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Performance Audit

# Australian Industry Involvement Program

## Department of Defence

Australian National Audit Office

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Australian National
Audit Office

Canberra ACT
6 June 2003

Dear Mr President
Dear Mr Speaker

The Australian National Audit Office has undertaken a performance audit in the Department of Defence in accordance with the authority contained in the *Auditor–General Act 1997*. Pursuant to Senate Standing Order 166 relating to the presentation of documents when the Senate is not sitting, I present the report of this audit and the accompanying brochure. The report is titled *Australian Industry Involvement Program.*

Following its presentation and receipt, the report will be placed on the Australian National Audit Office's Homepage—http://www.anao.gov.au.

Yours sincerely

P. J. Barrett
Auditor-General

The Honourable the President of the Senate
The Honourable the Speaker of the House of Representatives
Parliament House
Canberra ACT

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# Contents

# Abbreviations

| | |
|---|---|
| ADATS | Australian Defence Air Traffic System |
| ADF | Australian Defence Force |
| ADI | ADI Limited |
| AIG | Australian Industry Group |
| AII | Australian Industry Involvement |
| AIP | Australian Industry Participation |
| AIPP | Australian Industry Participation Plan |
| ANAO | Australian National Audit Office |
| ANZ | Australian and New Zealand |
| ANZGPA | Australian and New Zealand Government Procurement Agreement |
| ASLAV | Australian Light Armoured Vehicle |
| BAeA | British Aerospace Australia |
| CCC | Canadian Commercial Corporation |
| CCP | Contract Change Proposal |
| CSP | Commercial Support Program |
| CTD | Capability and Technology Demonstrators |
| DDGM | Detroit Diesel General Motors |
| DIAC | Defence and Industry Advisory Committee |
| DISPS | Defence and Industry Strategic Policy Statement (1998) |
| DITR | Department of Industry, Tourism and Resources |
| DMCN | Defence Mobile Communications Network |
| DMO | Defence Materiel Organisation |
| DPPM | Defence Procurement Policy Manual |
| DSTO | Defence Science and Technology Organisation |
| FMS | Foreign Military Sales |
| GMDA | General Motors Defence Australia |
| IP | Intellectual Property |
| ISO | Industrial Supplies Offices |
| ISONET | Industrial Supplies Offices Network |

| | |
|---|---|
| JLC | Joint Logistics Command |
| JSF | Joint Strike Fighter |
| LOT | Life of Type |
| MHC | Minehunter Coastal |
| MILSATCOM | Military Satellite Communications |
| MRIK | Mission Role Installation Kit |
| OEM | Original Equipment Manufacturer |
| PBSs | Portfolio Budget Statements |
| ProMIS | Project Management Information System |
| RFT | Request for Tender |
| SIDAs | Strategic Industry Development Activities |
| SME | Small and Medium Enterprise |
| TLS | Through-Life Support |
| USA | United States of America |
| WBS | Work Breakdown Structure |

# Summary and Recommendations

# Summary

## Background

**1.** Created in 1986, Australian Industry Involvement (AII) is the major program through which Defence gives effect to government policy on Australian industry. It has been the major mechanism through which Defence has sought to develop and enhance capabilities in industry. AII policy objectives are to:

- develop and sustain strategically important capabilities in Australian industry to support ADF operations and Defence capability development; and
- maximise Australian industry involvement in Defence's procurement of goods and services, consistent with the government procurement policy objective of achieving best value for money to the Commonwealth.

**2.** The aim of Defence procurement is to achieve 'value for money' in acquisition of new Defence capabilities and support of current capabilities. AII supports that procurement aim. Capacity building in Australian industry is not an aim in itself for AII. Under the AII framework, Defence spending is to be directed to Australian industry when it is competitive with overseas sources, or to meet strategic and/or operational Defence requirements.

**3.** Defence's AII activities are important because Australian industry is a vital component of Defence capability through its contribution to development of new capabilities and its role in the national support base. Also, the magnitude of Defence spending in industry makes it important, from a whole-of-nation perspective, that the funds are used to best effect. Under Defence's procurement rules, tenders of $5 million or more must have AII plans. Defence's AII activities focus on capital equipment projects. Defence spending on those projects was $2.5 billion in 2001–02.

**4.** A 2001 government policy statement indicated that the traditional approach in Defence policy for industry is to be replaced by a strategic approach to Defence procurement based on sustaining key industry capabilities critical to Australia's national security needs, through better demand management of Defence capability requirements and by moving away from a project-by-project approach into long-term, multi-project packages based on related capabilities.

**5.** The objective of the audit was to assess the extent to which the AII Program has achieved the objectives indicated above.

## Audit findings and conclusions

### Defence strategic and operational objectives

**6.** In the absence of reliable figures on the cost of administering the AII Program across Defence, the ANAO estimated that the cost of the AII activities in the Defence Industry Programs Section, which is in the Industry Division of the Defence Materiel Organisation (DMO), was about $320 000 a year. The resources in Industry Programs Section are a fraction of the total resources used for AII activities in the rest of Defence, principally for capital projects, which have to comply with AII policy requirements. No estimate of the cost of those resources was available from Defence. As well, it was not practicable to compile the necessary data in the audit.

**7.** In discussions during the audit there was near-unanimity among AII practitioners and managers in Defence and industry that the degree of prescription in the AII framework, and Defence's well structured approach to ensure that national industry considerations are addressed in procurement, were indispensable in achieving a reasonable outcome for Defence and Australian industry.

**8.** The lack of specific guidance as to what defence industry capabilities are required is a significant omission from Defence industry policy and makes it difficult to determine how well the strategic objectives of the Program are being met. As part of recent government initiatives, Defence is to supplement existing guidance on Defence priorities for industry by industry sector plans. Defence considers that very substantial public guidance has been released, detailing the strategic priorities for Australian industry, through the Defence White Paper, *Defence 2000—Our Future Defence Force*, and *Defence Needs of Australian Industry*, of which three editions were published from 1997 to 2000. The ANAO sees merit in Defence also conducting an early review of its documentation on Defence priorities in Australian industry, with a view to ensuring their currency on critical competencies in Australian industry.

**9.** The ANAO could not find any evidence of a systematic endeavour to gain synergies by linking the AII plans of one capital equipment project with those of any other project. For about a decade, Defence policy for industry has featured a requirement to link separate capital equipment projects; connecting similar technologies to achieve available economies of scale, as well as the benefits of commonality; and obtaining more sustainable flows of work to industry. The ANAO considers that identification of critical capabilities in Australian industry would help Defence decide how to best create and sustain those capabilities across projects.

## Requirements for ANZ sourcing

**10.** The Australia-wide Industrial Supplies Offices (ISO) network provides information on industry capabilities throughout Australia. Defence procurement policy documents clearly state the need for consultation with the ISO network, for all proposed tenders for $5 million or above, where the supplier is not proposing 100 per cent ANZ content. The ANAO found that consultation with the ISO network by Defence and its contractors was inadequate and that there is a need for Defence to rejuvenate the use of the network.

**11.** In respect of initiatives seeking to link Australian firms with global supply chains, as is occurring in the US-led Joint Strike Fighter (JSF) project, it is not clear at present how such initiatives are connected to current AII policy and practices. The ANAO considers that this should be addressed by Defence as part of the preparation of a document that consolidates agreed policy on industry and measures from recent and on-going industry-related initiatives. A related initiative under AII, linking Australian production of turrets for the Australian Light Armoured Vehicle (ASLAV) to the overseas manufacturer's supply chain, has been successful in job creation, introduction of advanced technology, and exporting. The strategic benefit to Defence in terms of the direct contribution of the manufacturing facility to maintenance, support and modification of the ASLAV vehicle is, however, difficult to quantify. No comprehensive assessment of that contribution was available.

**12.** Information on AII commitments and achievements in major capital equipment projects is compiled on Defence's Project Management Information System. The figures include percentages of AII commitments of total contract prices, and achievements made against those commitments. These figures are unreliable and unauditable. There are substantial difficulties in collecting AII figures based on value-added in Australia. The accounting and management information systems of Defence and contractors do not readily separate out the imported component of supplies obtained in Australia. As a result, figures purporting to show AII achieved against project expenditures or contracts signed are of limited value.

**13.** In view of the limitations of a quantitative approach to evaluating AII, the ANAO considers there would be merit in adopting a qualitative approach. Such an approach is needed to assess the strategic value of Australian industry capability developed and sustained as a result of Defence's AII activities. Defence has not yet attempted such an approach.

## Overall conclusions

**14.** The ANAO found that Defence had set up a well structured approach to ensure that AII considerations are addressed in procurement phases of capital equipment projects. Stakeholders in the AII Program, including industry, with near-unanimity, agreed that the AII framework is an essential element in achieving reasonable outcomes in Defence procurement for Australian industry and Defence. Evidence in the audit also indicated that, in contract negotiations for major contracts, Defence, in addition to seeking to obtain best value for the Commonwealth, usually presses for a good deal for Australian industry and generally achieves a reasonable outcome for the latter. Exceptions tend to occur when the requirements of the Defence users, including their need for speedy acquisition, overwhelm the AII aspects.

**15.** In the four major capital equipment projects used as case studies, the ANAO found that ANZ content targets were met and, in some cases, exceeded. Defence used the AII Program to develop and sustain capabilities in Australian industry which have provided strategic benefits to Defence in terms of better through-life support (TLS) by shorter lead-times in the procurement of parts, faster turn-around times for repairs, and the ability to carry out modifications to meet Defence operational and/or capability requirements. Rejuvenation in the use by Defence and its contractors of the ISO network in capital equipment projects would also help ensure that Defence is able to make best use of the capabilities in ANZ industry.

**16.** Defence had no agreed outcomes or outputs to be achieved in the pursuit of either of its AII Program objectives. Although, in the four case studies, ANZ content targets were met, there was no reliable information available in Defence on the cost-effectiveness of the Australian industry capabilities created under the projects or how they contributed to high level defence or project outputs and outcomes. The ANAO could not find any systematic reporting to Ministers on significant developments in the AII Program, as a whole, nor on AII aspects in the four capital equipment projects examined in the audit.

**17.** In the absence of quantitative and/or qualitative performance measures for the AII Program as a whole, it was not practicable for Defence to demonstrate whether, over the many years of its existence, the AII Program has been making real progress, or is losing ground, in seeking to meet its objectives.

**18.** The new strategic approach to Defence procurement, announced in 2001, brought to notice that Defence lacked specific guidance as to what key defence industry capabilities are required. Defence was to define the key industry capabilities that it requires and develop long-term strategies to sustain them. The ANAO sees merit in Defence reviewing its documentation on Defence

priorities for Australian industry, with a view to ensuring their currency on critical competencies in Australian industry. Identification of those competencies could provide the basis for a strategic approach in the AII Program. It is also needed to meet a long-standing government requirement to link separate capital equipment projects, connecting similar technologies to achieve available economies of scale, as well as the benefits of commonality and sustainable flows of work to industry.

# Recommendations

*Set out below are the ANAO's recommendations, with report paragraph references. Defence agreed to the recommendations. Defence's responses are in the body of the report. The ANAO considers that Defence should give priority to recommendations numbered 1, 2, 3 and 6.*

**Recommendation No.1 Para. 2.19**

The ANAO recommends that, to adequately inform Government and Parliament of progress in a significant area of Defence activity, Defence report its performance in achieving the Government's Australian Industry Involvement Program objectives against key performance indicators derived from agreed outputs and outcomes for the Program.

**Recommendation No.2 Para. 2.33**

The ANAO recommends that, as early as possible in 2003–04, Defence review *Defence Needs of Industry 2000*, with a view to ensuring the document's currency on critical competencies in Australian industry.

**Recommendation No.3 Para. 2.64**

The ANAO recommends that, to achieve available economies of scale as well as the benefits of commonality and a more sustainable flow of work to industry, Defence put in place a system that links its capital equipment acquisition and through-life support across individual projects sharing similar technologies.

**Recommendation No.4 Para. 2.71**

The ANAO recommends that Defence incorporate agreed policies on industry, and measures from recent and on-going industry-related initiatives, in a consolidated document readily available to Defence and industry personnel.

**Recommendation No.5 Para. 2.85**

The ANAO recommends that, in order to achieve continuous improvement in the Defence/industry relationship, Defence continue a program of attitudinal surveys in Defence and industry; identify the reasons for any significant under-performance; and develop, implement and monitor any necessary remedial measures.

**Recommendation No.6 Para. 3.26**

The ANAO recommends that, to make best use of the capabilities in Australian industry, Defence rejuvenate the use of the Industrial Supplies Offices network in procurements and ensure that the network is engaged early and constructively in the Defence procurement cycle.

**Defence agreed to all of the above recommendations.**

# Audit Findings and Conclusions

# 1. Introduction

*This chapter sets out the background to the Australian Industry Involvement Program and outlines government guidelines for Defence's policy on industry. It also outlines the audit objectives and the structure of the report.*

## Background

**1.1** Australia was a significant producer and exporter of military equipment during and immediately after the 2nd World War. In the course of the next two decades, Australian Defence-related industry focused on the domestic market and down-sized, reflecting a reduction in requirements of the Australian military.

**1.2** The Defence approach to industry since 1947 parallels the wider Australian government policies for the economy and industry.[1] The industry environment was highly regulated until the 1980s. Until then, Defence industry interaction was characterised by an interventionist approach: direct investment in facilities and the means of production; and government operation of factories such as military aircraft production and naval dockyards.

## Government guidelines for the current Defence policy on industry

**1.3** The increasing role of Defence industry as part of national defence has been acknowledged in Defence policy documents for at least 15 years. The 1987 Defence White Paper made a commitment to industry that Defence would rely on it to support, maintain and develop the Defence Force.[2] The importance of industry to Defence has been acknowledged by successive Australian governments. This is embodied in concepts such as industry as the 'fourth arm of defence'.[3]

**1.4** Over the last decade, there have been a number of enduring policy guidelines on Australia's Defence policy for industry. The main ones were as follows.

- Spending on Australian industry is not a Defence objective in its own right.[4]

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1 'Defence' comprises the Department of Defence and the Australian Defence Force (Navy, Army and Air Force).

2 *The Defence of Australia*, Department of Defence, 1987.

3 *Defence Policy and Industry, Report to the Minister for Defence,* Department of Defence, November 1992.

4 'Australian' industry in AII, with some exceptions, means Australian and New Zealand industry. See para. 3.3.

- Defence procurement is subject to the Commonwealth Procurement Guidelines. In the period under review, these guidelines required that Australian and New Zealand firms be given equal consideration and fair opportunities in competing for government contracts.[5] Defence is to source its requirements from the suppliers offering best value for money. Best value for money is usually (but not exclusively) assessed by way of a competitive bidding process.
- Defence industry policy is to promote strategically relevant capabilities in Australian industry.[6]
- Defence industry objectives (in line with broader national microeconomic policies) aim for an innovative, internationally competitive, Australian industry which makes use of export opportunities.[7]
- In general, Defence is not to pay a premium for placing work in Australia except where the work is of high strategic importance (and, explicitly or implied in practice, when Defence is the only or dominant customer).[8]
- There are acknowledged problems for industry caused by great fluctuations in Defence's demands on particular industry sectors. The report of the Defence Efficiency Review stated that:

> Defence cannot ignore the impact of its business in those industry sectors where it is the dominant customer for strategically significant materiel and where it has good prospect of achieving its industry objectives through thoughtful timing and packaging of its demand upon industry. Where it is a major customer in any given area of industry, Defence should consciously manage its demand for goods and services with an eye to the likely impact of the resulting business on the structure and capabilities of that industry sector.[9]

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5 Equal treatment between firms in each of the Australian States and Territories and New Zealand is based on the Australian and New Zealand Government Procurement Agreement.

6 *Defence Policy and Industry, Report to the Minister for Defence,* op. cit., para. 1.2.

7 ibid., para. 1.2. In the early 1990s there were somewhat inflated expectations of the prospects for Australian defence-related exports. A combination of factors, including reductions in projected Defence expenditure in potential export markets and competition as a result of global overcapacity in defence industries following the end of the Cold War, led to a more realistic assessment of the potential of exports. *Future Directions for the Management of Australia's Defence—Report of the Defence Efficiency Review* (Department of Defence, March 1997, Canberra) concluded that our domestic base is such that we should regard {defence-related} export orders as windfalls rather than reliable income sources in most areas (p. 37). Defence policy and programs have continued to promote Defence exports by Australian industry through programs of modest size.

8 ibid., p. vii.

9 *Future Directions for the Management of Australia's Defence—Report of the Defence Efficiency Review*, op. cit., p. 175. The then Minister for Defence stated that 'Defence must manage more effectively the timing of demands for goods and services with a view to helping industry'. (Press Release by the Minister for Defence, *Defence Reform Program boosts local industry*, 21 May 1997).

**1.5** The enhanced profile of industry in Defence policy has been accompanied by increased resources spent by Defence in industry. Defence spending on capital equipment projects alone saw an increase from $476 million in 1982–83, to $1.4 billion in 1991–92, and $2.5 billion in 2001–02.[10]

**1.6** In implementing recent Defence capability plans, including government endorsed projects mentioned in the Government's White Paper, *Defence 2000—Our Future Defence Force*,[11] Defence expects to spend $47 billion on major capital equipment, and $19 billion on in-service support, over the 10 years from 2001–02. In addition, Defence, over that period, is to spend $10 billion on support to operations (e.g. fuel, food, pharmaceuticals, transport, and support to Defence bases). On that basis, Defence would spend an average of $7.6 billion a year for the purchase of goods and services over that period. This would make Defence a major, if not the major, Australian spender on such items. Appendix 2 summarises Defence's proposed new capital expenditure by industry sector from 2001–02 to 2009–10.

## Statements of intent on Defence's relationship with industry

**1.7** The enduring guidelines for Defence policy on industry, provided by successive governments (see paragraphs 1.3 and 1.4) have been accompanied by statements of intent aimed at helping to bring about a viable Australian industry base with viable firms.

**1.8** The audit took statements of intent in the 1992 *Defence Policy and Industry* Report and the 1994 Defence White Paper, *Defending Australia,* as a starting point, on the assumption that, in the eight to ten years since then, there would have been significant progress in their implementation. Actual achievement in their implementation is discussed in chapters 2 and 3.

**1.9** The following were statements of intent in the above-mentioned report and White Paper:

- Defence would introduce long-term supplier arrangements where suited to Defence requirements and industry conditions.[12]
- Industry conditions and the expected cost of tendering would be taken into account in the development of procurement arrangements, along with

[10] Unless otherwise indicated, figures in this report are based on Defence records or advice from relevant contractors and refer to actual expenditure. All values have been rounded off to the nearest decimal point. Totals represent the result of these rounded values. Chapter 3 discusses issues related to ANZ sourcing.

[11] *Defence 2000—Our Future Defence Force*, Defence Publishing Service, Canberra, 2000.

[12] *Defence Policy and Industry, Report to the Minister for Defence,* op. cit., p. vii.

a continuing emphasis on best value for money and open and effective competition.[13]

- Defence would sustain competitive pressures in longer-term supplier arrangements through management strategies, including regular audit of performance against benchmarks and 'sun-setting' (nominating a specified duration for the arrangements) to allow competition from other firms.[14]
- To assist Australian industry to better plan for and meet Defence's strategic industry requirements, Defence would issue 'a clear statement of strategic priorities' for local industry's support to Defence and 'key defence-related technologies' for the ADF's (longer-term) development.[15]
- An annual forecast of expected logistic support expenditure would be released. This forecast was be informed by industry capability planning statements to ensure arrangements include AII objectives.[16]
- To encourage greater AII in acquisition and TLS Defence would consider modifying the timing of its projects where this improved continuity of work-flow, encouraged the sustainability of high priority skills and did not jeopardise the capability of the ADF.[17]
- Where separate capital equipment projects share similar technologies, linkages would be established to achieve economies of scale, the benefits of commonality and a more sustainable flow of work to industry.[18]
- To allow Australian firms to develop or contribute to equipment and TLS solutions, Defence would supply industry with the earliest possible advice of capability requirements and release forward procurement plans as one of the steps to achieve this.[19]

**1.10** The substance of the statements of intent re-emerge in a number of more recent Defence policy documents:

- 1997 Defence Efficiency Review Report and its implementation through the Defence Reform Program;
- 1998 Defence and Industry Strategic Policy Statement (DISPS); and

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13 ibid., p. vii.

14 ibid., p. 16.

15 ibid., p. 16.

16 ibid., pp. vi, 19.

17 *Defending Australia: Defence White Paper 1994*, Australian Government Publishing Service, November 1994, para. 11.17.

18 ibid.

19 ibid., para. 11.18.

- 2000 Defence White Paper.

## The AII Program

**1.11** Defence's AII Program was created in 1986. AII replaced the Australian Industry Participation Program (AIPP).[20] AII is the major program through which Defence gives effect to government policy on Australian industry. It has been the major mechanism through which Defence has sought to develop and enhance capabilities in industry.[21] Through AII, Defence seeks to maximise the involvement of Australian industry in Defence acquisition projects and to ensure an Australian capacity to provide TLS for ADF capabilities.[22]

**1.12** Defence advised the ANAO that the Government's AII policy objectives are to:

- develop and sustain strategically important capabilities in Australian industry to support Australian Defence Force operations and Defence capability development; and
- maximise Australian industry involvement in Defence's procurement of goods and services, consistent with the government procurement policy objective of achieving best value for money to the Commonwealth.[23]

**1.13** Defence also advised that the aim of Defence procurement is to achieve 'value for money' acquisition of new Defence capabilities or the support of current capabilities. AII supports that procurement aim. Capacity building in Australian industry is not an aim in itself in AII. Under the AII framework, Defence spending is to be directed to Australian industry when it is competitive with overseas sources, or to meet strategic and/or operational Defence requirements.

**1.14** Defence's AII activities are important because Australian industry is 'a vital component of Defence capability both through its contribution to the development of new capabilities and through its role in the national support base'.[24] Chapter 2 of this report discusses how well the first of the two AII objectives has been met.

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[20] AIPP was set up to use the Australian Commonwealth Government's purchasing power to counteract the perceived unwillingness of international suppliers to yield valuable technological information to users. Its aim was to place work in Australian industry to develop Australia's defence-oriented manufacturing and support capabilities.

[21] *Defence Procurement Policy Manual,* Department of Defence, 1999, para. 430.

[22] *AII Manual.* Department of Defence, January 2001, pp. 1-1 and 1-2.

