval ship, and the international market for such ships.

Secondly, it provides an overview of the shipbuilding and repair industry in Australia, tracing the emergence of the major shipbuilders in order to explain the current structure of the industry.