[23] Best value for money represents the best possible outcome for the Commonwealth, taking into account all relevant costs and benefits over the procurement cycle (Defence Procurement Policy Manual, Version 3.0, 2002, p. 1.2.1).

[24] *Defence 2000—Our Future Defence Force*, op. cit., p. 98.

**1.15** The second reason for the importance of AII arises from the magnitude of Defence spending (see paragraph 1.6). It is important from a whole-of-nation perspective that the large amounts expended by Defence in the purchase of supplies and services are used to best effect. That includes effective implementation of government procurement guidelines, including ensuring that Australian industry is provided with full, fair and reasonable opportunity to participate in projects. Chapter 3 deals with those aspects.

**1.16** The ANAO has been unable to obtain any reliable, or even indicative, figures for the cost of administering the AII program across Defence. On the basis of information provided by Defence and accrual-based costing data on personnel costs in the September 2002 Defence Manual of Costing, the ANAO estimated that the cost of the AII activities in the Defence Industry Programs Section in Industry Division of DMO was about $320 000 a year. However, the resources in Industry Programs Section are a fraction of the total resources used for AII activities in the rest of Defence, principally for capital projects, which have to comply with AII policy requirements. No estimate of the cost of those resources was available from Defence. As well, it was not practicable to compile the necessary data in the audit.

**1.17** Defence's AII activities are complemented by other Defence activities that support Australian business or encourage the participation of Australian industry in Defence business. These include the Commercial Support Program, promotion of research and development, and support for Defence exports. These activities were outside the scope of the audit.

## 2001 Defence review of procurement practices and industry policy

**1.18** The 2000 Defence White Paper indicated a new approach in Defence policy for industry. The White Paper stated the need to 'take a strategic approach to our defence industry base, and not to regard its capabilities as simply a by-product of procurement decisions'.[25] This strategic approach was developed in a submission to government in September 2001. The submission described Defence's traditional approach in its industry policy as promoting a commercial relationship with industry based on a project-by-project acquisition strategy. That was seen as a winner-takes-all approach that created an unpredictable 'boom and bust' for defence industry, resulting in short-term creation of project specific capabilities and skill sets rather than long-term sustainability of defence-critical industry capabilities.

[25] ibid., para. 9.1.

**1.19** Government endorsed the new strategic approach to procurement and industry policy in October 2001. The ANAO found that, in the public domain, the Coalition's Election Platform 2001 constitutes the main public expression of the new approach to be adopted.[26]

**1.20** The September 2001 submission noted the following features in the strategic approach to procurement and industry:

- A strategic approach to procurement based on sustaining key industry capabilities critical to Australia's national security needs, through better demand management of Defence's capability requirements.
- Responding to Defence's 'monopsonistic' (one buyer) market position in some industry sectors by changing Defence's competition policy arrangements for critical industry capabilities. The proposed arrangements involve the introduction of a 'two-tier' approach to industry, in which Defence 'develops a long-term commercial relationship' with the small number of Australian 'Tier One' prime-contractors (such as Tenix, Australian Submarine Corporation, BAE Systems, Thales, and Boeing Australia). The 'Tier One' relationships are to be actively supported by expected open competition at lower tier (subcontractor) level.
- Defence would move away from what it describes as a project-by-project approach by arranging individual acquisition projects into long-term, multi-project packages based on related capabilities. These packages would be offered to 'Tier One' companies, 'under a sole-source, restricted or 'follow-on business' arrangement, and structured to ensure the sustainability of key industry capabilities'.
- Industry is to be provided with information on Defence's total long-term demand for goods and services, to give firms the planning guidance and long-term certainty required to justify investment in Australian industry capabilities and skill sets required for national defence. Total Defence demand comprises planned new major and minor capital acquisitions, in-service support, Defence facilities, science and technology investment and general services.
- The two-tier approach described above is to be supported by new accountability and transparency measures such as open-book accounting, mutually agreed profit margins, benchmarking against international standards, use of third-party assessors, and programs of incentives and penalties for performance outside the specified range.

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[26] *The Howard Government—Putting Australia's Interests First—Election 2001—Our Future Action Plan—Strengthening Australia's Defences*, pp. 44-48.

- A significant omission from Defence industry policy is the lack of specific guidance as to what key defence industry capabilities are required in Australia. Defence is to define key industry capabilities that it requires and to develop long-term strategies on how to sustain them.

**1.21** Defence advised the ANAO that the role of the Defence and Industry Advisory Council (DIAC) complements the new strategic approach to procurement announced by government. Established in June 1999 to advise government on strategic matters related to achieving sustainable industrial support to ADF capabilities, DIAC is intended to be the 'peak body for defence industry' in a network of industry-government fora.[27] DIAC is chaired by the Minister for Defence, with the Parliamentary Secretary to the Minster for Defence chairing the meeting in the Minister's absence. The Industry Division of DMO provides the secretariat.

**1.22** DIAC membership is intended to represent all tiers of industry, drawn from defence and civil sectors. Members are appointed for two years with an option to extend. The DIAC's key functions include advising the Minister for Defence on the role of industry and wider national support for Defence, from a strategic and commercial perspective; facilitating communication between Defence and industry; and advising the Minister on issues which might impact on the sustainability of key industrial support for ADF capabilities. The DIAC normally meets three times a year at various locations. The Minister did not call a meeting of the Council in 2002.

**1.23** The ANAO notes that, at the time of the audit, AII policy and practices had yet to be reviewed systematically to ensure consistency with the new strategic approach.

**1.24** The ANAO's recommendations in this report are consistent with that approach and could assist in its implementation.

## The audit

**1.25** The objective of the audit was to assess the extent to which the AII Program has achieved the objectives of:

- developing and sustaining capabilities in Australian industry in support of the ADF and Defence capability development; and
- maximising the involvement of Australian industry in Defence procurement.

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[27] Media release, MIN 164/99, The Hon. John Moore, MP, Minister for Defence, *Senior Defence Industry Council Announced*, 2 June 1999.

**1.26** Audit criteria focused on the following issues:

- implementation measures through which Defence has given effect to government policies underlying the AII Program, including the incorporation of AII in the Defence capital procurement processes;
- the extent to which Defence has made cost-effective use of the AII Program and other means to create sustainable strategically important capabilities in Australian industry, including implementation measures of relevant elements of the 2001 Defence industry policy initiative;
- the effectiveness of the administrative processes, systems and procedures by which the Defence objectives of the AII Program have been developed and reviewed;
- achievements of the AII Program over time in pursuing Defence objectives; and
- performance assessment and reporting of the AII Program.

**1.27** The scope of the audit encompassed an examination of the AII framework and the administrative processes and practices through consultation with stakeholders and examination of Defence documentation. The audit also looked at four major capital equipment projects to examine the management of AII in those projects.

**1.28** The audit team conducted meetings with representatives from DMO, State and Territory authorities, DITR, Australian Business Limited, the Australian Industry Group (AIG), the Australian Industry Defence Network and firms in locations around Australia. Discussions were also held with Professor Paul Dibb of The Australian National University, Professors Peter Hall and Stefan Markowski of the Australian Defence Force Academy and senior procurement officials in the Swiss Department of Defence, Population Protection and Sport. The report makes some comparisons with experience in Switzerland, which faces similar defence industry issues to Australia in procurement and support of military equipment as a middle-ranking military and industrial country. The ANAO is grateful for the valuable assistance provided to the audit team in its consultations. Chapters 2 and 3 draw heavily on information obtained in these consultations.

**1.29** The ANAO engaged Mr Tom Hayes AO to provide expert advice in the audit and assist in its conduct with his experience in Defence acquisition management and wider public-sector management. The main audit fieldwork was conducted in the period from July to September 2002. Two discussion papers on audit findings were provided to Defence in November and December 2002 respectively. An exit interview was held in March 2003. The proposed report of

the audit was put to Defence for comment in April 2003 with report extracts also being given to relevant Defence contractors and ISONET. The report was completed after considering their comments, provided in May. The audit was conducted in conformance with ANAO auditing standards and cost $426 000.

## Report structure

**1.30** The report is organised into four chapters. Chapter 1 provided the Introduction. Chapters 2 and 3 examine the AII Program and Defence's efforts at meeting government requirements. Chapter 4 summarises the case studies on Defence's management of AII in four major capital equipment acquisitions.

# 2. Defence Strategic and Operational Objectives

*This chapter discusses performance assessment and reporting by Defence on the AII Program, partnering arrangements between Defence and industry, the need for a strategic approach to AII, the usefulness of the AII Program to Australian industry, and trends in the involvement of Australian industry in Defence's major capital equipment projects. It also discusses a range of issues affecting the Defence relationship with industry.*

## Performance reporting on the AII Program

**2.1** Created in 1986, AII is the major program through which Defence gives effect to government policy on Australian industry. It has been the major mechanism through which Defence has sought to develop and enhance capabilities in industry.[28] There is, however, little public reporting on AII's overall achievements.

**2.2** Defence's *Portfolio Budget Statements* (PBSs) *2002–03*, which are to 'provide detailed explanations and justifications of the proposed appropriations to Defence',[29] contain a number of references relevant to Australian industry:

- A competitive industry base should support a technologically-advanced ADF. In 2002–03 Defence will [inter alia]:
    - broaden its technical base (including improved technological transfer) by better links with industry, universities and other government research agencies;
    - continue the implementation of the Defence and Industry Strategic Policy Statement; and
    - strengthen links with industry to improve access to best-practice skills and innovative technologies.[30]
- Initiatives for 2002–03 include [inter alia]:
    - increasing government and industry involvement in capability definition and acquisition processes;
    - developing and implementing long term strategies for selected key industry capabilities that support the ADF;

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[28] *Defence Procurement Policy Manual, 1999*, para. 430.

[29] *Portfolio Budget Statements 2002–03, Defence Portfolio, Budget Related Paper Nos. 1.4A and 1.4C*, May 2002.

[30] ibid., p. 10.

- implementing the assessment of DMO's performance by contractors; and
- continuing to introduce alliance contracting.[31]

**2.3** Defence's 2001–02 PBSs also made reference to industry, as follows:

- improve the capability decision process, including a defined role for industry in the process;
- continue implementation of the Defence and industry policy statement;
- strengthen links with industry and universities to improve access to best-practice skills and innovative technologies;
- review theatre logistics systems in the light of the lessons learned from the sustainment of current and recent operations. This review, in conjunction with Joint Logistic Command, will focus upon providing an improved national support base; and
- increase government and industry involvement in capability definition and acquisition processes.[32]

**2.4** There is also no consolidated statement of the performance of the AII Program in recent Defence Annual Reports. Performance information included, in respect of AII, is disjointed and fragmentary and does not allow assessment of performance of the Program overall. For example, the Defence Annual Report 2001–02 comments as follows with reference to AII:

- Establishment of the *project development fund*—$10 million in 2001–02 and $20 million in 2002–03: targeted expenditure on project definition in the early stage of capital acquisition projects has the potential to save money through better definition of project concepts, better clarification of capability and acquisition options, and is to support early engagement with industry.[33]
- Implementation of the 2000 Defence White Paper—a range of reforms in Defence's capability decision making and acquisition processes include defining a role for industry in the capability decision process.[34]
- Continued implementation of DISPS and the release of a public version of the Defence Capability Plan with the intention of providing industry with greater certainty and a firmer planning base.[35]

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31 ibid., p. 98.

32 *Portfolio Budget Statements 2001–02, Defence Portfolio, Budget Related Paper Nos. 1.4A and 1.4C*, May 2001, pp. 10, 11, 27 and 101.

33 *Defence Annual Report 2001–02*, 25 October 2002, pp. 12-13.

34 ibid., pp. 29, 261.

35 ibid., pp. 30.

- Continued implementation of the Government's 2001 innovation statement, Backing *Australia's Ability*[36]—creation of a technology transfer and commercialisation office in the Defence Science and Technology Organisation (DSTO) intended to enable industry to capitalise on DSTO intellectual property and thereby improve industry's responsiveness to Defence's requirements.[37]
- Piloting of a 360-degree scorecard to measure DMO's performance from an industry perspective and assessment of the Defence/industry relationship by a purchaser/provider attitudinal survey and addressing of issues arising from that survey.[38]
- Mandating an industry involvement plan for all tenders and contracts over $5 million, and requesting that tenderers consult the Industrial Supplies Offices network to identify opportunities for Australian and New Zealand industry. For acquisitions of military significance, more stringent industry requirements apply, aimed at developing in-country support in pursuit of Defence self-reliance.[39]
- Engaging industry early in the capability development phase and providing it with forward planning guidance through the development of key industry sector plans for naval shipbuilding and repair; aerospace; electronic systems; and land and weapons.[40]

## Desired outcome and output

**2.5** The Government's desired outcome for the Defence organisation as a whole is:

> *The defence of Australia and its national interests.*[41]

**2.6** A part of a renewal process in which Defence reviewed its fundamental management settings, Defence developed a new performance framework which

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36 ibid, pp. 30, 222.

37 The relationship between DSTO and industry was not within the scope of this audit. That relationship presents significant issues related to the application of science and technology in Defence, the management of related intellectual property and related general capacity building in Australian industry which were outside the main activities of AII. The audit team reviewed the objectives of the DSTO's Capability and Technology Demonstrators (CTD) Program. The stated aim of the program is to explore the feasibility of advanced technology to meet Defence high-priority capability requirements. Industry capability development is neither a focus of CTD nor a driver in the approval of CTD projects. Annual funding for CTD is of the order of $10 million.

38 *Defence Annual Report 2001–02*, op. cit., p. 260.

39 ibid., p. 27.

40 ibid., p. 266.

41 *Portfolio Budget Statements 2002–03, Defence Portfolio, Budget related Paper Nos. 1.4A and 1.4C*, May 2002.

was to integrate financial and non-financial performance reporting through a balanced scorecard approach. In November 2001, Defence finalised a *simplified Whole-of-Defence **Strategy** Map* with 20 strategic objectives.[42] Australian industry and AII are particularly relevant to Defence's strategic theme of *Making use of Science and Technology and Australian industry*, in the Enabling Programs, which has two strategic objectives, E (Enabling) 10 and 11:

> E 10. Create the industry base environment to support capability development operations.
>
> E 11. Achieve excellence in acquisition and logistics.[43]

**2.7** Australian industry is relevant to Defence's strategic objectives E1 (Achieve seamless and sustainable support), E3 (Manage capability on a whole-of-life basis) and E10 (Understand and manage costs). However, there is no formal linkage in the simplified Defence strategy map.[44]

**2.8** Defence reporting of the outcome of the AII Program as a whole has been exclusively in terms of the levels of Australian content achieved. Defence has concentrated on compiling performance information on AII that relates to ANZ content in major capital acquisitions. That performance information, drawn from major capital equipment projects, is included in internal Defence documents compiled by Industry Division in 2000 and 2001. The quality of information in these reports, including its reliability and usefulness, is discussed in chapter 3.

**2.9** The ANAO has been unable to find any consolidated performance reporting (publicly or internal in Defence) as to what the AII activities, and the resources expended in their pursuit, have achieved in terms of creating enduring industry capabilities in support of Defence capability development or Defence operations. Compilation of reliable data on resources applied to development of various industry capabilities, across projects, would help in identifying potential duplication and also in identifying and obtaining synergies across projects.

**2.10** Defence's administrative arrangements, systems, processes and practices to ensure that appropriate Defence policies for industry are developed and implemented are important for the cost-effective spending of a major part of Defence outlays. Development and sustainment of strategically important industry capabilities are essential for Defence to achieve its desired outcome: the defence of Australia and its national interests. Defence spending in industry is also important to a number of Australian regional areas and States and Territories.

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[42] *Defence Annual Report 2001–02*, 25 October 2002, pp. 12-13.

[43] ibid., p. 13.

[44] ibid., p. 10.

**2.11** Performance information on AII in Defence's PBSs, outlined above, tended to be discrete measures to improve Defence's relationship with industry. They had a significant aspirational element,[45] which was difficult to measure, and were not linked to an endorsed outcome or output for the AII Program. The information provided in Defence's annual reports does not allow assessment of overall performance of the AII Program.

**2.12** The ANAO was advised by Defence that it had clear, public guidance on the policy objectives for AII. The first objective (foster strategically important capabilities in Australian industry) was discussed in DISPS and re-affirmed in the 2000 Defence White Paper. The second objective was to maximise Australian industry involvement in accordance with government procurement policy, which, in the Defence context, was articulated in the Defence Procurement Policy Manual (DPPM).[46]

**2.13** The ANAO's report[47] on performance information in PBSs recommended that agencies review their performance information to ensure that their effectiveness indicators focus on each agency's particular contribution to a government policy outcome and that output indicators actually measure the designated characteristics to the extent practicable or provide a suitable assessment of its impact. The ANAO also recommended that agencies develop appropriate performance targets for the performance information in their PBSs. Defence agreed to both recommendations.[48]

**2.14** The Department of Finance and Administration has distinguished outcomes from outputs as follows:

> Outcome and output structures reflect an agency's business and enable sound performance reporting to Parliament. Outcomes reflect Government's objectives and priorities and their community impact. Outputs contribute to outcomes, and are specified by price, quantity and quality.[49]

**2.15** The ANAO could not identify any government or Defence endorsed outcome or output to be achieved by either of the AII objectives. Nor was there any reliable information on the overall cost of the AII activities.

**2.16** Furthermore, there were no quantitative or qualitative performance measures for the AII Program as a whole, against which Defence measured the performance of the Program. Therefore, it was not practicable for Defence to demonstrate whether, over time, it has been making real progress, or is losing ground, in the pursuit of either of the two AII objectives.

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[45] Audit Report No. 18 2001–02, *Performance Information in Portfolio Budget Statements*, p. 16.

[46] *Defence Procurement Policy Manual, Version 3.0, 2002*, 19 February 2002.

[47] *Performance Information in Portfolio Budget Statements, op.cit.*

[48] ibid., pp. 19-20.

[49] *Department of Finance and Administration Annual Report 1999–2000*, Glossary.

**2.17** The ANAO could not find any systematic reporting to Ministers on significant developments in AII either for the AII Program as a whole or on AII aspects in the four capital equipment projects examined in the audit. Given the importance of AII, and in the interests of accountability, Government and Parliament should be given meaningful performance information on Defence's progress in achieving the Government's two AII objectives.

**2.18** The ability to measure progress against program objectives is also an integral part of good program management. Defence would also benefit from good performance information on the AII Program by identifying trends both in Australian industry capacity to meet Defence requirements and the extent of use of ANZ industry, and to take remedial action when appropriate. Formulation of outputs and outcomes for the AII activities, and key performance measures for them, would be a major step towards a meaningful assessment of Defence's performance in meeting the two AII Program objectives.

## Recommendation No.1

**2.19** The ANAO recommends that, to adequately inform Government and Parliament of progress in a significant area of Defence activity, Defence report its performance in achieving the Government's Australian Industry Involvement Program objectives against key performance indicators derived from agreed outputs and outcomes for the Program.

### *Defence response*

**2.20** This recommendation is agreed.

## Introducing partnering arrangements with industry

**2.21** The 2001 initiative on a strategic approach to Defence procurement and Australian industry recognises, that, given the limited volume of the Australian demand for some specialist defence supplies, there may be a need to channel that demand to one supplier, under partnering arrangements, in order to ensure long-term survival of particular industry capabilities.

### *Partnering charters*

**2.22** In respect of Defence partnering with firms, Defence and its major equipment suppliers have had (alongside formal contracts between the two parties) partnering type agreements or signed commitments for many years. Examples are:

- Jindalee Operational Radar Network Partnering Charter;

- Integrated Team Charter with Raytheon Systems Company, British Aerospace Australia and CAE Electronics on the AP-3C Operational Mission Simulator and Systems Engineering Laboratory Mission Simulator;
- HS 748 Navigation Update Project Strategic Partnering Charter, with British Aerospace Australia Limited (2 October 1997);
- Lead-in Fighter Partnering Agreement, with British Aerospace Military Aircraft (4 September 1997); and
- Partnering Charter between the Australian Department of Defence and Rolls-Royce Plc (February 1997).

**2.23** All of the above partnering documents stress the importance of meeting contractual obligations. Except for the last charter listed above, the partnering agreements refer to specific capital equipment projects. Such agreements do not necessarily prevent problems in the relationship between contractors and Defence or facilitate management of relationships when problems arise. This was evident from a review of partnering agreements carried out by a consultancy for Defence. The review[50] indicated that, given the importance attached to contractual obligations, Defence tended to 'suspend' partnering principles when significant problems in contract delivery arose and that, when it did, there was so little trust left between the parties that any attempt to return to partnering was likely to be unsuccessful.

**2.24** Successful strategic partnering between private sector firms tends to be based on complementarity in the capabilities of the firms; a trust gradually developed and tested over years, between purchaser and provider, encompassing the capacity of the provider to deliver; acceptance of a reasonable and agreed profit margin or a scale of profit; and willingness to adapt to changes through negotiations. To reflect the commitment to a relationship of trust, strategic partnering is characterised by a willingness to seek a win/win solution in unexpected situations rather than insistence on detailed specifications and contract deliverables, irrespective of changed circumstances.

**2.25** Defence's experience with partnering with industry points to the difficulty of reconciling the fundamental partnering principle of the importance of trust, with the need to protect the Commonwealth's interests, traditionally through contracts specifying the precise contract deliverables (including delivery schedules, qualitative and quantitative aspects) and sanctions such as liquidated damages to give weight to those provisions. The situation could be different with a genuine sharing of accountability for performance.

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[50] *Status Report—1999 Review of Partnering Projects*, Department of Defence, 23 April 1999.

### *Partnering and the 2001 Strategic Approach to Defence Procurement*

**2.26** The characteristic of strategic partnering in industry is not readily reconcilable with the traditional means to determine 'value for money' and the established means to protect the Commonwealth's interests. Genuine adoption of a partnering framework may mean that the Commonwealth forgoes some traditional interpretations of safeguards of its interests. A range of new accountability and transparency measures have been proposed to supplement, and, in appropriate cases, replace, traditional safeguards, to protect the Commonwealth's interests. Measures proposed include open-book accounting; setting mutually agreed profit margins; benchmarking against international standards; using third party independent assessors; and devising a program of incentives and penalties. Such measures are an integral part of the 2001 Strategic Approach to Defence Procurement.

**2.27** Past Defence initiatives on partnering with industry have not resulted in sustained improvements in the overall relationship between industry and Defence. Compared with previous efforts, there are two noteworthy differences in the 2001 Strategic Approach to Defence Procurement and related initiatives, for example in the US-led JSF project. First, there has been early, comprehensive and direct participation of Australian industry in the formulation of industry sector plans and strategies. Second, these policy initiatives have been part of an integrated set of proposals, benefiting from the lessons learnt in previous endeavours to introduce partnering principles into the Defence/industry relationship, and including the adoption of a wide-ranging consultative framework with industry in individual programs such as JSF (see paragraphs 2.82-2.84).

**2.28** The closer involvement of industry in the formulation of Defence plans and strategies for industry may help to produce realistic and practicable solutions of the challenges posed in identifying a future path for the various Defence industry sectors. It may also provide added impetus to ensure that the strategies and plans developed are translated into actual results.

## Strategic approach to the AII Program

**2.29** The 2000 Defence White Paper states that:

> Australian industry is a vital component of Defence capability, both through its direct contribution to the development and acquisition of new capabilities and through its role in the national support base. So a strong industry base benefits

> Defence. We must take a strategic approach to a defence industry base, and not regard its capabilities as simply a by-product of procurement decisions.[51]

**2.30** The approach in the White Paper is reinforced in the 2001 initiative on a strategic approach to Defence procurement and Australian industry, outlined in chapter 1. In that initiative, the lack of specific guidance as to what key defence industry capabilities are required was noted by Defence as a significant omission from its industry policy. As part of that initiative, Defence was to define the key industry capabilities that it requires and develop long-term strategies on how to sustain them.

**2.31** Defence advised the ANAO that industry sector plans would supplement existing guidance on Defence priorities for industry. The plan for naval shipbuilding and repair[52] was released publicly in August 2002 and is to be considered by the Government soon. Plans on the aerospace; electronic; and land and weapons sectors are being drafted. The ANAO considers that, as these plans are completed, and the Government endorses industry capabilities of high priority to Defence, Defence should translate these priorities into critical competencies for Defence in the ANZ industry base. These critical competencies could then inform Defence's AII Program, to form the basis of decisions for the selection of industry capabilities to be given priority in Defence procurement. These competencies in industry could also be a major factor to be considered in the formulation of outputs and outcomes for the AII Program.

**2.32** The 2000 Defence White Paper identified priority areas for Australian industry support to Defence. The Defence document *Defence Needs of Australian Industry 2000*[53] details Defence priorities on Australian industry functions for the support and development of the ADF. It was to be updated annually. The ANAO considers that Defence should conduct a speedy review of the document, with a view to ensuring the document's currency on critical competencies in Australian industry. These could form the basis for the adoption of a strategic approach in the AII Program. It would not be unreasonable to expect that the work required would be in place for the administration and performance assessment of the AII Program during 2003–04.

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[51] *Defence 2000—Our Future Defence Force*, op. cit., para. 9.1.

[52] *Naval Shipbuilding and Repair Sector Strategic Plan*, Department of Defence, August 2002.

[53] *Defence Needs of Australian Industry 2000*, Department of Defence, June 2000.

## Recommendation No.2

**2.33** The ANAO recommends that, as early as possible in 2003–04, Defence review *Defence Needs of Industry 2000*, with a view to ensuring the document's currency on critical competencies in Australian industry.

### *Defence response*

**2.34** This recommendation is agreed.

## Usefulness of the AII Program: An industry perspective

**2.35** The audit team held extensive discussions with a wide range of Australian firms. A fundamental issue that arose in those discussions was whether there is a sufficient rationale for the ongoing life of the AII Program.

**2.36** A view put to the audit team was that the level and quality of Australian industry involvement in Defence projects should be left to market forces. In other words, contractors should be free to offer what they saw fit, without any minimum prescription in terms of an overall percentage or specific requirements for Australian industry involvement in the acquisition and TLS of equipment.

**2.37** This was not a widely held view. There was near-unanimity among AII practitioners and managers in Defence and industry that the degree of prescription in the AII framework, and Defence's well structured approach to ensure that Australian industry considerations are addressed in procurement, were indispensable in achieving a reasonable outcome for Defence and Australian industry in Defence's spending. In ANAO's round-table discussions involving more than one firm a common response to the question about the importance of that prescription was that 'we wouldn't be here if there was no AII.'

**2.38** The importance of AII was attributed by the interlocutors to the characteristics of the international armament industry. Firms providing military equipment (Original Equipment Manufacturers—OEMs) are usually highly specialised, with established subcontractors in their country of origin. OEMs tend to stay with their tried and tested suppliers.

**2.39** That tendency requires pressure to ensure that Australian suppliers are even considered. Market forces, and competitiveness of local suppliers in terms of price, quality and delivery time, are not necessarily sufficient to ensure that local suppliers get a fair opportunity to compete. There are several reasons for this as follows.

- Use of established supplier network is the natural and administratively easiest and cheapest way for the OEM to act (notional costs of 5–10 per

cent just to include another 'handling point' have been quoted to the ANAO). A degree of inertia has to be overcome to ensure that alternative suppliers are given a chance to participate.

- Proximity to the main location of the equipment supplier is an advantage, perceived by OEMs as facilitating communication and shortening supply lines.
- Lingering doubts by some overseas firms about the ability of Australian firms to deliver or their competitiveness on price. This may possibly be a result of the former heavy Australian industry protection and high value of the Australian dollar, and a lack of awareness by overseas firms of the diversity in the Australian economy and the specialist skills residing in it.
- The effort required to ensure that a new supplier meets specified military quality assurance requirements.
- OEMs tend to be able simply to charge their customers existing sub-contractors' price levels and to present Defence with their delivery schedules because these elements are not necessarily apparent to the customer.

**2.40** The ANAO also found that a degree of compulsion in AII is useful to the Australian management of subsidiaries of overseas firms because it provides leverage for management to seek greater Australian industry involvement from the overseas firms than might otherwise be the case.

**2.41** This is not to say that all OEMs transacting defence business in Australia reflect the above-mentioned inertia. The long history of AII has had an impact on the culture of firms operating in Australia.

**2.42** During the audit fieldwork, the benefit of AII was questioned by a number of representatives of smaller firms. They could not identify how the AII framework and policy were benefiting them. On further investigation in the audit, it transpired that the AII requirements placed on prime contractors by Defence were not necessarily known to some smaller firms. As subcontractors, they may not have been aware of the stringent requirements for contractors to meet Australian sourcing requirements down to detailed Work Breakdown Structures (WBSs).[54]

**2.43** The utility of Defence maintaining a requirement for the involvement of national industry was confirmed in discussions with Swiss military procurement authorities. Their experience matched that of Australian industry and Defence officials in that a compulsion for some work to be placed in national industry is

[54] A WBS is a graphic tool to display a project's statement of work showing a hierarchy of deliverables and services to be carried out.

seen as desirable to help ensure a satisfactory national industry and defence outcome.

## Percentage of AII Program content in major capital acquisition projects

**2.44** The proportion of AII Program content in major capital acquisition contracts seems to have reached a peak in 1990 at about 70 per cent. No auditable figures are available as to the changes in that percentage since. From indicative figures compiled by Defence's Industry Division for 2000–01, the ANAO calculated a cumulative value of 57 per cent AII in the new major capital equipment contracts entered on the Industry Division AII data base in that year.[55]

**2.45** Overall, Industry Division records a cumulative total value of all capital equipment projects reported on its system of $21.9 billion (as at 30 June 2001), of which AII requirements amounted to $12.9 billion (59 per cent of total project values). Table 3 (chapter 3 – page 69) sets out percentages, across industry groups, of contracted AII in 2000–01, of the total value of contracts for new Defence capital equipment.

**2.46** No consolidated figures were available from Defence about the level of AII after 2000–01.

**2.47** The ANAO understands that concern in the early 1990s, in the then Defence Acquisition Organisation, about a perceived decline in AII resulted in the establishment of WBSs in projects. This enabled Defence to specify the particular components of a project it required to be undertaken by Australian industry. This was to ensure a specified percentage of AII in individual projects. More importantly, in terms of aligning with Defence self-reliance objective, WBSs provide a means to identify those aspects of a project which ought to be carried out in Australia to meet Defence capability or operational objectives. The capabilities required to carry out those aspects form part of the critical competencies for Defence in Australian industry (see Recommendation No.2).

**2.48** While the overall percentage of AII may have declined over time, the current AII framework with detailed WBSs constitutes a reasonable mechanism for targeting and implementing strategically important work to be carried by Australian industry. However, no consolidated performance information on the strategic benefits achieved by the AII Program has been collected by Defence. As a result, the ANAO has been unable to assess whether the Program is

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[55] The lack of reliability of these figures is discussed in chapter 3. In 2000–01, six contracts, to the value of $2.6 billion, with $1.47 billion in AII requirements, were added to the cumulative total in Defence's AII database.

achieving any significant progress in creating and sustaining strategically important capabilities in Australian industry.

**2.49** The issue of the percentage of AII in Defence projects is discussed further in chapter 3.

## Competitiveness of Australian industry

**2.50** In the implementation of AII, a good understanding is necessary of the capabilities of national industry, and the economic feasibility of setting up specific industry capabilities for the comparatively small scale demands of the ADF. In terms of the ability of Australian industry to compete against overseas sources on price, delivery schedules and quality, the ANAO found that Australian prime contractors and Defence project officers were unaware of any persistent and pervasive element which would make Australian industry less capable or efficient in meeting Defence requirements than overseas contractors. Nor could evidence of such an element be found in Defence documentation.

**2.51** Defence and industry sources covered in the audit indicated that, in their experience, Australian Defence-related industry seems to have improved over time, in terms of its ability to put in place quality assurance and delivery schedule systems. In terms of costs and the quality of human resources, advice to the ANAO from industry sources engaged in larger scale engineering and information technology work overseas and in Australia indicates that labour cost in Australia is half to a third of that overseas, for skills and aptitudes which match, if not exceed, those of overseas counterparts.

**2.52** This is not to say that Australian sourcing would be cost-effective in all cases of Defence procurement. Defence is seeking to achieve self-reliance, that is the ability to carry out required military operations in pursuit of Australia's defence objectives. Self-sufficiency is not the aim. Defence policy for industry reflects an appreciation of economic realities. Defence's policy states clearly the need for 'support in-country for repair, maintenance, modification and provisioning—especially in war time when the ADF would need urgent and assured supply'.[56] High establishment costs and low production runs for the supply of items, such as guided weapons, may make it more cost-effective to stockpile key supplies rather than duplicate overseas production capacity.

**2.53** Industry expressed a strong concern to the ANAO that, in recent times, Defence tended to be more reluctant to use Australian solutions for advanced technology projects because of a number of major capital acquisition projects where industry has not delivered. The perception was that Defence officials

[56] *Defence 2000—Our Future Defence Force*, op. cit., p. 99.

may be tempted to employ risk-averse strategies by adopting apparently low-risk solutions to ADF requirements by simply purchasing off-the-shelf products in the international market-place.

**2.54** It was not within the scope of the audit to explore the merits of tailor-made solutions for Australian Defence requirements over existing solutions (adapted as necessary) in the international market. There has been no evidence that the performance of Australian firms has been worse than that of overseas firms.

**2.55** Meaningful comparisons of Australian with overseas solutions in the Defence field are difficult to make. In the Defence field, particularly in leading technologies, the ability to make evaluative comparisons is limited, if not impossible, because of a lack of transparency. Often, national security concerns and legal issues limit the public release of relevant information. Military organizations, all over the world, tend not to publicise deficiencies in their systems and the underlying reasons for them. The lack of information can lead to the assumption that another solution might have provided a better outcome, when this may not actually be the case.

## Through-life-support (TLS) across capital equipment projects

**2.56** Defence policy for industry clearly states the need for in-country support. DMO, formed in mid-2000, combines a capability purchasing and an in-service support stream. DMO is to give effect to a Defence capability life-cycle management model that takes a whole-of-life approach to capability development, acquisition and support.[57]

**2.57** As part of Defence acquisition reforms, tenders are to include a TLS phase in order to gain synergies from both the acquisition and the logistic support phases. The ability to provide logistic support for the equipment operated by the ADF tends to be of great strategic importance to meeting Defence self-reliance objectives, that is, for the ADF to carry out a range of military operations without external combat support.

**2.58** Sustainability of operations depends on a number of factors, including the ability to maintain, repair and modify equipment, and provide spares and consumable items such as ammunition. This is where Australian industry can make a most useful contribution to the national defence effort. Proximity to the customer and likely operational theatre tend to shorten supply times and costs. Familiarity with the customer also helps in developing appropriate custom-made solutions.

[57] *Defence Annual Report 2000–01*, 28 October 2001, p. 20.

**2.59** In contrast, reliance on international supply chains can involve protracted delays. Specific examples which emerged in the audit were delivery times of 200 to 400 days for some infrequently required but essential replacement parts. This was the result of a number of factors such as the batching of orders from several customers to gain economic runs in factories designed for larger-scale production, competition for factory capacity by higher-order customers, and long transport routes. Reliance on overseas sources has also proved disadvantageous in the past because of political decisions such as embargoes on the support of particular operations by particular countries.

**2.60** As Defence projects designed under the DMO's capability life-cycle model come on stream, greater involvement by Australian industry in the support of those projects could be expected. That capability model did not apply to the older projects considered as case studies[58] in the audit. Nevertheless, Defence for many years has acknowledged the importance of the link between acquisition and TLS.[59] Furthermore, in order to achieve available economies of scale, as well as the benefits of commonality and a more sustainable flow of work to industry, Defence was to establish linkages between capital equipment projects sharing similar technologies.[60]

**2.61** The case studies examined in the audit disclosed the following issues:

- In the Australian Defence Air Traffic System project, the major TLS aspect in the AII activities has not yet been achieved because of delays in obtaining and licensing the source codes.
- In the ASLAV project, repair and overhaul facilities have been created, which, in Defence's assessment, provide the capacity to perform practically every repair to the vehicle. However, dependence on imported parts led Defence to conclude that self-reliance has not been achieved.
- In the Military Satellite Communications (MILSATCOM) project, strategic repair capabilities have been created, but the large amount of work in progress does not yet allow assessment of the overall TLS benefits of AII in the project.
- In the Minehunter Coastal project, skills in industry and new industry capabilities of strategic value were created.

**2.62** Defence specified clearly the degree of TLS to be achieved by contractors in-country for those projects.

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[58] See chapter 4.

[59] For example in *Defending Australia: Defence White Paper 1994* (op cit), 'through-life support is integral to all stages of planning and decision-making. Through-life support will be considered in developing an acquisition strategy for each major project...' para. 11.16.

[60] ibid., para. 11.17.

**2.63** The AII plans examined showed that Defence sought to establish a link in industry TLS between the different phases of individual capital equipment acquisition projects. In the MILSATCOM project, Defence used the AII plan of the platform on which the satellite equipment was to be fitted. The ANAO found no evidence of a systematic endeavour to gain synergies by linking the AII plans of one capital equipment project with those of any other project. A requirement to link separate capital equipment projects, connecting similar technologies to achieve available economies of scale as well as the benefits of commonality and more sustainable flows of work to industry, has been a continuing feature in Defence and government Defence policy for industry for about a decade. Identification of critical capabilities in Australian industry, discussed earlier, is an essential step for Defence to be able to plan on how best to create and sustain those capabilities across projects.

## Recommendation No.3

**2.64** The ANAO recommends that, to achieve available economies of scale as well as the benefits of commonality and a more sustainable flow of work to industry, Defence put in place a system that links its capital equipment acquisition and through-life support across individual projects sharing similar technologies.

### *Defence response*

**2.65** This recommendation is agreed. This objective has been, and will continue to be, pursued by Defence where appropriate.

## Documentation of Defence policy for industry

**2.66** The Defence framework for harnessing Australian industry to meet Defence capability and operational requirements is set out in the January 2001 AII Manual. Defence policy on industry has been further updated and elaborated in other Defence documents such as PBSs, Annual Reports, and government policy documents including DISPS and the 2000 Defence White Paper. That White Paper identified the following as the areas attracting highest priority for support from Australian industry:

- combat and system software and support;
- data management and signal processing, including for information gathering and surveillance;
- command, control and communications systems;
- systems integration;

- repair, maintenance and upgrades of major weapons and surveillance platforms; and
- provision of services to support the peacetime and operational requirements of the ADF.

**2.67** DISPS envisaged that AII would be given a 'better focus on strategic priorities' by establishing a stronger link between industry objectives in Defence projects and broader Defence industry priorities described in Defence's publication *Defence Needs of Australian Industry*. This was to be achieved by Industry Issues Papers which were to help identify critical areas for Australian industry participation in major projects.

**2.68** There were three editions of *Defence Needs of Australian Industry*, the last in June 2000. Defence advised the ANAO that these documents were effectively overtaken by the Government's decision in October 2001 to commission a number of industry sector plans. The first of these, on Naval Shipbuilding and Repair,[61] was released in August 2002 and is awaiting consideration by government. The strategic in-country requirements identified in that plan would inform the content of AII plans to be negotiated with the proposed shipbuilding entity and other industry partners in that sector.

**2.69** In Defence's view, the ongoing challenge is to ensure that government policy is well understood within Defence and industry, and that the dual objectives of AII are actively pursued by those negotiating AII plans for inclusion in contracts. Defence considers that it has continued to highlight the Government's AII policy in all relevant documentation, notably the Defence Procurement Policy Manual (the latest version was released in February 2002), which gives considerable attention to AII and the government objective of maximising Australian content. AII related initiatives have also been mentioned in Defence Annual Reports and the PBSs. Defence noted that an update of the Defence AII Manual, last released in January 2001, has been deferred pending this ANAO report on the AII Program.

**2.70** Resources previously employed on AII activities in the last year or so have been allocated usefully to progressing policy initiatives such as the industry sector plans. The ANAO considers that, as those plans take shape and government agreement is obtained for policy positions and courses of action in the various industry sectors, AII documentation should be amended to reflect the agreed positions and measures. As part of those efforts, Defence may also be able to develop outputs and outcomes for the AII Program (see Recommendation No.1). It would further the understanding of AII and its implementation by personnel in Defence and industry if there were a consolidated document,

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[61] *Naval Shipbuilding and Repair Sector Strategic Plan*, op. cit., see para. 2.31.

possibly an updated AII manual, setting out current Defence policies, priorities, processes and systems that guide Defence's relationship and transactions with industry in respect of AII. The document should include reference to the implications for AII policies and activities of the Government's new strategic approach.

## Recommendation No.4

**2.71** The ANAO recommends that Defence incorporate agreed policies on industry, and measures from recent and on-going industry-related initiatives, in a consolidated document readily available to Defence and industry personnel.

### *Defence response*

**2.72** This recommendation is agreed. The Defence Materiel Organisation has commenced preparation of an appropriate document.

## Acceptability of Defence's policy for industry and its implementation

**2.73** In terms of the acceptability of Defence policy for industry, the ANAO found that the guiding principles of that policy are welcomed by industry. There was concern in industry that policy was not applied satisfactorily in practice. The application of AII principles in individual capital projects was seen as being heavily dependent on the sympathy of the Defence project manager to AII principles. Industry felt that, although a large number of Defence officials were genuine in seeking productive engagement with industry and made serious efforts to optimise their use of Australian industry, there were many who did not.

**2.74** That feeling is reflected in the results of recent Defence attitudinal surveys. Between 2000 and 2002 Defence commissioned three attitudinal research surveys of Defence purchasers and suppliers. The surveys form part of the DISPS initiatives to improve communication and understanding between Defence and industry. Survey results over the period indicate industry concerns about poor communication between Defence and industry, poor performance in timely negotiation of contracts, poor accessibility to information about future tenders or contracts for small and medium (SME) enterprise firms, and over-specification of Defence's requirements.

**2.75** Specific Defence concerns identified in the surveys include:

- half of Defence members surveyed perceived that industry is unable to support the defence effort;

- delays in the delivery of capabilities;
- poor management of risks, especially in the area of software development; and
- concerns about industry's measures of contract progress.

**2.76** The surveys highlighted industry concerns such as:

- only half of industry members surveyed saw the relationship with Defence as mutually beneficial;
- Defence is not implementing suitable strategies to improve contract progress; and
- Defence is failing to place significant emphasis on using in-country capabilities.

**2.77** The surveys indicate that there has been no noticeable improvement more recently in the relationship between Defence and industry.

**2.78** On the issue of improving the integration of industry into capability development and establishing new ways to involve industry in Defence business, neither industry nor Defence personnel thought Defence had been successful in these respects, with both parties indicating success rates of less than 30 per cent.[62]

**2.79** Industry indicated that Defence does not know the full potential of industry capability in Australia. The surveys concluded that Defence should work closer with industry in a partnership role; and streamline the tender preparation process to make it more cost and time effective for industry and Defence staff. Surveyed Defence personnel recognised that their performance is poor in regard to timely negotiation of contracts.

**2.80** The need for improvements in the relationship between Defence and industry has been recognised by both parties for many years. Exhortations for greater trust, cooperation, mutual understanding and respect between the parties have been made by well-meaning stakeholders in that relationship. There has been no evidence that Defence systematically analysed the survey results to identify the underlying reasons for unsatisfactory performance and to develop an integrated plan of remedial measures. As a result, it is not surprising that there is little evidence of improvements in the Defence/industry relationship.

**2.81** Some factors affecting the Defence/industry relationship have been outside the control of DMO, which is responsible both for developing Defence policy for industry and major procurement action from industry. An example is delays in Defence procurement action in major capital acquisition projects to allow their review by government when preparing the 2000 Defence White Paper.

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[62] *DMO Purchaser and Supplier Attitudinal Research*, Department of Defence, May 2001, p. 38.

The delays affected DMO's relationship with industry due to the uncertainties created and the costs incurred by industry to maintain project teams while Defence decision-making on major capital procurement was in suspension.

**2.82** Recent industry initiatives may help to improve the Defence/industry relationship. Defence and the Department of Industry, Tourism and Resources (DITR) have facilitated the participation of Australian industry in the global supply chain for the 3000–6000 aircraft expected to be built under the US-led JSF program.

**2.83** Defence advised the ANAO that 'new methods of marshalling Australian industry capabilities and developing capture strategies were created to have industry leader oversight of the process of winning work in the program and to match the JSF prime contractor's business management arrangements'. The new methods for engaging Australian industry are as follows.

- A JSF Industry Advisory Council, comprising senior executives of Australian companies involved in the JSF program, to ensure industry's input is coordinated and to provide advice to industry (through Industry Capability Teams) and to government (through the joint Defence/DITR Industry Strategy Group), on strategies to assist Australian industry to secure JSF work.
- Industry Capability Teams, formed by Australian companies to enhance their ability to promote Australian industry capability in the JSF program. They mirror the Integrated Product Teams, comprising the prime contractor (Lockheed Martin) and its partners, coalescing Australian industry capability related to Air Frame, Mission Systems, Vehicle Systems, Autonomic Logistics and Propulsion Systems.
- An Industry Strategy Group, bringing together the executives of Defence's Industry Division, the New Air Combat Capability Integrated Project Team, DITR and the Chair of the JSF Industry Advisory Council. The Group develops strategies and policy for government support to Australian industry in pursuit of JSF work.

**2.84** The ANAO notes that Defence and DITR have made considerable efforts to engage Australian industry in the JSF program, to coordinate their activities, and to facilitate the input of Australian industry. However, Defence/industry relationship issues extend beyond that program. Issues in the relationship that require long-term building of trust and mutual respect include a need to ensure that both Defence personnel and industry understand and implement AII policies. The ANAO considers that Defence should continue to monitor whether its relationship with industry is improving; identify the reasons for any significant under-performance; and develop, implement and monitor any necessary

remedial measures. Attitudinal surveys, initiated by Defence as part of DISPS, could play a useful role in monitoring the health of the Defence/industry relationship. Defence could use them as a basis for developing strategies to improve the relationship. The ANAO understands that Defence is considering ways to improve the reliability of these surveys as a diagnostic tool.

## Recommendation No.5

**2.85** The ANAO recommends that, to achieve continuous improvement in the Defence/industry relationship, Defence continue a program of attitudinal surveys in Defence and industry; identify the reasons for any significant under-performance; and develop, implement and monitor any necessary remedial measures.

### *Defence response*

**2.86** This recommendation is agreed.

## AII Program paperwork

**2.87** Industry advice to the audit team indicated that the need for the elaborate documentation requirements of AII, including the WBS system, was generally accepted. However, many industry representatives queried Defence's need for detailed documentation on the Australian sourcing of items which were known to be readily available in Australia from contractors having a history of using the Australian sources.

**2.88** Defence advice to the ANAO was that, in such circumstances, the Defence procurement framework allowed Defence in its tenders documents to seek details of supplies sourced overseas, rather than requiring a detailed submission on the Australian sourcing of each item. The frequency of this issue being raised by industry during the audit fieldwork indicates scope for wider adoption of an approach lessening the documentation requirements of industry in such circumstances.

## Volume of project documentation in smaller contracts

**2.89** Although the volume of AII documentation generally was not an issue for firms, industry repeatedly expressed a concern about the volume of project documentation required for smaller contracts. A case mentioned was a contract to the value of about $2 million. The firm estimated its cost for 'Defence paperwork' it had to complete at $600 000 (included in the costing of the contract and therefore paid by Defence). The cost was said to arise largely out the need

to meet Defence's requirements for project progress certificates for 173 milestones in the project, each with a Milestone Acceptance Sheet. This cost, when added to the cost of Defence's monitoring of the documentation, indicates scope to reduce contract documentation requirements in smaller contracts, which could result in lower contract prices and savings in Defence administrative costs.

## Modifying Defence demand to provide steadier workflows to industry

**2.90** There is little evidence of effective action taken by Defence to implement government intentions since the early 1990s to manage Defence demand in order to improve work-flows in industry. The realities of constraints in the Defence budget may well have been a major factor in this. Furthermore, in more recent times, the preparation of the 2000 Defence White Paper was accompanied by a temporary stop to new Defence capital equipment commitments.

**2.91** An internal Defence program evaluation report issued by Defence in December 2001, *Progress in Pursuing the National Support*[63] *Approach*, concluded that Defence needed to define what it wants from the National Support Base.[64] Defence has sought for a long time to define its requirements of industry, which is a major part of the National Support Base. A series of documents has been released over the last 10 years intended to provide industry with that information. Advice from industry to the ANAO was that those documents have assumed greater detail over time but still do not define what Defence sees as the strategically important capabilities in industry in sufficient detail to allow industry to make required resource allocation decisions.

**2.92** In 2001, in its submission to government on the need for a strategic approach to Defence procurement and Australian industry, Defence acknowledged the need to define critical skills and capabilities required from industry, and Defence's total demand over time. Working groups, including industry representatives, have been convened to define those requirements on an industry sector by sector basis.

**2.93** DMO's Strategic Logistics Branch is developing a better understanding of the capabilities in the Australian economy for supporting Defence and proposes to put in place arrangements to ensure that Defence can make optimal use of the national support base in military operations.

**2.94** Although the acquisition procurement and logistic support streams have both been in DMO since 2000, they do not yet have information systems which

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[63] National support is defined by Defence as *the integrated application of all the resources of the nation to maximise the defence capability of Australia.*

[64] The domestic support capability contained on the Australian mainland and Tasmania.

allow ready interchange of information. Industry Division, which administers the AII Program, has no ready access to information on the Management Information Systems in Joint Logistics Command (JLC). There is a disjunction. JLC's AII related activities data are not captured by Industry Division. Furthermore, each DMO Division is responsible for TLS of materiel acquired for the ADF by that Division. There does not appear to be a mechanism to ensure that the Defence requirements across DMO acquisition projects, including their TLS, and JLC are coordinated and potential demands combined to make it economic to set up Australian industry capabilities which would not be cost-effective on the basis of each individual project alone.

## Conclusion

**2.95** There was near-unanimity among AII practitioners and managers in Defence and industry that a degree of prescription, incorporated in the AII framework, and a well structured approach, adopted by Defence to ensure that Australian industry considerations are addressed in procurement, were indispensable in achieving a reasonable outcome for Defence and Australian industry.

**2.96** The ANAO found that there were no endorsed outcomes or outputs to be achieved by the AII Program. Furthermore, there were no quantitative and/or qualitative performance measures for the AII Program as a whole, against which Defence measured the performance of the Program. Therefore, it was not practicable for Defence to demonstrate whether, over time, it has been making real progress, or is losing ground, in the pursuit of either of the two AII objectives.

**2.97** The ANAO could not find any systematic reporting to Ministers on significant developments in the Program, as a whole, nor on AII aspects in the four capital equipment projects examined in the audit.

**2.98** The lack of specific guidance as to what defence industry capabilities are required is a significant omission from Defence industry policy. Defence indicated that industry sector plans would supplement existing guidance on Defence priorities for industry. Defence considers that very substantial public guidance has been released, detailing the strategic priorities for Australian industry, through the Defence White Paper, *Defence 2000—Our Future Defence Force*, and *Defence Needs of Australian Industry*, of which three editions were published from 1997 to 2000. The ANAO sees merit in Defence also conducting an early review of its documentation on Defence priorities in industry, with a view to ensuring their currency on critical competencies for Defence in Australian industry. They could form the basis for the adoption of a strategic approach in the AII Program.

**2.99** The ANAO could not find any evidence of a systematic endeavour to gain synergies by linking the AII plans of one capital equipment project with those of any other project. For about a decade, Defence policy for industry has featured a requirement to link separate capital equipment projects; connecting similar technologies to achieve available economies of scale, as well as the benefits of commonality; and obtaining more sustainable flows of work to industry. The ANAO considers that identification of critical capabilities in Australian industry should allow Defence to address how to best create and sustain those capabilities across projects.

Maintenance work on an F-111 Strike and reconnaissance aircraft. Photo supplied by Defence.

# 3. Meeting the Government's Requirements for ANZ Sourcing

*This chapter focuses on Defence's implementation of the objective of maximising ANZ content in the procurement of government goods and services, consistent with government procurement policy.*

## Defence definitions of Australian industry and content

**3.1** The ANAO's 1998 report on the New Submarine (Collins) project commented on local content as follows:

> 10.4 The New Submarines contract [1987] defines Australian Industry to include an Australian company or other business incorporated in Australia and Local Content to mean work undertaken by Australian Industry (clauses 1.8a and 1.3). Annex A of the contract specifies that subcontract packages shall be undertaken wholly in a single country.
>
> 10.5 As indicated in the 1992 audit report,[65] the ANAO notes that these definitions are so broad as to allow work to be undertaken overseas and classed as local content if the supplier operates through a company incorporated here. The ANZAC Ships contract [1989] has a better definition, that is, local content is work undertaken in Australia and New Zealand.
>
> 10.6 Since the broad objective of the local content definition is to benefit local firms and to produce an enduring local competence available in the future, it would have been preferable to have the Submarine contract define local content as work undertaken locally.[66]

**3.2** More recent Defence documents define local content as that part of supply that is value-added by Australian and/or New Zealand industry, excluding all imported supplies (and associated taxes) in that work. Australian and New Zealand industry means industry carried on in Australia or New Zealand by a company registered in Australia or New Zealand or by a natural person or any other person acceptable to Defence.

**3.3** In AII, 'local' and 'Australian' industry mean Australian and New Zealand industry (a single Defence industrial base) when this is consistent with the objective of self-reliance. Australian and New Zealand firms are treated equally in Defence industry policy, except for a small number of high security or third country collaborative projects, and in some specific circumstances associated with the use of strategic industry development activities.

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[65] ANAO, *New Submarine Project*, Audit Report No.22 1992-93.

[66] ANAO, *New Submarine Project*, Audit Report No.34 1997-98, paras. 10.4-10.6.

**3.4** Equal treatment between firms in Australia and New Zealand flows from the 1983 Australian New Zealand Closer Economic Relations—Trade Agreement and the 1997 Australian and New Zealand Government Procurement Agreement (ANZGPA). ANZGPA, an agreement between the Commonwealth Government, State and Territory Governments and the New Zealand Government, seeks to create and maintain a single government procurement market to maximise opportunities for competitive ANZ firms and to reduce costs of doing business for government and industry. The agreement requires that all ANZ businesses be given equal consideration and opportunity to contract or supply to the New Zealand, Commonwealth, State and Territory governments. Location in either Australia or New Zealand determines whether a business is defined as an Australian and New Zealand business. Ownership of the business or the origin of the product offered is irrelevant.

## Defence Procurement Rules

**3.5** To meet AII requirements, any firm meeting the AII Manual's requirements can meet local content requirements. Foreign ownership is not an issue. However, since 1997, Defence has had in place a set of Procurement Rules for foreign-owned firms operating in the Australian defence market. Those rules set out six criteria by which Defence assesses that overseas firms have demonstrated a long-term commitment to the Australian economy, before allowing them to control key (strategically important) Australian industry capabilities.[67]

**3.6** Under the six Procurement Rules, firms can demonstrate their long-term commitment to the Australian economy by:

- establishing significant local facilities and plants;
- employing a significant number of Australian citizens;
- pointing to a record of performance in the defence area through, for example, previous involvement with Defence as a subcontractor;
- performing significant research and development in Australia and developing Australian intellectual property;
- proving independence of action from overseas parents, including through exports from Australia; and
- nurturing Australian small and medium enterprises.[68]

**3.7** Although these rules appear to have been formulated particularly for foreign-owned firms, there appears to be no impediment in their use to assess any firm's suitability to control key Defence industry capabilities.

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[67] *Defence and Industry Strategic Policy Statement*, Department of Defence, 1998, pp. 4, 33.

[68] ibid., p. 34.

## Australian Industry Participation National Framework

**3.8** On 27 April 2001, Australian Industry Ministers (Commonwealth, States and Territories) launched the Australian Industry Participation (AIP) National Framework. It constitutes a national approach to maximising Australian industry participation in major investment projects. A major principle in the framework is that Australian industry be provided with full, fair and reasonable opportunity to participate in investment projects in Australia, without imposing burdensome requirements that may deter potential investors.

**3.9** The framework sets out a number of strategic approaches to achieve that principle, including:

- encouraging industry to meet world's best practice through capability building;
- early identification of opportunities for AIP, both domestically and overseas;
- promoting Australian capabilities and integrating industry into global supply chains; and
- enhancing project facilitation and industry development.

## Defence procurement guidelines on maximising ANZ content

**3.10** The DPPM is the prime reference document for Defence procurement. It has recently been revised and incorporates the Commonwealth Procurement Guidelines, to which all Commonwealth purchasing officers must have regard. It is a comprehensive, logically structured and well-written and indexed document.

**3.11** The DPPM states 'that if the locally based good or service does not offer equal or better value for money in comparison with alternatives it should not be purchased'.[69]

**3.12** To help ensure that local suppliers are given a 'fair go', Defence purchasing officers are instructed to conduct market research on the capabilities of local suppliers using the services of the ISO network.[70] ISONET Limited, a public company located in Canberra and funded by DITR, provides national coordination to the ISO network. Its primary role is to maximise Australian

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[69] Defence Procurement Policy Manual, op. cit., p. 3.12.2.

[70] The ISO network is a network of offices in each State and Territory and New Zealand that assists purchasers to find capable and competitive ANZ suppliers of goods and services. ISONET nationally coordinates the network.

industry participation in meeting the purchasing requirements of both governments and the private sector by seeking competitive Australian solutions and sources.

**3.13** In addition to requiring its own purchasing officers to consult ISO, Defence, in its standard contract documents, has included a mandatory requirement for its suppliers to consult the ISO network for all proposed tenders of $5 million or above, where the supplier is not proposing 100 per cent ANZ content, and to show documentary evidence of systematic efforts to consult with the ISO network in a genuine attempt to provide opportunities for ANZ industry participation and development. Tenderers are to consult the network early in the tender preparation process, so as to ensure that ISO has sufficient time to respond. For procurements of less than $5 million, Defence encourages suppliers to use the services of ISO network to buy locally and to assist in forming consortia and developing Australian industry involvement proposals.

**3.14** The DPPM[71] also iterates the government direction that Commonwealth agencies must not draw up purchasing specifications (including technical, performance and functional) and conditions of contract that exclude ANZ supplies which are suitable for, or reasonably adaptable to, Commonwealth needs, or evaluate offers in a manner which is biased against ANZ supplies. Prospective tenderers who consider that the government direction is not being followed were to contact the nominated Defence contact officers in the request for offer.

## Implementation of the Defence guidelines on ANZ content

### Consultation with ISO

**3.15** The requirement to consult ISO has been a Defence procurement requirement for many years. At a Buying Australian Program progress meeting in 1998, mention was made of an ISO report that there had been few Defence-related inquiries of the ISO network during the last six months. Defence stated at the meeting that it had done as much as it could to push the use of ISO as there were obligations to utilise the ISO network in all Requests for Tender. The meeting concluded that no further action was appropriate.[72]

**3.16** The evidence available to the ANAO showed that, in recent times, Defence purchasing officials and Defence tenderers have had little contact with the ISO network as the following indicate:

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[71] Defence Procurement Policy Manual, op.cit., Annex 3 H.

[72] Record of Defence 'Buying Australian' Program—progress meeting, 11 February 1998, p. 5.

- ISONET Limited (Canberra) estimated nine inquiries from Defence and tenderers over a 12 month period;
- NSW ISO Limited (re-named the Industry Capability Network (NSW) Ltd in February 2003) recorded four Defence related inquiries (from Defence Project Offices and firms) in the period 1 July 2001 to 31 July 2002 (out of a total of 1057 inquiries);
- Industrial Supplies Office (Victoria) Ltd. estimated that they received 10 to 20 such inquiries a year on Defence;
- South Australian ISO received about five such inquiries a year;
- ISO Western Australia had less than five such inquiries a year;
- ISO Queensland has less than 10 inquiries;
- ISO Tasmania had no direct inquiries; and
- NT ISO does not normally receive direct queries from Defence purchasing officers or tenderers before contract signature but opportunities may be referred to them through the ISO network.

**3.17** There appear to be fewer than 50 inquiries a year, Australia-wide, to ISO offices from Defence and its tenderers. This compares with a reported number of 152 000 Defence contracts for a total value of nearly $19 billion over the past three financial years (averaging over 50 000 contracts a year).[73] Not all those contracts would have required consultation with ISO, since many contracts would have 100 per cent ANZ content.

**3.18** Even in major and minor capital acquisitions projects, where 100 per cent ANZ content is not the norm, there is no evidence that prior consultation with a member of the national ISO network has occurred commonly or that Defence has ensured in a systematic and reliable way that tenderers have consulted ISO as required in the Defence's procurement manual and tender documentation. Mention was made to the ANAO that, in Defence construction contracts, ISO was given no opportunity to propose Australian sourcing for items such as lighting and cooking equipment, for which there were Australian manufacturers that could competitively supply and support equipment that met Defence's functional performance requirements. The evidence indicates inadequate compliance with Defence requirements to consult ISO.

**3.19** Where ISO is consulted by Defence purchasing officers and tenderers, ISO staff reported a significant number of instances where the contact was initiated at the last moment before closure of tender documentation. Despite

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[73] *Defence Acquisitions: Getting it Right*, Speech by the Minister for Defence, 26 September 2002.

the requirements for, and the desirability of, consultation with ISO, as set out in the DPPM, it is apparent that the requirements, and in many cases even the existence, role and capability of ISO, are not known well to Defence purchasing officers and tenderers. That evidence emerged in discussions with Defence officers administering major and minor capital acquisition projects; DMO regional officers; State and Territory ISO staff; and State and Territory industry development officials.

## Early involvement of Australian industry in Defence projects

**3.20** There was unanimity by all parties consulted in the audit that the best Australian industry outcomes in Defence purchasing are achieved when Australian industry considerations are incorporated into the decision process early in the life of the project, from the capability development stage onwards.

**3.21** The performance reporting section in chapter 2 referred to Defence's commitment to involve Australian industry in the early phases of projects. It was beyond the scope of this audit to undertake a comprehensive survey of how well this commitment has been translated into reality. However, some noteworthy evidence emerged in the course of the audit.

**3.22** Early consideration of AII aspects, and the inclusion of a significant period of time for through-life-support as an integral part of the initial acquisition, were mentioned by industry as positive developments in the Eurocopter project. In two recent projects, Air 6000 (New Aerospace Combat Capability) and Air 9000 (Additional Troop Lift Helicopters), ISO was contacted very early by the Defence officers progressing the two projects.

**3.23** Evidence from industry, Defence personnel and files indicates that the earlier Australian industry considerations are applied in the procurement cycle, the more likely a good outcome will result in terms of maximising the level of ANZ industry participation at a competitive price, and obtaining, at reasonable cost, strategically important capabilities in Australian industry in support of Defence operational and capability development. The ISO network can advise Defence personnel and Defence contractors on industry capabilities throughout Australia. That information extends beyond knowing the product ranges of firms, to their capacity to meet new products and services by building on their current expertise and equipment. Defence and its contractors should make more use of that expertise. This would help meet both objectives of the AII Program.

**3.24** The ANAO also notes that the Defence Annual Report 2000–01 states:

> The Government has agreed to a two-pass approval process for the acquisition of new capital equipment for the ADF. In the early stages of capability development

analysis, the Government will be provided with a range of new investment options to fill a capability gap. At this stage, first-pass approval is sought to develop specific options. In the second-pass process, the Government will be provided with the necessary level of detail to make an informed decision on acquisition and TLS resource implications. Defence will undertake to deliver against the business case underpinning the approved action.[74]

**3.25** In preparing for the first-pass approval, it would be useful if the options to be put to government by Defence were informed by early consultation with Australian industry and gave an indication of the AII involvement in each of the investment options put forward. Information on AII, including TLS aspects, should be an integral part of the second-pass process.

## Recommendation No.6

**3.26** The ANAO recommends that, to make best use of the capabilities in Australian industry, Defence rejuvenate the use of the Industrial Supplies Offices network in procurements and ensure that the network is engaged early and constructively in the Defence procurement cycle.

### *Defence response*

**3.27** This recommendation is agreed, noting the need to consult with ISONET on practical steps to implement it.

## Involvement in global supply chains

**3.28** In respect of the JSF project, industry commented on the Defence and DITR initiative to seek to involve Australian firms in the global supply chain by early involvement in that US-led multi-national project.

**3.29** Firms acknowledged the potential for significant new work which may result from the Defence and DITR initiative. A persistent concern that emerged from discussions with firms related to the lack of firm agreed outcomes for Australian industry. Some firms were sceptical about the scope for new suppliers in the JSF project, particularly for those firms which did not have an existing affiliate in the US, and the transparency and fairness in the way the overseas firms would actually choose new suppliers.

**3.30** Defence advised the ANAO that all JSF work must be won on a 'best value' basis, there being no agreed workshare or offset arrangements, and that transparency in contracting was a condition of the JSF System Design and Development Memorandum of Understanding. Work being pursued included

[74] *Defence Annual Report 2000–01*, op. cit., p. 281.

areas of importance to ADF capability and areas of significance to the growth of Australia's aerospace industry. The major differences between traditional acquisitions and the JSF initiative were as follows.

- Australian industry has an opportunity to bid for JSF work on a best value basis now, at least five years ahead of any Defence acquisition contract, and at least ten years ahead of Australian industry's traditional contracts in support of ADF aircraft.
- Australian defence industry would be sustained independently of the Australian defence budget through any contract for JSF work with the US firm Lockheed Martin.
- Work won by Australian industry would be into the JSF global supply chain of 3000 to 6000 aircraft, not just the 100 or so that Australia might buy. This would in turn aid Australian industry support of the ADF fleet.

**3.31** The direct contribution to Defence operational and capability objectives made by Australian firms joining global supply chain is difficult to assess.

**3.32** The Defence offset arrangements under the F/A-18 aircraft procurement in the 1980s, for example in the production of ailerons (aircraft hinged wing flaps), joined the firms undertaking such work to the world civil aircraft market. The AII Program has no objective relating to general capacity building in the Australian economy. The connection between JSF type initiatives to seek to link Australian firms to global supply chains and AII policy and activities is not clear at present and should be addressed by Defence as part of the preparation of a document that consolidates agreed policy on industry and measures from recent and on-going industry-related initiatives (see Recommendation No.4).

**3.33** Industry emphasised to the ANAO the importance of a reliable and steady flow of work in specialist areas for which there is little demand, in Australia at least, outside Defence. To maintain such areas, firms require Defence to manage its demand and avoid boom and bust cycles.

**3.34** Another avenue for firms to maintain some specialist areas for Defence is through cross-subsidies and lateral transfers of resources (including human resources). That requires firms to have a critical size and turnover. This has been the underlying rationale behind the Defence support for offsets programs in the past and also some on-going activities under AII and under the JSF program.

**3.35** For example, turret production in Adelaide for the ASLAV (part of the AII Program) has been successful, leading to job creation, introduction of advanced technology, and exports (see chapter 4). It links the Australian manufacturing facility with the global supply chain of a multi-national equipment manufacturer. However, the direct contribution of the manufacturing facility to the maintenance

and support of the ADF's ASLAVs is difficult to quantify and no comprehensive assessment of that contribution could be found in Defence documentation. Defence advised the ANAO in May 2003 that the Adelaide manufacturing facility has not been identified for use in TLS of the ASLAV fleet and that its remote location from the user units would significantly increase freight costs of vehicles.

**3.36** There was evidence of separate, significant efforts by the contractor to 'Australianise' support to the ASLAVs. Progress was monitored through monthly lists of Australianised items. Improvements in the number of items seemed to be incremental, with five to seven items reported to be added each month. Reported benefits were reductions in costs and significant reductions in supply times, down from about 200–400 days for specialised items.

**3.37** Furthermore, in the case of Australian repair and overhaul of major components for the ASLAVs, advice from workshop staff was that turn-around times had dropped from six to eight months to three to four weeks since the establishment of the Australian facility. The refurbishment costs to Defence, for rear suspensions, differentials and struts, were 11–15 per cent of the cost of purchasing new items. The savings on an individual item could be up to $31 000.

**3.38** Defence advised the ANAO that practically every repair on the ASLAVs can now be performed in Australia. However, repairs were often dependent on imported parts which can take a long time to be supplied (200–400 days). Most repairable items continued to take six to eight months to repair but high-impact items such as steering bearings, drive shafts and differential were now taking only three to four weeks.

**3.39** Advice from industry in the audit supports the contention that involvement in production tends to lead to greater understanding of technologies, components and their interaction in weapon systems. This leads to an enhanced capacity to maintain, repair and modify those systems. The extent of that enhanced capacity, and the cost-effectiveness of gaining it, is difficult to demonstrate and differs across technologies. The enhancements tend to be in the nature of industry capacity enlargements, through a deepening of industry capacity to handle future maintenance and repair challenges.

## Targeting of Australian industry sectors

**3.40** Defence policy guidance in the last ten years or so has tended to emphasise the development of industry capacity at the higher end of the technology spectrum. In general, that emphasis is welcomed by industry. Industry is keen to be involved in the 'noble' work, including research and development, design, testing and evaluation.

**3.41** There is, however, a concern in industry that some Defence policy documents and officers have taken that emphasis too far, and neglected the importance of less glamorous industry activities related to the sustainability of Defence platforms and weapon systems. Technologies involved in many 'black-trade' or 'metal bashing' activities have changed dramatically. Welding technology involved in turret production is an example. It cannot be automatically assumed that the skills and capabilities, of a standard required for Defence, will be readily available in the economy at large, particularly in the event of war, when battle-damage to platforms and weapon systems must be repaired quickly. Defence policy guidance to procurement officers should reflect those requirements as elements to consider as part of the AII elements in projects. Defence advised the ANAO that a number of practical measures to retain 'black-trade' skills in Australia had in part been prompted by the AII Program, for example in welding ASLAV turrets in Adelaide. In that example, welders from the Collins submarine project, which had reducing welding requirements, had been employed.

## Defence guidance to industry

**3.42** Industry generally regarded Defence's AII policy guidance as adequate. However, in discussion with firms there emerged a concern about changes in interpretation of those requirements over the life of projects, particularly with changes in project managers. Firms complained that what had been agreed with one project manager as an AII deliverable was later changed as new project managers adopted different interpretations of AII policy objectives, or, in projects spanning some 10 years, AII requirements changed during the life of the project. The firm would then be rated as non-compliant or unsatisfactory in their AII performance, although they considered they had met the original AII requirement. This was all the more vexing for the firms concerned when this resulted in an unsatisfactory DMO Company Scorecard result. Although firms could comment on that Scorecard result, they were unaware of a mechanism to change the rating.

**3.43** A related criticism raised was that, in respect of the delivery of contracted industry development activity, Defence project officers with a limited grasp of developments in industry and technology would insist on the delivery of specific elements of industry development activities even when, in the firm's assessment and business strategy, those had become obsolete. In such instances, neither Defence nor the firm would gain any long-term value by the resources expended on achieving an obsolete deliverable. The resources would be better directed to a mutually beneficial alternative.

**3.44** Defence advised the ANAO that there was sufficient flexibility within the existing contracting framework for project officers and industry to consider issues as they arise during the life of a contract. Defence asked contractors to improve on the AII plan through the life of a contract. Likewise, contractors were free to put forward alternative capabilities through the contract change proposal process. The ANAO notes that it may be difficult for the contractor to gain Defence agreement on a change to the contracted AII. Defence and contractor staff have different exposure to technological change in the market place, with firms likely to be exposed earlier and more directly and needing to adapt quickly to such changes. There could be a role for Defence Industry Division in resolving a disagreement between the project offices and firms on the direction that AII activities should take.

## Compilation of AII data

**3.45** The Defence AII Manual mentions a Defence Buying Australian Action Plan. The AII Program has two components:

- local content; and
- strategic industry development activities (SIDAs).

**3.46** Local content is defined as that part of the supplies that is value-added by Australian or New Zealand industry, and encourages the development and maintenance of strategically-important capabilities within Australian industry. Local content is to be achieved without Defence paying more (a premium) than if the work was carried out outside the Australian and New Zealand economies.

**3.47** SIDA is an activity that will satisfy an industry requirement that can be used as an alternative to fulfilling local content when there are limited or no opportunities for local content. SIDAs are categorised as primary and enabling activities.

**3.48** Primary activities comprise research and development, exports, domestic sales and innovative activities that 'offer value to Defence such as commitment to venture capital or direct marketing efforts aimed at exports or domestic sales'.[75] Enabling activities include technology transfers, training and provision of infrastructure.

**3.49** Cumulative values for the last two years of local content and SIDA in Defence capital equipment contracts are shown in Table 1.

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[75] *AII Progress Report June 2000*, Defence Industry and Procurement Infrastructure Division, July 2000, p.18. Its reporting baseline is 31 May 2000. The Report, as well as the AII Progress Report 2001, was prepared by the AII Section of Industry Division. The two reports have no security classification but they lack a distribution list indicating their recipients.

**Table 1**

**Cumulative values of AII in Defence capital equipment contracts**

| Financial year | Local content ($b) | SIDA ($b) | AII Total ($b) | Cumulative value of new contracts ($b) |
|---|---|---|---|---|
| 1999–2000[a] | 11.12 | 1.84 | 12.96 | 19.7 |
| 2000–2001[b] | 9.90 | 3.00 | 12.90 | 21.9 |

Source: compiled by the ANAO from data provided by Defence.

Notes:

a As at 31 May 2000. This is for an eleven month period only. Full year figures for that year are not readily available, nor are the figures for previous years.

b As at 30 June 2001.

## *Management Information Systems: AII Data Base*

**3.50** Capital equipment acquisition contracts require contractors to report regularly on local content and SIDA. The frequency and quality of reporting vary across contracts and DMO programs. The quality of the AII data is reliant on the data entered into the Project Management Information System (ProMIS) by DMO's project managers. ProMIS data is used by Industry Division for reporting on the values of local content and SIDA for various projects and systems.

**3.51** ProMIS is to provide visibility to project managers on the progress of projects. When data is entered by project managers, previous data entries are over-written. As a consequence, there is no automatic recording and retention of historical data at a particular point in time. Consequently, the figures are not auditable, because there is no audit trail over time.

**3.52** Moreover, AII figures in ProMIS include data from projects with different definitions of what constitutes local content. The different definitions in the Collins class submarine and the ANZAC ships have been mentioned earlier in this chapter. AII figures from both these projects are contained in the ProMIS totals for the years 2000–01 and 2001–02.

**3.53** Defence Industry Division files state that 'the reporting of local content against the company undertaking the task is very deficient' and that this limits Defence's ability to provide reliable indication of how local content activities are being distributed throughout local industry.[76] Defence documentation in previous years also acknowledged the difficulty in tracking projects with little or no reported AII.[77]

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[76] *Australian Industry Involvement Progress Report 2001*, Industry Division, Department of Defence, undated, p. 13.

[77] *Australian Industry Involvement Progress Report June 2000*, Industry Division, Department of Defence, 14 July 2000, p. 4.

**3.54** Project managers naturally concentrate on the most pressing issues in their projects, which tend to be issues related to meeting the 'trinity' of time, cost and quality in their acquisition projects. AII tends to take second place to resolving higher priority issues in the project offices. Furthermore, the accounting and management information systems of Defence and contractors do not readily separate out the imported component of supplies obtained in Australia. It is impossible to identify, from the figures in ProMIS, the amounts for imports from supplies purchased from Australian suppliers, but with value-added overseas. As a result, recording of AII related information on ProMIS is unreliable and therefore not a robust means for identifying trends and issues related to AII across Defence projects or significant AII problems in individual projects.

**3.55** There is no government requirement to meet a fixed percentage of AII in major capital equipment projects. Defence procurement is carried out under the principle of obtaining best value for money for the Commonwealth. A consideration in that is the benefit to Defence operations and capability development of AII. The percentage of AII in a project is no indicator of the degree to which that AII contributes to Defence capabilities and self-reliance. The Government's 2001 strategic approach to Defence procurement and Australian industry focuses on building sustainable industry capability of strategic importance. Achieving a certain percentage of AII in capital equipment projects is not mentioned in that approach. Furthermore, a means of monitoring Defence purchases of non-local products and services exists through the Buying Australia Database, which can be accessed by the public. Defence is required to list on that database all purchases over $100 000 which are not fully value-added in Australia.

**3.56** Defence advised the ANAO that it would require a significant effort to put in place and operate systems to collect reliable figures on AII achievements. Given the factors outlined above, limited value in terms of reliability and significance should be attached to figures purporting to show AII achievements against project expenditures or contracts signed. In view of the limitations of a quantitative approach to evaluating AII, the ANAO considers there would be merit in adopting a qualitative approach. Such an approach is needed to assess the strategic value of Australian industry capability developed and sustained as a result of Defence's AII activities. Defence has not yet attempted such an approach.

## Monitoring AII achievements

**3.57** The audit team was informed by Defence that, prior to June 2000, four AII project reviews had been conducted. There was no indication that the reviews

resulted in any measures for improvement in policy development or program administration of the AII Program. Industry Division intended to conduct further project reviews during 2000–2001 to monitor the level and progress of AII.

**3.58** The resources of the AII section have been limited, and focused on providing assistance in the development of AII in new capital projects. In addition, the development of industry sector plans has been given a higher priority by Defence than the routine administration and policy development for AII, and personnel with relevant expertise have been shifted from AII to the higher priority task.

**3.59** AII performance in individual capital projects has been left to individual project managers. Their reporting on AII tends to be ad hoc and is not systematically monitored. There is no system to ensure that agreed AII reporting in contracts is adhered to, that non-compliance in time schedules or quality is actively monitored, and that any remedial action is initiated. The reporting system does not allow an overall assessment of AII Program achievements against costs; any enduring industry capabilities created or sustained; or the importance of those capabilities in terms of Defence's strategic and operational objectives.

**3.60** Implementation of Recommendations Nos. 1 and 2 would be a significant step towards remedying deficiencies outlined above.

## AII percentages across industry sectors

**3.61** Table 2 sets out the number and value of contracts for Defence capital equipment, by industry sectors, as at 30 June 2001. It shows the dominance of maritime and aerospace systems in the total cumulative value of capital equipment projects recorded in Defence's AII database. The two together comprise 80 per cent of the total.

**Table 2**

**Cumulative number and value of contracts for Defence capital equipment**

| | | At 30 June 2001 |
|---|---|---|
| **Aerospace systems** | No. of Contracts | 46 |
| | Value ($b) | 7.447 |
| **Electronic systems** | No. of Contracts | 55 |
| | Value ($b) | 2.968 |
| **Land systems** | No. of Contracts | 17 |
| | Value ($b) | 1.318 |
| **Maritime systems** | No. of Contracts | 17 |
| | Value ($b) | 10.192 |
| **Defence total** | **No. of Contracts** | **135** |
| | **Value ($b)** | **21.925** |

Source: compiled by the ANAO from data provided by Defence.

**Table 3**

**All contracted as a percentage of total new contract values for new Defence capital equipment in 2000–01**

| Year | Aerospace systems | Electronic systems | Land systems | Maritime systems | Defence total |
|---|---|---|---|---|---|
| 2000–2001 | 43 | 68 | 44 | 70 | 57 |

Source: compiled by the ANAO from data provided by Defence.

**3.62** Table 3 shows percentages of AII contracted in 2000–01, by industry sector. The comparatively high percentage of AII in maritime systems was attributed by Defence to the ability of local industry to participate in hull manufacture and on-site integration of sub-systems.[78] The relatively low level of AII in aerospace systems was reported as follows:

> ...aerospace related systems are often add-on capabilities and upgrades to equipment purchased initially from an overseas source. In that sector, there is also a higher proportion of purchasing through the US [Department of Defense] Foreign Military Sales (FMS) system which does not lend itself to the opportunity for local companies to participate in activities associated with the supply of core equipment. The reluctance by the original equipment manufacturer to pass on the intellectual know-how associated with production of the systems to other parties is a significant factor that minimises the opportunities for AII.[79]

**3.63** Defence has not set a firm target for AII that is to be achieved as a minimum requirement in all major capital acquisition projects. In a 1994 report on Defence Procurement, the Industry Commission[80] recommended that neither minimum

[78] *AII in Defence Capability Investment Projects, Progress Report 2001*, op. cit., p. 11.

[79] ibid.

[80] *Defence Procurement*, Industry Commission, Report No. 41, Canberra, 30 August 1994.

nor target levels of local content should be specified in the procurement process. The intent of that Industry Commission recommendation was to improve Defence sourcing decisions by ensuring that they are made after industry proposals have been submitted.

**3.64** Defence did not accept the Industry Commission recommendation. Defence favoured retaining an AII target in individual projects to ensure that suppliers recognise their obligation to maximise Australian content. A target, not set as a mandatory requirement in the tender documentation issued by Defence, was to provide Defence with leverage and offer a discriminator in source selection. The evidence in the audit indicates that current arrangements by Defence are in accord with the intent of the Industry Commission recommendation. In practice, the precise percentage of AII has been set on a project-by-project basis, usually in negotiation with the tenderers and in the light of industry proposals.

**3.65** There are diverse views on the desirability of setting a minimum percentage of AII to be applied across all Defence capital acquisition projects.

**3.66** In ANAO's discussions with the Chief of Procurement of the Swiss Department of Defence, Population Protection and Sport, he stated that they had no formally set minimum level of local industry involvement in military purchase. His organisation's experience was that it was counterproductive to nominate a set percentage across different weapon systems and industry sectors. The Swiss aimed for an ideal of 100 per cent participation for Swiss industry. The percentage on each project was arrived at in negotiations. They felt that a set percentage was an unnecessary constraint ('chains'), which would hinder rather than assist the aim of obtaining maximum local industry involvement.

**3.67** There is no prescription in Defence on the weighting to be given to Australian sourcing in the evaluation of tenders. AII is a 'discriminator' in the selection process, the importance of which varies depending on what significance the individual Defence decision-makers place on it.

**3.68** The audit evidence taken in discussions with Defence and industry and from Defence documentation indicates that the most effective time to achieve a good percentage of AII (and of a good a quality) is in the competitive phase of the acquisition, with a firm and unified negotiating team that stresses the importance of AII in the source selection. However, even when there is only one supplier, the application of a variation of the 'no acceptable price, no contract', namely a principle of 'no acceptable AII, no contract', has worked in one case reviewed by the audit team.

**3.69** The fact that there is no specific weighting to be placed on AII in the evaluation of tenders emphasises the personal importance which individual

Defence decision-makers wish to place on that aspect in the evaluation of tenders. However, as discussed earlier, in the end, the percentage of AII is not a meaningful performance measure. The contribution of AII to meeting strategic Defence requirements is the important factor.

**3.70** Discussions during the audit with practitioners on both sides (the Commonwealth and tenderers) indicate that Defence, while seeking to obtain best value for money for the Commonwealth in negotiations for major contracts, usually also presses for a good deal for Australian industry and generally achieves a reasonable outcome for the latter. Exceptions tend to occur when the requirements of the Defence users, including their need for speedy acquisition, overwhelm the AII aspects. In discussions with Defence procurement and policy staff and other stake-holders in the AII Program such as industry and State and Territory industry departments, there was near-unanimity for the proposition that the AII framework constitutes an essential element in reaching satisfactory outcomes in Defence procurement for Australian industry and Defence.

## Geographic distribution of Defence major equipment contracts

**3.71** Table 4 shows the dominance of the share of South Australia, Victoria and NSW in major Defence capital equipment projects.

### Table 4

**Prime and sub contract distribution within Australia in 2000–2001**

| State | Prime contract value $b | Sub-contract value $b |
|---|---|---|
| South Australia | 4.644 | 0.941 |
| Victoria | 4.292 | 0.905 |
| New South Wales | 3.599 | 1.591 |
| Queensland | 0.891 | 0.235 |
| Australian Capital Territory | 0.274 | 0.186 |
| Western Australia | 0.041 | 0.010 |
| Tasmania | - | 0.003 |
| Northern Territory | - | 0.0002 |

Source: compiled by the ANAO from data provided by Defence.

**3.72** The location of the prime contractor is of importance to regional industry. Figures from the Minehunter Coastal project showed that nearly 85 per cent of the business suppliers to the project were from NSW, and more than half of those from that State's Newcastle/Hunter Valley region, where the vessels were

built.[81] Those figures are in line with experience in the ANZAC ship project, where approximately 75 per cent of the project's subcontractors were located in Victoria, where the ships have been completed.

**3.73** Government's principal objective for Defence spending in industry is to obtain value for money in achieving ADF capability.[82] Defence has no mandate to direct spending on industry in a specific geographic region. The allocation of Defence contracts and sub-contracts on major capital projects seems to reflect largely the capabilities of the nation's industry. During the audit fieldwork, there was adverse comment from firms outside the Sydney/Melbourne/Adelaide industry concentrations on the preponderance of Defence capital acquisition project work in these three centres. There has been no evidence of deliberate action or systemic element directing work to these three centres. There have been repeated complaints from firms and local industry authorities outside South East Australia that Defence and prime contractor information sessions on major projects on a number of recent occasions have occurred without prior notice sufficient to allow local business to prepare properly for the briefings. These briefings were welcomed, but local firms would have preferred sufficient notice, for example to consult with each other and make a coordinated case.

**3.74** Firms without a history of dealing with Defence commented that the Defence culture is not easy to penetrate, with many unique features such as military rank structures, jargon, and the attitude of some Defence officials towards service providers that was described as one of 'master/slave'. Audit inquiries on specific complaints indicated that, in general, Defence officials were open to approaches from potential service providers and provided them with reasonable feedback on reasons why their bids were not successful. In some cases, it was obvious that industry also needs to attune itself better to Defence as a customer and do its part in achieving a more productive, partnership-based relationship. It was clear that the Defence and industry relationship has significant room for improvement, as evidenced by recent Defence attitudinal surveys mentioned earlier in this chapter.

**3.75** Firms, industry associations and State/Territory industry authorities commented favourably on the work done by some Defence personnel to optimise Defence's use of local industry. There was a persistent theme that Defence seems to have little institutional memory, particularly in the regions. The regular changes in Defence personnel, particularly ADF personnel, meant that, about every two years, a process of familiarisation of new Defence personnel with

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[81] *Impact of Major Defence Projects: A Case Study of the Minehunter Coastal Project. Final Report*, Tasman Economics, January 2002, p. 12.

[82] See for example Defence and Industry Strategic Policy Statement, June 1998, p. 6: 'Defence spending in industry is not an end in itself—but a means of achieving ADF capability'.

local industry had to be undertaken, to ensure that those personnel understood the capabilities of local firms and availed themselves of them. The extent to which the latter occurred, and the use they made of the established Defence/ industry consultative framework, seemed to be very much a matter of the personalities and their individual interests.

**3.76** In discussions with Swiss authorities on the subject of the distribution of Swiss defence work across the country, Swiss procurement authorities stated that industry in the so-called periphery (outside the main industry agglomerations on the Geneva/Bern/St Gall axis) complained about the preponderance of work going to the main industrial centres. Swiss Defence authorities were aware of this situation. They considered that it was a reflection of industry structure and capability, which inevitably meant that most work flowing from major capital acquisitions went to established firms with requisite capabilities in the main industrial centres. The Swiss Defence organisation directed prime contractors to select their local sub-contractors on the basis of value for money. The only significant intervention measure in support of regional businesses was a provision that, in the selection of subcontractors, prime contractors were not to take into account freight costs to and from regional Swiss firms. The contractor could, however, take those costs into account in the calculation of prices and charge Defence for them. The Australian Defence organisation has no remit to provide regional preferences but may invest in Australian regional industry capabilities where such investment is warranted on strategic grounds.

**3.77** The ANAO noted that government authorities in Queensland, Western Australia and the Northern Territory have been active in pursuing Defence related business for their industries. As a result, a number of initiatives have come to fruition, particularly in respect of TLS of Defence equipment.

**3.78** The pursuit of Defence business opportunities has included proactive initiatives by the DMO regional office in Darwin and the Northern Territory Department of Business, Industry & Resource Development to instil consideration of local industry capabilities for the support of helicopters in the planning phase of the Eurocopter project. This seems to be the first time that the interests of remote regional industry are being pursued actively in the early phase of a major Defence capital equipment project.

**3.79** There is room to enhance the role of some DMO regional offices in providing assistance on AII aspects to project directors in their region. The DMO Melbourne and Darwin Offices in particular seemed to be active in providing such assistance, but little use was made of the Brisbane Office, which was willing to assist them when given the opportunity. The use of DMO regional offices in

providing assistance on AII matters would seem be all the more important as procurement action moves to the DMO's Systems Program Offices being established outside Canberra.

## Purchases through the Foreign Military Sales (FMS) Program

**3.80** Purchases through the United States FMS Program do not normally have an AII component. However, if FMS purchases are made as part of a capital acquisition, the particular project should have an AII plan. There was some concern expressed by industry about the level of spending on FMS, which was seen as an all too easy option for Defence purchasing officers because of the relative administrative ease of sourcing through FMS.

**3.81** Table 5 sets out Defence's spending on FMS over the last ten years. Defence advised the ANAO that FMS expenditure tended to reflect Defence activity levels and that its purchasing officers were required to buy locally, provided that value for money was not compromised, and to test the Australian market before seeking to purchase from an overseas supplier. Defence was not aware of instances of its purchasing officers choosing to purchase through FMS purely because it was administratively easy to do so.

### Table 5

**Defence spending on US Foreign Military Sales**

| Year | $ US (million) - actual | $ Aus (million) equivalent |
|---|---|---|
| 1992–93 | 350 | 500 |
| 1993–94 | 234 | 333 |
| 1994–95 | 165 | 226 |
| 1995–96 | 204 | 271 |
| 1996–97 | 193 | 249 |
| 1997–98 | 197 | 299 |
| 1998–99 | 252 | 402 |
| 1999–00 | 227 | 370 |
| 2000–01 | 236 | 446 |
| 2001–02 | 318 | 612 |

Source: Defence data.

## Conclusion

**3.82** Stakeholders in the AII Program, including industry, with near-unanimity agreed that the AII framework is an essential element in reaching satisfactory outcomes in Defence procurement for Defence and Australian industry.

**3.83** The Australia-wide ISO network can provide Defence personnel and contractors with information on industry capabilities throughout Australia. Defence procurement policy documents clearly state the need for consultation with the ISO network, for all proposed tenders for $5 million or above, where the supplier is not proposing 100 per cent ANZ content. The audit found that consultation with the ISO network by Defence and its contractors was inadequate and that there is a need for Defence to rejuvenate the use of the ISO network.

**3.84** In respect of initiatives seeking to link Australian firms with global supply chains, as is occurring in the JSF project, it is not clear at present how such initiatives are connected to current AII policy and practices. This should be addressed by Defence as part of the preparation of a document that consolidates agreed policy on industry and measures from recent and on-going industry-related initiatives. A related initiative under AII, linking Australian production of turrets for the Australian Light Armoured Vehicle (ASLAV) to the overseas manufacturer's supply chain, has been successful in job creation, introduction of advanced technology, and exporting. However, the strategic benefit to Defence in terms of the direct contribution of the manufacturing facility to maintenance, support and modification of the ASLAV vehicle is difficult to quantify and no comprehensive assessment of that contribution was available.

**3.85** Information on AII commitments and achievements in major capital equipment projects is compiled on Defence's Project Management Information System. The figures include percentages of AII commitments of total contract prices, and achievements made against those commitments. These figures are unreliable and unauditable. There are substantial difficulties in collecting AII figures based on value-added in Australia. The accounting and management information systems of Defence and contractors do not readily separate out the imported component of supplies obtained in Australia. Limited value in terms of reliability and significance should be attached to figures claiming to show AII achieved against project expenditures or contracts signed.

**3.86** In view of the limitations of a quantitative approach to evaluating AII, the ANAO considers there would be merit in adopting a qualitative approach. Such an approach is needed to assess the strategic value of Australian industry capability developed and sustained as a result of Defence's AII activities. Defence has not yet attempted such an approach.

**3.87** The audit evidence indicates that Defence, while seeking to obtain best value for the Commonwealth in negotiations for major contracts, usually also presses for a good deal for Australian industry and generally achieves a reasonable outcome for the latter. Exceptions tend to occur when the requirements of Defence users, including their need for speedy acquisition, overwhelm the AII aspects.

**3.88** There is no systematic monitoring of the achievement of the AII Program as a whole and no reporting system on what the Program has achieved against what costs, what capabilities have been created, sustained or lost, and the strategic value of those capabilities. Implementation by Defence of Recommendation No.1 would remedy this deficiency by providing key performance indicators for the AII Program.

Construction of Anzac-class frigate, Forward module. Photo courtesy of Forgacs Shipyard Pty Ltd, Tomago NSW.

# 4. Overview of Capital Acquisition Case Studies

*This chapter provides an overview of the four major capital acquisition case studies examined in the audit. A detailed discussion of the management of AII in those capital acquisition projects is at Appendix 1.*

## Introduction

**4.1** Prior to contract signature, there are several steps that must be taken in the Defence acquisition process. One of these is the RFT, which is to be prepared and issued in accordance with a standard Defence template. The RFT requires tenderers, among other things, to set out their AII proposal. The level of AII is not specified in the RFT, but tenderers are expected to propose the highest possible level they can produce. Defence compares tenderers' AII proposals with its own baseline AII figure prepared earlier as a result of consultations with industry. The baseline AII figure is set on a project-by-project basis, because projects have varying requirements.

## Australian Defence Air Traffic System (ADATS)

**4.2** The ADATS project (AIR 5186) will replace and provide military air traffic control services that are interoperable with Air Defence systems and Airservices Australia's civil air traffic systems. The contract has increased from its original contract price of $156 million (May 1994 prices) to $225.7 million (December 2002 prices). Defence advised the ANAO that about one third of the increase reflects additional deliverables added to the project since 1993, but most of the increase reflects Consumer Price Index and exchange rate variations.

**4.3** Raytheon (USA), the prime contractor in the project, was responsible for overall project management. Stanilite Electronics (the major Australian sub-contractor) exercised day-to-day control of the AII Program. Stanilite Electronics went into receivership and was sold to ADI Limited, which in turn was purchased by Transfield Holdings and Thales (the joint venture is known as ADI Group Holdings Pty Limited and is an Australian company). Raytheon perceives Thales as a competitor in the field of air traffic and radar systems and considers that the change in ownership has caused difficulties in the transfer of software support capabilities in ADATS.

## AII Program component

**4.4** Specific industry objectives for the ADATS project were to establish and maintain capabilities for in-country TLS and maximise AII. Work performed in Australia was to be at least 70 per cent of the value of the contract price. As most of the hardware for the project was to be imported, AII was to be achieved through offsets manufacturing, site activation, management and logistic support activities valued at $67.1 million. In the most recent AII report reviewed during audit fieldwork an achievement of 75 per cent was reported against the target level of AII.

**4.5** Defence advised that offsets have been partially completed, as Stanilite (now ADI Limited) software engineers and technicians received training at Raytheon's facility in the USA, covering all aspects of systems development and engineering necessary to establish the base for the provision of TLS. Documentation was to be transferred from Raytheon (USA) to Stanilite for the establishment of in-country TLS, implementation of the software engineering initiative and transfer of the source code. The software engineering initiative was to enhance Stanilite's TLS capability for ADATS software and establish Stanilite's ability to undertake future development of large Defence software contracts as the prime contractor.

**4.6** Technology transfer was included under the offsets program to provide Stanilite with the full ability to provide TLS services as well as periodic software and hardware upgrades. Activities planned under the technology transfer program included data transfer, training and licences. The transfer of source code from Raytheon (USA) to Stanilite was to occur as part of the training program for software engineers.

## Australian industry benefits

**4.7** Participation from Australian SMEs in the ADATS project has been restricted to construction of various radar towers and supply of minor components across other areas of the project. Further Australian industry participation has been limited, as most of the software support capability to be transferred to the subcontractor from the prime contractor has not yet been provided. Raytheon advised the ANAO that it has made extensive use of its local subsidiary, with much of the planned program management, logistics management and systems engineering being undertaken in Australia by Raytheon Australia rather than by Raytheon Company in the USA.

**4.8** The AII plan at the time of contract specified that Raytheon (USA) was to deliver the source code to Stanilite under the offsets program to enable maintenance and repair of ADATS. Raytheon (USA) later proposed to transfer

the software source code to Raytheon Australia in a contract change proposal. As ADI Limited has not received the source code, maintenance support and enhancements are currently carried out in the USA. The transfer of software source code is currently being negotiated between Defence and the contractor.

**4.9** Evidence indicates that a large proportion of the AII work generated by the project was of a non-strategic nature. The ANAO considers that obtaining the source code would be of strategic benefit to Defence by providing the basis for enhanced through-life support in-country.

## Australian Light Armoured Vehicle (ASLAV)

**4.10** ASLAV is an eight-wheeled amphibious vehicle designed for reconnaissance and surveillance operations. The ASLAV project is divided into five phases. Phase 1 was a concept evaluation trial of 14 Light Armoured Vehicles (LAV-25) and one armoured recovery variant (LAV-R) purchased in 1989 for $28.4 million (June 1989 prices) from the United States Marine Corps. The trial evaluated the concept of wheeled reconnaissance. The 14 LAV-25s remained in service until November 1995, and the LAV-R was acquired by an Australian museum.[83]

**4.11** In Phase 2, 111 ASLAVs were purchased for $282.2 million (December 2001 prices) through a deed of agreement signed in December 1992 with the Canadian Commercial Corporation (CCC). The CCC contracted to Detroit Diesel General Motors (DDGM) for the total performance of the supply contract.

**4.12** The AII target for Phase 2 was eleven per cent of the contract value ($38 million December 1997 prices). Fourteen per cent was achieved ($48.6 million December 1997 prices). The AII value for Phase 2 was low because the LAV was largely a commercial off-the-shelf purchase from Canada. Excess credits were transferred to Phase 3 in the form of $1.5 million in local content and $3.5 million in SIDAs.

**4.13** Phase 3 involves the purchase of 144 ASLAVs for $612.7 million (December 2001 prices) to be delivered by 2005 with the original equipment manufacturer (DDGM). It includes provisions to equip Phase 2 ASLAVs to the same standard as those purchased under Phase 3. DDGM has committed $81.7 million (23 per cent) in local content against a minimum requirement of $67 million (19 per cent of contracted value).

**4.14** Phase 4 is a whole-of-life continuous upgrade and combat enhancement program for 257 ASLAVs. The phase is in the concept development stage, with a year of decision 2004–2005 and in-service delivery 2008–2009. Estimated

[83] Two LAV-25s from Phase 1 were retained and included in the Phase 3 standardisation program.

expenditure for Phase 4 is $75–100 million. The proposed Phase 5 is for a second stage, whole-of-life continuous upgrade and combat enhancement program for the post 2009 fleet of ASLAVs, with a year of decision 2008–2009 and the year of in-service delivery yet to be determined. Estimated expenditure for Phase 5 is $250–350 million.

### *AII Program objectives*

**4.15** Agreed industry objectives for Phases 2 and 3 included:

- achievement of a maximum level of AII for the project;
- co-production of components for the DDGM production line, with priority being given to the manufacture of high usage items such as ammunition, tyres and hydraulic components;
- design, manufacture and fitment of Mission Role Installation Kits,[84] comprising role-specific equipment for the Australian vehicles such as communications equipment, vehicle work stations and surveillance equipment;
- establishment of maintenance capabilities for repair and adaptation of equipment;
- ability to provide spares[85] and other consumable goods through sourcing local vehicle components; and
- development of technological and supply/support capabilities for longer-term Defence needs through technical publications, enhanced TLS and export activity.

## Australian industry benefits

**4.16** Logistic support for Phase 2 was initially provided from Army's Bandiana Logistic Group. In addition to receiving support from Bandiana for Phase 2, repair and overhaul work is now undertaken at a General Motors Defence Australia (GMDA) facility in Darwin.[86] Defence advised the ANAO that, in the early stages of the phase, some repairs required welders to be brought from Canada. The Bandiana and Darwin facilities are now able to repair damaged

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[84] The following vehicle configurations can be generated from the MRIKs: ASLAV-25: reconnaissance, ASLAV-PC: personnel carrier, ASLAV-C: command, ASLAV-R recovery, ASLAV- F: fitter, ASLAV-A: ambulance, ASLAV-S: surveillance.

[85] Defence advised the ANAO that there is a dependency on high value repair parts that are imported, and that limited reserves of spare parts were held. The repair parts could take many months and even up to one year to be supplied.

[86] In Phase 3 DDGM established an Australian company, GMDA, to manage and coordinate all activities in Australia.

ASLAVs. Phase 2 has been completed and achieved the agreed industry objectives.

**4.17** DDGM has established its Australian headquarters, with a turret manufacturing plant, in Adelaide and a repair facility in Darwin. Seventy people are employed in those two locations. Defence advised the ANAO that it is still very dependent on imported high-value repair parts, some of which take many months, if not more than a year, to be supplied. The Darwin facility is to assist Army in achieving an operational availability of 90 per cent of the ASLAV fleet. Defence assessed that logistic support for the ASLAV has been improving every year.

**4.18** In order to assist in increasing the level of Australian sourcing of ASLAV components, Defence asked DDGM to conduct a study of Australian industry. The study included ISO, Austrade, GMDA and DDGM. A recent AII six-monthly report noted that the Australian supplier base had increased, with 33 companies and 17 small businesses added to GMDA's database.

**4.19** The ANAO found that the level of AII achieved in Phase 2 exceeded the target. Under Phase 2, training data, documentation and skills were transferred as agreed offsets, which enabled a repair and overhaul capacity to be developed by Australian industry.

**4.20** The prime contractor used ISO prior to and during Phase 3 to identify local components for ASLAV and could have made similar use of ISO with respect to Phase 2. Early involvement of ISO clearly assisted in identifying more components than would have been available if ISO had been involved later in the identification process.

**4.21** The level of AII for Phase 3 is considerably greater than the amount specified in Phase 2. The higher level of AII in Phase 3 has so far resulted in more benefits to Australian industry. The contractor's AII progress reports indicate that activities are progressing towards the AII target. Already, the Australian ASLAV assembly and turret fabrication activities have generated employment and exports. Australian industry can now practically perform every repair to ASLAVs, although there remains a dependence on imported parts.

## Military Satellite Communications (MILSATCOM)

**4.22** MILSATCOM is a multi-phased project to develop various satellite communication capabilities for long distance strategic and tactical communications in support of the ADF.

**4.23** Phase 1 was a study of user requirements. Phase 2 involves major contracts to deliver:

- a mature Defence Mobile Communications Network (DMCN) (Phase 2A);
- an ultra high frequency satellite communications capability for the P-C3 and C130H aircraft (Phase 2B); and
- a number of off-shore deployable medium-rate data satellite communications terminals (Phase 2C).

**4.24** Phase 3 focuses on the study of options for:

- a mature satellite communications systems (Phase 3A);
- definition study (Phase 3B);
- Theatre Broadcast System to mitigate the risks and further refine the requirements for later phases (Phase 3C);
- sharing a new generation Optus communications satellite (Phase 3D);
- the provision of terrestrial infrastructure necessary to utilise the Defence payload on the satellite (Phase 3E); and
- a future project to enhance terrestrial infrastructure (Phase 3F).

**4.25** Phases 4 and 5 are future projects for the provision of a mature military SATCOM capability.

## Industry benefits

**4.26** Phase 2A is complete. Defence's AII Final Report in 2001 noted that the AII target (85 per cent or $73.7 million) was exceeded by 12.2 per cent and that the contractor, in a number of areas, had met the bare minimum required in the agreed AII plan for the project. That report also noted that Australian industry benefited from Phase 2A, as there is now a manufacturing and support capability in Australia to support DMCN in service, modifications and through-life upgrades over the life of type (2010).

**4.27** The ANAO found that, due to the large amount of work in progress, it is not yet possible to assess the overall AII Program benefits of the project. AII progress reports and evaluation reports by DMO indicate that AII targets have been met to date. Phase 2A is the only materially significant phase completed. It has exceeded its overall AII target, but only met minimum requirements in some areas. It has generated strategic work in Australian industry, such as the ability to repair DMCN.

## Minehunter Coastal (MHC)

**4.28** MHC was a project to build six 52.5 metre, 720 tonne Navy vessels. The vessels have combat and weapons systems capable of detecting and destroying mines in deep water using variable depth minehunter sonar, remotely operated mine disposal vehicles and clearance divers. A $917 million (December 1993 prices) contract was signed with ADI Limited (the prime contractor) in August 1994. The contracted level of local content was 68.7 per cent (or $629.9 million) for the original construction contract and now stands at $656 million (December 1993 prices) due to additional contracted work.

**4.29** Industry objectives in the MHC project were to:

- acquire full disclosure of all software and documentation;
- establish cost-effective capabilities for through-life engineering and maintenance support;
- establish capabilities for supply support; and
- have ANZ industry involvement in the design, development and production of Australian unique modifications.

**4.30** The prime contractor's tender proposed to make extensive use of the Industrial Supplies Offices (ISO). The early use of NSW ISO Limited (now Industry Capability Network (NSW) Ltd) contributed to the achieved level of AII exceeding the contracted target. The ISO consultant identified Australian businesses that could supply components for the MHC's related products and services. A study commissioned by AIG[87] noted that, as a result of NSW ISO Limited's involvement, 'at least $55 million of the initially proposed imports were replaced with products manufactured by local industry'.

### Australian industry benefits

**4.31** The project involved some 2000 subcontractors, of which 1970 were Australian. There are two in-service support contracts for the MHC. One is with ADI Limited ($41 million in March 2000 prices) for platform and combat system support. The other is with Thales Underwater Systems ($19.8 million in December 1999 prices) for sonar system support. Each is for five years with an option to extend.

**4.32** The AIG study assessed some of the quantifiable benefits to Australia and Defence from construction of the six MHCs. It found that the nine-year construction project had:

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[87] *Impact of Major Defence Projects: A Case Study of the Minehunter Coastal Project, Final Report*, Australian Industry Group—Defence Council, January 2002.

- contributed up to $887 million to Australia's gross domestic product;
- maintained an average of more than 1800 full time equivalent jobs each year throughout Australia;
- developed capabilities that enhance and extend Australian industry's integral role in the national defence effort;
- achieved savings in the amount of money and other resources needed by Defence for in-service support; and
- achieved shorter repair turn-around times, resulting in improved operational capability.

**4.33** The ANAO found that the MHC project was successful in achieving a significantly higher level of AII than was contracted. Skills, new industry capabilities and export markets were developed and were of strategic value. The AIG study enhanced public accountability. Defence should consider sponsoring or undertaking similar studies for other major capital acquisitions.

**4.34** The use of ISO in the MHC project contrasts to some of the other case studies in this report. From the early stages of the project, there was willingness on the part of the contractor to involve the ISO actively. In accordance with DPPM, early and active engagement of ISO should be pursued by all contractors. Defence should ensure that contractors do this.

## Lessons to be learnt from the case studies

**4.35** The case studies of AII examined in the audit demonstrated the benefits from consulting the ISO network early in the procurement cycle. Strategic benefits to Defence were obtained through enhanced Australian industry capabilities, resulting in better TLS of Defence equipment through shorter lead-times in procurement of spare parts, faster turn-around time in repairs and the ability to carry out modifications of equipment to respond to Defence requirements. The benefit of consulting the ISO network has been clearly demonstrated in the MHC and ASLAV (Phase 3) projects. Early consultation in Phase 3 enabled several firms to be added to GMDA's global supply chain, in addition to receiving the benefits outlined earlier in this paragraph.

**4.36** Regular reports by Defence project officers and contractors are important for efficient and effective management. In the case studies, the ANAO noted some deficiencies in the frequency and the content of those reports. Defence documentation examined in the audit included ad hoc reporting on AII issues to the Under Secretary Defence Materiel. However, the ANAO could not locate any systematic reporting to Ministers on significant developments in the AII

aspects in the case studies. Reports of that kind on projects would enhance accountability for the significant amount of public funds expenditure on major capital equipment.

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Canberra ACT
6 June 2003

P. J. Barrett
Auditor-General

# Appendices

## Appendix 1

# Capital Acquisition Case Studies

*This appendix reviews the engagement of AII aspects in four large capital acquisition projects. Findings for each of the four projects and a lessons learnt section are in Chapter 4.*

## Australian Defence Air Traffic System (ADATS)

**1.** The ADATS project (AIR 5186) will replace and provide:

- Air Traffic Control radars at six sites;
- an air transportable tactical radar;
- Air Traffic Control operational facilities and Communication Switches at 12 sites; and
- a radar simulator at the school of Air Traffic Control.

**2.** The replacements are to provide efficient modern military air traffic control services that are interoperable with Air Defence systems and Airservices Australia's civil air traffic systems.

**3.** ADATS was approved in the context of the Government's 1993–1994 Budget. The contract valued at $156 million (May 1994 prices) was with Raytheon (USA, the prime contractor) for the design, development, provision, installation and logistics support of a fully tested and operational integrated ADATS.[88] The contract made allowances for labour and/or material price variations but not for exchange rate variations. Defence advised the ANAO that current project approval has increased to $225.7 million (December 2002 prices). About one third of the increase in approval reflects additional deliverables added to the project since 1993, but most of the increase reflects Consumer Price Index and exchange rate variations.

### *Contract signing*

**4.** The prime contractor (Raytheon (USA)) was responsible for overall project management and achievement of the AII Program. Stanilite Electronics (the major Australian subcontractor) exercised day-to-day control of its in-country AII Program, including the AII Program of its subcontractors. Other in-country subcontractors who were not subcontracted to Stanilite reported to Raytheon on the progress of their AII Programs.

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[88] All prices quoted are in $A unless otherwise specified.

**5.** After going into receivership Stanilite Electronics was sold to ADI Limited, which in turn was purchased by Transfield Holdings and Thales (the joint venture is known as ADI Group Holdings Pty Limited and is an Australian company). Raytheon perceives Thales as a competitor in the field of air traffic and radar systems and considers that the change in ownership has caused difficulties in the transfer of software support capabilities in the project.

### *AII Program component*

**6.** Specific industry objectives for the ADATS project were to establish and maintain capabilities for in-country TLS, maximise AII, and for work performed in Australia to be valued at least 70 per cent of the contract price.[89] As most of the hardware for the project was to be imported, AII was to be achieved through offsets manufacturing, site activation, management and logistic support activities valued at $67.1 million. In the most recent AII report reviewed during audit fieldwork an achievement of 75 per cent was reported against the target level of AII.[90]

**7.** Defence advised that offsets have been partially completed, as Stanilite (now ADI Limited) software engineers and technicians received training at Raytheon's facility in the USA, covering all aspects of systems development and engineering necessary to establish the base for the provision of TLS. Documentation was to be transferred from Raytheon to Stanilite for the establishment of in-country TLS, implementation of the software engineering initiative and transfer of the source code.[91] The software engineering initiative was to enhance Stanilite's TLS capability for ADATS software and establish Stanilite's ability to undertake future development of large government (Defence) software contracts as the prime contractor.

**8.** Technology transfer was included under the offsets program to provide Stanilite with the full ability to provide TLS services as well as periodic software and hardware upgrades. Activities planned under the technology transfer program included data transfer, training and licences. The transfer of source code from Raytheon to Stanilite was to occur as part of the training program for software engineers.

### *Reporting*

**9.** Under the contract Raytheon is responsible for reporting AII achievements against targets at six monthly intervals. File searches revealed that Raytheon did not submit an AII report from April 1999 to April 2000. Defence advised the

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89 *ADATS Project Management and Acquisition Plan*, Vol 8 AIIP, Issue 1.

90 *AII Report*, July 2001–December 2001.

91 *AII Program—Industry objectives*, Attachment K, p. K 2.

ANAO that from April 1999 to April 2000 Raytheon did not ensure that ADI Limited had a nominated individual responsible for tracking AII and so did not have the necessary data to complete its AII reports. Since then, AII reports have been submitted at the nominated intervals.

**10.** Industry Division commissioned a consultant to conduct an AII audit of ADATS in 1999. It was to validate AII data and to check the means by which local content data is captured and reported in the biannual AII report. The audit report commented on the following issues:

- no consultation with ISOs by the prime or subcontractor to confirm there were no suitable Australian suppliers of fibre optic materials;
- unawareness by the prime or subcontractor of ISO's existence or its role;
- neither the prime nor subcontractor had a clear idea of what might constitute actual 'Australian' content; and
- neither of the parties requires lower level subcontractors to report on the level or value of foreign content in 'Australian' sourced supplies.[92]

**11.** The report recommended that contractors be educated on what constitutes local content and on the function of ISO. It stated that 'as ADI's management and accounting systems have not been designed to allow for the tracking of actual local content expenditure, it is difficult to estimate the amount by which actual local content achieved differs from that which is set out in the AII plan of the ADATS contract'.[93] The report concluded 'if contractors do not have appropriate management and accounting systems in place to track and report on AII ... then it is not possible to monitor the precise level of achievements of a project's AII plan'.[94]

**12.** In response to paragraph 10 above, ADI Limited commented to the ANAO as follows:

- No such requirement exists in ADI's subcontract;
- ADI does not agree that it was unaware of the existence or role of the ISO. In fact, ADI made extensive use of this organisation on its Minehunter Coastal Project, a fact evidenced by the ISO often quoting the ADI Minehunter project as the shining example of the benefits that ISO can bring to Prime contractors in the defence industry in Australia;
- ADI does not agree that is does not have a clear idea of what might constitute Australian content; and

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[92] *ADATS AII Audit report*, issued by a consultant to Defence, 2 March 2000, p. 16, ADATS Pre-Audit meeting 11 November 1999, *ADATS AII Review Report*, 2 March 2000, p. 10.

[93] ibid., p. 9.

[94] ibid., p. 17.

- ADI entered into relatively few lower level subcontracts.[95]

**13.** In response to paragraph 11, ADI Limited commented as follows:

> ADI does not agree that 'ADI's management and accounting systems have not been designed to allow for the tracking of actual local content expenditure'. ADI's CINCOM management accounting system is a $CS^2$ system fully compliant with DEF (AUST) 5655 and is capable of tracking local content expenditure on a project. The Minehunter Project is also a good example where Australian content can be traced down [to] either State level, or region within a State.[96]

The ANAO considers that Defence needs to resolve with ADI Limited the latter's contentions concerning the above-mentioned report.

**14.** The prime contractor for ADATS has been reviewed under DMO's Company Scorecard system. Comments from the prime contractor on the scorecard report indicate a disagreement with the rating. The prime contractor and Defence are jointly reviewing the situation.

### *Entering service*

**15.** Defence and contractor records indicate that the delivery schedule for ADATS slipped from April 1999 to beyond 2002 for the following reasons:

- poor risk assessment;
- the instigation of Commonwealth changes to the installation sequence as a consequence of and to mitigate the effects of contractor delays in the contract;
- major slips in data processing and display software development due to the prime contractor experiencing problems; and
- schedule slippage due to software/hardware problems experienced by subcontractors.

**16.** A negotiated revised delivery schedule resulted in Raytheon (USA) paying the Commonwealth $2.8 million in liquidated damages through a reduced contract price for not completing a milestone. Defence provided the Senate Foreign Affairs, Defence and Trade Legislation Committee in February 2001 with a list of projects where time slippages were in excess of six months against their in-service date.[97] ADATS was among those projects, with a slippage of 59 months reported. More recently, a 13 month reduction in delays for the delivery of ADATS was reported by Defence in answer to a question on notice.[98]

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[95] ADI Limited letter to the ANAO dated 8 May 2003.

[96] ibid.

[97] *Senate Foreign Affairs, Defence and Trade Legislation Committee Hansard*, 21 February 2001, p. 56.

[98] ibid., 14 November 2002, p. 6273.

### *Australian industry benefits*

**17.** Participation from Australian SMEs in the ADATS project has been restricted to construction of various radar towers and supply of minor components across other areas of the project. Further industry participation has been limited, as the majority of the software support capability to be transferred to the subcontractor from the prime has not occurred. Raytheon advised the ANAO that 'Raytheon has made extensive use of the local Raytheon subsidiary, with much of the planned program management, logistics management and systems engineering being undertaken in Australia by Raytheon Australia rather than by Raytheon Company in the USA'. At project completion, Stanilite was to hold all software and technical data specific to ADATS, following planned factory acceptance tests in July 1998 and October 1998. In a November 1999 presentation to the Defence ADATS team by Raytheon and ADI Limited, Raytheon stated that it intended to transfer IP and rights to ADI Limited at segment acceptance of the first site.

**18.** The AII plan at the time of contract specified that Raytheon (USA) was to deliver the source code to Stanilite under the offsets program to enable maintenance and repair of the ADATS. Raytheon (USA) later proposed to transfer the software source code to Raytheon Australia in a contract change proposal. For reasons indicated in paragraph 5, ADI Limited has not received the source code. As a consequence, there is presently no in-country capability to maintain and enhance the software for the life of type. Comments from the ADATS Project Office indicate that, due to the non-transfer of the source code, offset values totalling $53 million for the training and transfer of software tasks have not been met. The transfer of software source code is currently being negotiated between Defence and the contractor.

**19.** Raytheon's non-transfer of the source code has implications for Raytheon's claims to have met offset requirements. Raytheon (USA) has established Raytheon Australia and, with it, its own capability to undertaking the work in Australia, intending to meet project AII requirements.

**20.** Raytheon now intends to transfer to ADI Limited the intellectual property (IP) at agreement acceptance, subject to proper 'firewalls' to prevent a competitor exploiting the IP. The ADATS AII audit report noted that the software required was already installed, but the licence for use was unsigned. Without the signed licence, ADI Limited will be unable to support data processing and display software or satisfy industry requirements in maintaining ADATS.

**21.** Evidence indicates that a large proportion of the AII work generated by the project was of a non-strategic nature. The ANAO considers that obtaining the source code would be of strategic benefit to Defence by providing the basis for enhanced through-life support in-country.

## Australian Light Armoured Vehicle (ASLAV)

**22.** ASLAV is an eight-wheeled amphibious vehicle designed for reconnaissance and surveillance operations. The number of troops carried is determined by the hull design and vehicle configuration.[99] Mission Role Installation Kits (MRIKs) enable different vehicle configurations to be produced from Types 2 and 3 hull designs.[100] The ASLAV project is divided into five phases.

### *Phases 1 & 2*

**23.** Phase 1 was a concept evaluation trial of 14 Light Armoured Vehicles (LAV-25) and one armoured recovery variant (LAV-R) purchased in 1989 for $28.4 million (June 1989 prices) from the United States Marine Corps. The trial evaluated the concept of wheeled reconnaissance. The 14 LAV-25s remained in service until November 1995, and the LAV-R was acquired by an Australian museum.[101]

**24.** In Phase 2, 111 ASLAVs were purchased for $282.2 million (December 2001 prices) through a deed of agreement signed in December 1992 with the Canadian Commercial Corporation (CCC). The CCC contracted to Detroit Diesel General Motors (DDGM) for the total performance of the supply contract. British Aerospace Australia (BAeA) was subcontracted by DDGM for design, installation and testing of some of the MRIKs, and provision of some components.

**25.** The AII target for Phase 2 was 11 per cent of the contract value ($38 million December 1997 prices) and 14 per cent was achieved ($48.6 million December 1997 prices).[102] The AII value for Phase 2 was low because the LAV was largely a commercial off-the-shelf purchase from Canada. AII progress reports were submitted at six-monthly intervals by DDGM. Excess credits were transferred to Phase 3 in the form of $1.5 million in local content and $3.5 million in SIDAs.[103]

### *The agreement*

**26.** Agreed industry objectives for Phase 2 included:

- achievement of a maximum level of AII for the project;

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[99] For example, a Type 1 hull design has only one vehicle configuration, Type 2 has four configurations and Type 3 has two configurations.

[100] The following vehicle configurations can be generated from the MRIKs: ASLAV-25: reconnaissance, ASLAV-PC: personnel carrier, ASLAV-C: command, ASLAV-R recovery, ASLAV-F: fitter, ASLAV-A: ambulance, ASLAV-S: surveillance.

[101] Two LAV-25s from Phase 1 were retained and included in the Phase 3 standardisation program.

[102] *AII Phase 3 Proposal*, June 2000.

[103] ibid., p. 30.

- co-production of components for the DDGM production line, with priority being given to the manufacture of high usage items such as ammunition, tyres and hydraulic components; and
- design, manufacture and fitment of MRIKs, comprising role-specific equipment for the Australian vehicles such as communications equipment, vehicle work stations and surveillance equipment.[104]

**27.** Under the contract, the minimum offset obligation was 30 per cent of the value of imported content or $25 million.[105] Notable offsets from Phase 2 included the development, in conjunction with Army, of a suitable long-term logistic support package, and the Commonwealth obtaining ownership of all necessary technical data. Some offsets included the transfer of DDGM's:

- packaging data base to Australian industry;
- repair and overhaul capability to Australian industry;
- training data and documentation to Australian industry; and
- franchise to warehouse and sell repair parts for supplies.[106]

**28.** Liquidated damages provisions for Phase 2 were for 10 per cent of the amount by which the contractor fails to discharge the agreed offsets obligation, subject to a maximum liability of $2 million.[107] The liquidated damages provision was not used for Phase 2 as the AII target was exceeded.

### *Australian industry benefits*

**29.** ASLAVs were delivered to Army's 2nd Cavalry Regiment, in Darwin, over the period May 1996 to May 1997. The offsets program in this project aims to enable Australian industry to provide TLS for the ASLAVs.[108] Logistic support for Phase 2 was initially provided from Army's Bandiana Logistic Group. In addition to receiving support from Bandiana for Phase 2, repair and overhaul work is now undertaken at a General Motors Defence Australia (GMDA, now General Dyynamics) facility in Darwin.[109] Maintenance work undertaken in Darwin is valued at $1.3 million per annum.

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[104] *Agreement between Commonwealth of Australia and General Motors of Canada Limited*, 11 December 1992, Appendix 1 to Attachment A.

[105] *AII Phase 3 Proposal*, June 2000.

[106] *Agreement between Commonwealth of Australia and General Motors of Canada Limited*, 11 December 1992, Appendix 4 to Attachment A.

[107] *Contract between the Commonwealth of Australia and the Canadian Commercial Corporation for the supply of Australian Light Armoured Vehicles*, Book 2 of 2, 2000, p. 7.

[108] *Australian Industry Involvement Report*, 29 June 1995, p. 4.

[109] In Phase 3 DDGM established an Australian company, GMDA, to manage and coordinate all activities in Australia.

**30.** Defence advised the ANAO that, in the early stages of the phase, some repairs required welders to be bought from Canada. The Bandiana and Darwin facilities are now able to repair damaged ASLAVs. Phase 2 has been completed and achieved the agreed industry objectives.

### *Phase 3*

**31.** Under a deed of agreement signed in June 2000 with the original equipment manufacturer (DDGM), Phase 3 involves the purchase of 144 ASLAVs for $612.7 million (December 2001 prices) to be delivered by 2005. It includes provisions to equip Phase 2 ASLAVs to the same standard as those purchased under Phase 3. The Phase 3 purchase aims to achieve high commonality with Phase 2 vehicles. Phase 3 includes vehicle enhancements such as electric drive for the ASLAV-25 turrets and integrated laser range finders.

**32.** The deed also includes funding of $21.2 million (December 2001 prices) for a Crew Procedural Trainer (CPT).[110] Thales Training & Simulation has been subcontracted to supply nine CPTs to facilitate introduction into service and sustainment of crew gunnery training for the ASLAV. Tenix Defence Systems have been contracted for the manufacture and installation of the MRIKs and final vehicle assembly.

**33.** The industry objectives for Phase 3 include:

- establishment of maintenance capabilities for repair and adaptation of equipment;
- providing spares[111] and other consumable goods through sourcing local vehicle components; and
- developing technological and supply/support capabilities for longer term Defence needs through technical publications, enhanced through-life support and export activity.[112]

**34.** Under the agreement the following activities will be performed by Australian industry:

- assembly and installation of some of the vehicle systems and components;
- turret installation and integration;

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[110] *AII Management Plan for the supply of Light Armoured Vehicles to the Commonwealth of Australia (ASLAV Phase 3)*, 22 June 2001, p. 4.

[111] Defence advised the ANAO that there is a dependency on high value repair parts that are imported, and that limited reserves of spare parts were held. The repair parts could take many months and even up to one year to be supplied.

[112] *Contract between the Commonwealth of Australia and the Canadian Commercial Corporation for the supply of Australian Light Armoured Vehicles*, Book 2 of 2, p. A-1-2, Amendment, 26. September 2000.

- installation of the MRIK;
- final paint and identification; and
- complete vehicle test and final acceptance.[113]

### *Phase 4*

**35.** Phase 4 is for a whole-of-life continuous upgrade and combat enhancement program for 257 ASLAVs. The phase is currently in the concept development stage, with a year of decision 2004–2005 and in-service delivery 2008–2009. Estimated expenditure for Phase 4 is $75–100 million.[114]

### *Phase 5*

**36.** The proposed Phase 5 is for a second stage, whole-of-life continuous upgrade and combat enhancement program for the post 2009 fleet of ASLAVs, with a year of decision 2008–2009 and the year of in-service delivery yet to be determined.[115] The estimated expenditure for Phase 5 is $250–350 million.

### *The agreement*

**37.** DDGM has committed $81.7 million (23 per cent) in local content against a minimum requirement of $67 million (19 per cent of contracted value).[116] Liquidated damages provisions for Phase 3 are for 15 per cent of the amount by which the contractor fails to discharge the agreed local content obligation and for 10 per cent of the amount by which the contractor fails to discharge the SIDA obligation of $62.3 million.[117] The total liability for liquidated damages for the prime contractor is a maximum of $3 million.[118] SIDAs comprise exports ($18.7 million), technology transfers (mainly turret technology $39.7 million) and $3.5 million in credits from Phase 2.[119]

**38.** Mutual objectives for Phase 3 are for an improvement over Phase 2, through increasing local content. Improvements will be visible to Defence by General Motors establishing a more substantial presence in Australia, providing more efficient TLS and a broader utilisation of Australian industry.[120]

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[113] *Phase 3 Australian Industry Involvement Sourcing Plan*, 10 June 1998, p. 3.

[114] *Defence Capability Plan 2001–2010,* p. 189.

[115] ibid., p. 190.

[116] *Australian Industry Involvement Summary for HAS (M&G) ASLAV Phase 3*, May 2000.

[117] *Australian Industry Involvement Phase 3 Proposal*, June 2000, p. 30.

[118] ibid., p. 26.

[119] *Australian Industry Involvement, Phase 3 Deed and Proposal*, ASLAV, p. 19.

[120] *Phase 3 Australian Industry Involvement Sourcing Plan*, 10 May 1998, p. 10.

### *Australian industry benefits*

**39.** DDGM has established its Australian headquarters, with a turret manufacturing plant, in Adelaide and a repair and overhaul facility in Darwin and employs a total of 70 people in those two locations. The facility in Darwin is to provide a 'one stop shop' for base and selected field level repair, as well as supply support for ASLAV variants. Defence advised the ANAO that the repair and overhaul facility currently only provides limited support to the TLS of the ASLAV fleet. The following services are to be provided by GMDA in Darwin in support of ASLAVs: maintenance/diagnostic support, subcontractor/supplier management, technical support/services, and LAV fitter support services.[121] The contract for repair and overhaul in Darwin is for an initial seven year period, with repair parts provided by Defence.

**40.** The usage of repair parts is maintained and monitored by the Darwin facility through an interface with the Standard Defence Supply System. Repair response times are three working days for standard vehicle repairs (fair wear and tear), and one day for components. Defence advised the ANAO that it is still very dependent on imported parts for the supply of high-value repair parts, some of which take many months, if not more than a year, to be supplied. The Darwin facility aims to assist Army in achieving an operational availability of 90 per cent of the ASLAV fleet.[122] Defence said that logistic support for the ASLAV improves every year.

**41.** Turret fabrication, assembly and testing capabilities were transferred from Canada to Adelaide. The Adelaide facility is to manufacture turrets for Australian and New Zealand military, with potential orders from other countries. The transfer of the production capacity from Canada to Australia should result in the Australian manufacture of ASLAV and other products valued at between $210–395 million over the next three to eight years.

**42.** Defence documentation indicated that there was significant potential for enhancing and sustaining local industry through local and export sales of Australian made MRIK, components for LAV and other vehicles, and the integration of LAV turrets. Technology transfers for the production of turrets will occur through the establishment of a turret manufacturing capability, training of Australian personnel and an enhanced program of exports.

**43.** Defence advised the ANAO that current turret manufacturing work undertaken at the Adelaide facility essentially consisted of welding, fabrication, painting and assembly of the high value components such as the cannon and turret drive that are imported and fitted. However, internal Defence

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[121] *Contract Deliverable Requirement*, 1 August 1996.

[122] ibid., p. 3.

documentation queried whether the direct value of ASLAV manufacturing would add to defence self-reliance in the long term. The limited benefit of work undertaken was noted in the source evaluation report.

**44.** In order to assist in increasing the level of Australian sourcing of ASLAV components, Defence asked DDGM to conduct a study of Australian industry and identify any premiums from using Australian industry. The study involved ISO, Austrade, the Commonwealth, GMDA, and DDGM.

**45.** As part of this study, DDGM met ISO directors and developed a detailed plan to identify potential ANZ sources. Components to be sourced in Australia were identified from a parts candidates' list (PCL). Initially there was a potential for 3,000 parts to be sourced, which was then narrowed to 1200.[123] ANZ companies were requested to provide quotations on a representative sample of the PCL. ISO was also consulted to provide company profiles for the enhanced TLS element. The study noted that a premium of $0.2 million would apply to the sourcing of Australian ASLAV components. A recent AII six-monthly report noted that the Australian supplier base had increased, with 33 companies and 17 small businesses added to GMDA's database.[124]

## Military Satellite Communications (MILSATCOM)

**46.** MILSATCOM is a multi-phased project to develop various satellite communication capabilities for long distance strategic and tactical communications in support of the ADF. Under Phase 3D of the project, SingTel Optus (formerly Cable and Wireless Optus) will share its new communications satellite with Defence. The C1 satellite[125], with an expected life of 15 or more years, is scheduled to become operational in 2003. Defence will own its payload on the C1 satellite and, under long-term contractual arrangements, will share responsibility with SingTel Optus for operation and management of the satellite.

**47.** SingTel (a leading Asian communications company) acquired 100 per cent of Optus Cable and Wireless in 2001. Issues of concern to Defence about the acquisition included security, the change of ownership and guarantees in the project. To address those issues, a Deed of Agreement between Defence, SingTel and Optus was negotiated offering remedies, including step-in powers for the Commonwealth.[126]

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[123] *Australian Industry Involvement Phase 3 Deed and Proposal*, ASLAV, p. 6.

[124] *Semi-Annual Report 3, Phase 3 ASLAV Program*, December 2001 to May 31 2002, p. 13.

[125] C1 is a third generation satellite responding to increased demand for satellite communications throughout Oceania and Asia.

[126] *Communications Project Governance Board Meeting*, 24 September 2001.

### *Phases 1 & 2*

**48.** Phase 1 commenced in 1991 with a six-month study of user requirements and funding of $2.3 million (December 1997 prices). The total value for Phase 2A was $75.8 million (December 2001 prices). A major contract for Phase 2A was signed with Optus in September 1998 to deliver the Mature Defence Mobile Communications Network (M-DMCN). A total of 667 configuration items, including 69 M-DMCN ship kits, 524 M-DMCN Army kit variants, as well as other ancillary equipment, have been progressively delivered to the ADF over the period from July 2000 to September 2001. Two earth stations were also upgraded and delivered to the Commonwealth.

**49.** AII objectives for all Phase 2 activities are to maximise the following capabilities:

- capability of Australian industry to support the equipment throughout its service life;
- design and develop capabilities in Australian industry to enhance the operational capability and performance of equipment throughout the service life;
- applied research in respect of technologies relevant to the equipment; and
- local production of the supporting equipment.[127]

**50.** Various AII reports were submitted by Optus throughout Phase 2A. The reports stated that there had been little variation between planned and achieved AII figures.[128] Defence's AII Final Report noted that the AII target (85 per cent or $73.7 million) was exceeded by 12.2 per cent.[129] Despite the high AII figure achieved, the report also noted that the contractor, in a number of areas, had met the bare minimum required in the detail in the agreed AII plan for the project.[130] Lower values than those specified in the contract were achieved by the contractor in research and development activities.

**51.** A Maintenance and Operational Support Agreement (MOSA) for the support of DMCN fixed components and mobile terminals was signed in September 1998 for five years. The agreement contains an option to extend the MOSA for an additional five years. The final AII report of 2001 commented that Australian industry benefited from Phase 2A, as there is now a manufacturing

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[127] *Phase 2 Equipment Acquisition Strategy*, MILSATCOM, Issue 2, Annex C, Australian Industry Involvement.

[128] *DMCN Contract Progress Report No. 6*, 5 June 1999.

[129] *Joint Project 2008 Phase 2A, MILSATCOM DMCN—AII Final Report*, July 2001, p. 7.

[130] ibid., p. 1.

and support capability in Australia to support the DMCN in service, modifications and through-life upgrades over the life of type (2010).[131]

### *Phase 2B*

**52.** Phase 2B is introducing an Ultra-High Frequency Aircraft Satellite Communications (UHF SATCOM) capability to the P-3C and C130H aircraft. The SATCOM on the P-3C and C130H are to be used in support of ADF operations.

**53.** Phase 2B (C130-H component) was approved for $13.3 million (December 1999 prices) and a contract was signed in July 2002. The UHF SATCOM in the C130-H will be implemented through a change to an existing Project AIR 5401 contract. Defence advised that the C130-H contractor is progressing a preliminary design for the systems integration. Installation activity is planned to commence in July 2003 using SATCOM radios. Defence purchased these radios from the USA under Foreign Military Sale Program arrangements, as no suitable SATCOM radios and ancillary equipment were available in Australia. The SATCOM are to be installed on all 12 C130-H aircraft by August 2004. AII for the C130-H contract will focus on maintaining an Australian capability in the design and development of systems, project management and system engineering and was estimated to be 35 per cent of that contract.[132] An AII progress report was submitted by the contractor in September 2002.

**54.** The integration and installation of the UHF SATCOM systems on the P-3C aircraft were implemented through a change to the P-3C modification contract in August 1996.[133] An AII target of $1.4 million for the P-3C upgrade has been applied through a contract change to the SATCOM contract. Installation on six P-3C aircraft has been completed. Installation on all 18 aircraft is expected to be completed in 2004. Phase 2B is due to close in 2004, but Australian industry will continue to benefit from a three year deeper-level maintenance contract.

### *Phase 2C*

**55.** Phase 2C was the purchase of a number off-shore deployable medium-rate data SATCOM terminals. The phase has funding of $5.7 million for the prime contract ($3.3 million), TLS and project management costs. The AII value was $1.89 million, which represents 58 per cent of the prime contract. Phase 2C was completed when equipment was handed over to users in 1998.

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[131] ibid.

[132] The local content target of 35 per cent was estimated in the Equipment Acquisition Strategy, 10 April 2000. *JP 2008 Phase 2B AII*, p. 1.

[133] The contract change was applied to the AIR 5276 P-2C upgrade contract, linking the schedule of JP 2008 Phase 2B to the schedule of AIR 5276. The contract change was for $US 9.4 million, plus $A 3.4 million.

### *Phase 3*

**56.** Phase 3A involves a study of options for a mature satellite communications system to meet ADF requirements. Phase 3B was a definition study to provide full system architecture and equipment specifications for the most suitable satellite communications system identified under Phase 3A. Phase 3B was removed from the Defence Capability Budget with unallocated funding of $2.5 million (and the year of decision 2003–2004). The in-service delivery year is yet to be determined.

### *Phase 3C*

**57.** Phase 3C, the Theatre Broadcast System (TBS), is a current CTD project, with contracts totalling $27.5 million (December 1998 prices).[134] Phase 3C seeks to mitigate the risks and further refine the requirements for Phase 3E (explained below). The project office as Prime Systems Integrator is responsible for development of the CTD with DSTO assistance. The objective of the TBS CTD is to provide access to high bandwidth information resources by using relatively inexpensive commercial satellite communications technology.[135]

**58.** Industry requirements are not strictly applicable for this phase, due to a large number of small contracts, and the incremental nature of the acquisition strategy, in which the Project Office is the Prime Systems Integrator. The AII requirements are to be addressed in Phase 3E.

**59.** Phase 3C does not have a prime contract; instead it has a large number of small contracts ranging in value from $2.2 million to a few hundred dollars. Overseas equipment is worth 13 per cent of the project's value, with remaining equipment and labour to be Australian sourced. Defence advised under the current guidelines, AII is not a mandatory component of these contracts. This is because:

- Phase 3C, as a CTD, is essentially a definition study, and provides minimal opportunity for Australian industry involvement; and
- the project office will utilise the services of existing Standing Offers and may involve research institutions in providing additional specialised research capabilities not normally available from commercial companies.[136]

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[134] This value includes $4.4 million to 'operationalise' the TBS CTD for activities in East Timor.

[135] *JP2008 Phase 3C Theatre Broadcast System Capability and Technology Demonstrator—Project Approach*, Version 0, p. 3.

[136] *JP 2008 Phase 3C Theatre Broadcast System Capability and Technology Demonstrator, Equipment Acquisitions Strategy*, 2 June 2000, p. 13.

### *Phase 3D*

**60.** Phase 3D was established after an unsolicited approach from Optus in early 1997 for Defence to share a new generation Optus communications satellite. A sole source RFT was released to Optus in December 1997 requiring subsequent releases and requests for repriced offers. The tender for Phase 3D was evaluated by Defence's Technical Evaluation Working Group (TEWG) and found to be deficient in the area of local content. No minimum level of AII was specified in the RFT. The requirement was to maximise the level of local content (see below). Defence had been concerned that background and foreground IP may be insufficient to support and operate the equipment.[137] Defence advised the ANAO that the IP issue was addressed to Defence's satisfaction during contract negotiation. The project is to be closed some three months after the launch, which has been re-scheduled to mid 2003, subject to availability of launch vehicles.

**61.** Phase 3D, to cost $314.9 million (local content $73.5 million or 23 per cent (October 1999 prices), is for four principal contracts: the Satellite Segment Acquisition (SSA), Defence Ground Segment Acquisition (DGSA), Whole-of-life Satellite Services (WOLSS), Operations and Support Services (OSS) and a Satellite Management Agreement (SMA).[138] Defence considers that the project will give it a significant military satellite communications capability years earlier, and at lower cost, than if it had attempted to acquire, launch and operate a dedicated Defence communications satellite.

**62.** The contract for SSA, the Defence communications payload, covers satellite design, build, launch and related insurance services. The Defence payload segment will be designed, built and launched overseas. The Defence payload will be accepted by the Commonwealth at factory completion, prior to shipping to the launch site. After the launch, orbit raising and in-orbit testing will be undertaken to verify that the satellite suffered no damage during launch and that it is fully operational.[139] The prime contractor is to endeavour to facilitate Australian company participation where practicable, aiming for $32.8 million in local content from the $236.4 million contract (October 1999 prices).[140] The tenderer recognised the importance of using ISO, and stated that 'where appropriate, the ISO will be requested to assist in finding new local sources of supply'.[141]

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[137] *Defence Source Selection Board, Secretarial Note*, 11 December 1998.

[138] In addition to the five principal contracts, there are numerous smaller valued contracts for the delivery and support of the new capability.

[139] The launch of the C 1 satellite is to occur from French Guiana using an Ariane 5G+ rocket.

[140] *Space Segment Acquisition*, Appendix 1 to Attachment U, Local Content Schedule.

[141] *JP2008 Phase 3D TDR 029*, 28 October 1998.

**63.** The DGSA covers the X[142] and Ka-Band[143] anchor stations, primary and back-up payload operations control facilities, ground segment spares (contract option), and integrated logistic support. The contract was valued at $28.2 million, of which $18.4 million (October 1999 prices) will be in local content. Local content levels of 100 per cent were for the provision of the payload operations and ground control infrastructure, all installation and testing of the X and Ka-band anchor stations and all project management activities.

**64.** WOLSS is a ten year $40.9 million (October 1999 prices) service contract covering telemetry, tracking and command of the Optus C1 satellite, Defence payload management infrastructure, satellite related insurance (for the first five years in orbit operations) and satellite bus service.[144] WOLSS is a support services contract. The value of local content was $12.8 million (October 1999 prices).

**65.** OSS is a $9.5 million (October 1999 prices) five year service contract for the supply of payload and operations operators, maintenance and logistical support for the fixed terrestrial infrastructure, and configuration control. The contract is for in-service support activities, with a value of local content of $9.5 million (October 1999 prices). The final component for Phase 3D is the SMA, which will provide for management of Defence's and Optus's interests in the satellite.

**66.** Defence will benefit from the C1 satellite, as the costs and risks of acquiring, launching and operating the C1 satellite are shared with Optus. Benefits to Australian industry from Phase 3D arise from managing the Optus C1 satellite acquisition, engaging local industry for the systems design, sourcing and on-site integration of the ground segment facilities and the provision of satellite payload operators and ground segment maintenance and support services for Defence. There are no SIDAs under this program because Optus will be provided with a complete satellite solution, with no potential for incorporating any strategic industry development initiatives.[145]

**67.** DMO, under its Company Scorecard System, evaluated the performance of the prime and the major subcontractor at six monthly intervals. Performance by a foreign subcontractor was found to be unsatisfactory because of delays in the delivery of technical components from subcontractors associated with the UHF payload. Defence records indicate that this key subcontractor has a record

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[142] X-Band has the capability to support medium and high data rate communications to large sea platforms and deployed land headquarters.

[143] Ka-Band capability will support theatre broadcast and communications to deployed forces. Ka-Band is relatively new and will be reliant on the theatre broadcast infrastructure developed under Phase 3E.

[144] Satellite bus service is the area of the satellite with components for supporting, tracking, telemetry and command, power systems, propulsion and control of the spacecraft.

[145] *Tender Response TDR 029—Australian Industry Involvement*, 28 October 1998, p. 18.

of schedule underperformance in Electronic Systems Division projects.[146] Neither the Commonwealth nor Optus was able to apply any direct contractual leverage on the subcontractor for the late delivery of the Ultra High Frequency payload in late 2001.[147]

**68.** Lessons to be learnt identified by Defence from Phase 3D include the following:

- Given the sole supplier situation and long contractual period, Defence assessed that a partnering arrangement would have been preferable to using DEFPUR 101[148] (the Defence contracting standard at the time).
- The operational concept document should have been developed and agreed prior to development of a specification for the Defence payload and the ground segment.
- In multiple contracts and complex subcontractual arrangements used in high technology projects, low-cost technical problems have the potential to cause major delays to the project.[149]

### *Phase 3E*

**69.** The proposed Phase 3E would provide terrestrial infrastructure necessary to fully utilise the Defence payload on the Optus C1 communications satellite, with an estimated expenditure of $100–150 million.[150] Phase 3E will provide the minimum SATCOM infrastructure required by Commander Australian Theatre for use with the Defence payload on the C1 satellite to support communications with deployed and highly mobile forces. Infrastructure beyond the minimum requirement will be procured under other projects.[151] In 2001, after briefing industry, Defence invited expressions of interest. Tenders were sought in February 2002. Contract signature for terrestrial infrastructure equipment is due in 2003 and in-service delivery is to begin around 2005.

**70.** Phase 3E will initially be funded for a five-year period for deeper-level support of all equipment acquired under this phase, with an option to extend the contract for an additional five years, and eventually to the whole of life of the satellite.[152] The support contract is concurrent with, but separate from, the

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146 *Project Performance and Final Assessment Form, Peer Review Final Report*, 24 September 2001.

147 ibid.

148 *Proforma Request for Tender.*

149 *Project Performance and Final Assessment Form, Peer Review Final Report, op. cit.*

150 *Defence Capability Plan 2001–2010*, p. 78.

151 *JP2008 Phase 3E MILSATCOM Terrestrial Infrastructure Project Management and Acquisition Plan*, Vol.1, Issue 1a, p. 3.

152 *Defence Capability Plan 2001–10*, p. 8.

prime contract.[153] Defence advised that industry would be developing the Phase 3 capability. They may also enhance it but the thrust of their involvement will remain developmental.

**71.** The target local content value for Phase 3E is $70 million. It is expected that industry will be involved in provision of services and modification of existing ground facilities to complement the satellite being procured under Phase 3D. Phase 3E is expected to transfer Phase 3C Defence Science and Technology Organisation technologies to Australian industry for further development.[154]

### *Phase 3F*

**72.** Phase 3F is a future project to enhance terrestrial infrastructure. The year of decision is 2004–2005 and the in-service delivery date is yet to be determined.[155] The estimated expenditure for this phase is $20–30 million.[156] Phase 3F would provide a more robust and efficient Defence SATCOM capability and may include provision of bandwidth efficient modems and address issues concerning anti-jam and low probability of intercept. Australian industry is intended to be involved in the acquisition and TLS of the infrastructure.

### *Phases 4 and 5*

**73.** Phase 4 has an estimated expenditure of $700 million, with a year of decision 2007–2008. The in-service delivery date is yet to be determined for the provision of a mature military SATCOM capability. Phase 5 has an estimated (phase) expenditure of $200–250 million and a year of delivery 2010–2011.[157] Phases 4 and 5 will progressively acquire a mature satellite communications system to meet high data speed requirements of deployed ADF elements. Requirements of industry will be guided by information obtained through the preliminary stages of the proposal. Requirements include:

- supply and installation of new satellite terminals; and
- upgrading of existing, and/or supply and installation of new, terrestrial infrastructure.

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[153] *JP2008 Phase 3E Terrestrial Infrastructure Equipment Acquisition Strategy*, 25 September 2000, pp. 9-10.

[154] *JP2008 Phase 3E EAS*, Annex F, 25 September 2000.

[155] The year of decision refers to those projects that are unapproved by Government and are subject to further reviews. Approval and funding for the project is expected to be given in the nominated year.

[156] *Defence Capability Plan 2001–2010*, p. 82.

[157] ibid., p. 84.

## Minehunter Coastal (MHC)

**74.** MHC was a project to build six 52.5 metre, 720 tonne vessels. The vessels have combat and weapons systems capable of detecting and destroying mines in deep water using variable depth minehunter sonar, remotely operated mine disposal vehicles and clearance divers.[158] A $917 million (December 1993 prices) contract was signed with ADI Limited in August 1994. MHC was the first major Australian sourced navy project where the prime contractor was given design authority.

**75.** This case study draws heavily on a study commissioned by the Australian Industry Group (AIG) Defence Council and sponsored by Defence, the DITR, the NSW Department of State and Regional Development, ISONET Ltd and ADI Limited.[159] The AIG study included data from a survey of firms involved in the MHC on the impact on Australian industry of defence-related spending.[160] It focused not on the issue of cost premiums for work undertaken in Australia, but on benefits to the economy, as there was little information on the impact of sourcing major Defence acquisitions in Australia.[161]

**76.** The Defence Source Definition Committee (DSDC) considered that there was no strategic defence imperative to have the ships built in Australia, although detailed knowledge of, and experience with, ship construction techniques were considered essential for routine maintenance of ship performance characteristics and for any major damage repair. The ships were expected to have greater flexibility in the range of possible equipment to be fitted to the MHC from an Australian construction.

**77.** Industry objectives in the MHC project were to:

- acquire full disclosure of all software and documentation;
- establish cost effective capabilities for through-life engineering and maintenance support;
- establish capabilities for supply support; and;
- have ANZ industry involvement in the design, development and production of Australian unique modifications.[162]

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[158] *Minehunter Coastal Project (Sea 1555), detailed brief for Foreign Affairs, Defence and Trade Legislation Committee Hearings*, February 2000.

[159] *Impact of Major Defence Projects: A Case Study of the Minehunter Coastal Project*, Final Report, Australian Industry Group Defence Council, January 2002.

[160] Firms included in the survey were identified from ADI's database as having involvement with the project with contract values ranging from $100 000 to $200 million.

[161] Defence documentation indicated that a cost premium of less than five per cent of the ship's construction cost would be paid for having the MHC built in Australia.

[162] *RAN Minehunter Coastal—Definition Studies Contract, Australian Industry Involvement Study*, Attachment K, 21 May 1993, p. 5, Project SEA 1555 ACMAT-N Brief, MHC SER Consideration by Australian Defence Source Definition Committee, 5 May 1994.

### *The contract*

**78.** The contracted level of local content was 68.7 per cent (or $629.9 million) for the original construction contract and now stands at $656 million (December 1993 prices) due to additional contracted work. The project involved some 2000 subcontractors, of which 1970 were Australian.[163] Of the 1970, 1579 were located in NSW, including 834 in the Newcastle region.[164]

**79.** There are two in-service support contracts for the MHC. One is with ADI Limited ($41 million in March 2000 prices) for platform and combat system support. The other is with Thales Underwater Systems ($19.8 million in December 1999 prices) for sonar system support. Each is for five years with an option to extend. ADI Limited estimated that the long-term support arrangements could be three to four times the value of the routine in-service support component.

**80.** Defence commissioned a study to investigate the life-cycle costing component that could be included in the acquisition phase. The study found that Defence's policy should be revised to improve the accuracy of in-service budget forecasts and that the quantity and quality of data available to firms were usually poor, and often unavailable if data is held by a foreign military agency.[165] The study also found that the cost to defence-related industry of preparing life-cycle costing tender deliverables for a major capital acquisition averaged $40 000–$50 000 per company per tender.

**81.** The MHC requires access to IP for production of the equipment. Under the MHC contract the relevant contractor (prime or subcontractor) will retain ownership of both foreground[166] and background IP[167] for defence purposes. The foreground IP licence is very broad and enables Defence to use IP for any purpose, but the background IP licence is to be used only in support of specific equipment. There is a contractual requirement for the source code and software design data used in the MHC that is not commercial off-the-shelf to be delivered to the Commonwealth.[168]

**82.** A Management Performance Incentive Fee Scheme was included in the MHC contract. The scheme includes provisions for the potential payment of

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[163] *Minehunter Coastal Project (Sea 1555), detailed brief for Foreign Affairs, Defence and Trade Legislation Committee Hearings*, February 2000.

[164] ibid.

[165] *Department of Defence-Logistics Division Part 1-Review of life cycle costing policy and procedures*, Coopers & Lybrand, 8 February 1995, pp. 10-12.

[166] Foreground IP is that IP which comes into existence under the development project.

[167] Background IP is the IP that exists before commencement of a project, and bought into that project by its participants and may include proprietary information, standard technical solutions or techniques.

[168] *MHC Project—Intellectual Property and Joint Procurement Minute*, 16 April 1997.

$1 million (December 1993 prices) every six months, plus 60 per cent of the amount not awarded in the previous period to ADI Limited. ADI Limited's performance was rated against contract requirements in the following areas: financial, schedule, product, and contract administration.[169] In order to receive payment, ADI Limited was required to demonstrate that it achieved superior performance management over the six month period.[170] Defence documentation states that, by December 2002, ADI Limited had been paid $12.223 million under the incentive fee scheme.

**83.** Contractors are required to arrange offsets to at least 30 per cent of the value of imported content. In December 2000, all 42 offsets had been completed for $70.5 million, which was 29 per cent above the contracted level.[171] Offsets in the contract included technology transfer; specialised training; provision of data; waiving of licence fees; and provision of TLS for equipment.[172]

### *AII Program achievement*

**84.** The prime contractor's tender proposed to make extensive use of the Industrial Supplies Offices (ISO).[173] The early use of NSW ISO Limited (now Industry Capability Network (NSW) Ltd) contributed to the achieved level of AII exceeding the contracted target. A consultant from NSW ISO Limited worked with ADI Limited from the tender period and in an on-going role for five years. The consultant identified Australian businesses that could supply components for the MHC's related products and services. The AIG study stated that, as a result of NSW ISO Limited's involvement, 'at least $55 million of the initially proposed imports were replaced with products manufactured by local industry. NSW ISO (Limited) performed an invaluable service that ADI Limited was not resourced to do'.[174] The importance of ISO is further emphasised as more than 20 per cent of firms surveyed in the study reported that NSW ISO Limited had played a role in their company becoming involved in the MHC project.

**85.** Defence's Management Audit Branch undertook an audit in 2000 on the management processes of the MHC. The audit report commented that the project was well managed and achieving good results.[175] The prime contractor's AII

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[169] *Minehunter Coastal Project, Management Performance Incentive Fee Scheme*, 21 February 1995, p. 3.

[170] The allocation of a satisfactory/ unsatisfactory rating receives no payment, a superior 1 rating results in 25 per cent of the amount, superior 2 rating equates to a 50 per cent payment of the amount, superior 3 rating is 75 per cent of the amount, and a superior 4 rating equates to full payment. *Minehunter Coastal Project, Management Performance Incentive Fee Scheme, User Manual*, 21 February 1995, p. 3.

[171] *Minehunter Coastal Contract C218481—AII Report No. 31*, (prices are in $A at base date).

[172] MHC Minute, Collection of Buying Australian Statistics, 17 October 1996.

[173] *Tender for MHC and Associated Support*, Executive Summary, 16 December 1993, p. 5.

[174] *Impact of Major Defence Projects: Minehunter Coastal Study*, 2002, p. 11.

[175] Department of Defence, Management Audit Branch, *Minehunter Coastal Project SEA 1555*, Report C101N035, January 2001.

manager was responsible for ensuring that subcontractors identified, established and undertook an AII Program in accordance with ADI Limited requirements.[176] Subcontractors were required to achieve negotiated levels of AII. Subcontractors who did not meet AII targets would have been subject to the liquidated damages provisions that applied to ADI Limited.[177]

**86.** Throughout the project AII quarterly reports were submitted by the prime contractor. In one report, a shortfall in the level of local content was noted. Shortfalls in local content were also noted in the Industry Performance Measurement Report. The prime contractor was confident that shortfalls would be overcome, as a number of subcontractors were expecting to over-achieve their contracted local content levels.[178] This proved to be so.

**87.** In addition to AII quarterly reports, ADI Limited and Defence's project office regularly conducted AII audits that checked the systems subcontractors used to collect AII data, the accuracy of local content data collected and that technology transfers had occurred. Desk audits were initially conducted at ADI Limited's premises, followed by on-site visits to subcontractors' premises at three monthly intervals.[179] Towards the end of the project, the audits ceased due to the maturity of the project.

**88.** The levels of local content per ship steadily increased from the construction of the first ship, with the hull built in Italy (HMAS *Huon* 45 per cent), to the remaining five ships, with hulls built in Australia. The level of local content reached 59 per cent for HMAS *Diamantina* and HMAS *Yarra*.[180]

### *Australian industry benefits*

**89.** Since the manufacture of the first hull, in Italy, all remaining hulls have been constructed in Australia. All technical data necessary for the hull build including specifications standards, procedures, drawings and design data were transferred to Australian industry. Australian industry has been enhanced through the transfer of training and technology. For example, a range of Australian pumps have been developed and sold for use overseas.

**90.** The AIG study assessed some of the quantifiable benefits to Australia from construction of the six MHCs. It reported[181] that the nine-year construction project has:

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[176] *Section 1-ADI-AT-01-01 Industry Objectives*, Issue One, p. 16.

[177] ibid., p. 18.

[178] Report on industry visit to ADI Minehunter on 4-5 September 1996, p. 1.

[179] *MHC-Auditing of the Industry Program,* 5 July 1996.

[180] Section 3, Schedule of Local Content, ADI-AT-01-03, p. 4. Department of Defence, Management Audit Branch, *Minehunter Coastal Project SEA 1555*, Report C101N035, January 2001, p. 20.

[181] *Minehunter Project: A big win for the Australian economy*, Media release from Australian Industry Group, 29 January 2002, p. 1.

- contributed up to $887 million to Australia's gross domestic product;
- maintained an average of more than 1800 full time equivalent jobs each year throughout Australia;
- improved business practices for more than 75 per cent full-time participating firms and significantly enhancing their export opportunities;
- made industry more productive and competitive as a result of project-related technology transfers; and
- enhanced industry productivity and other aspects of performance through industry's need to conform to Defence's risk management requirements.[182]

**91.** Defence, as well as Australian industry, has benefited from construction of the MHC. Benefits to Defence identified in the study include:

- the acquisition of capabilities that enhance and extend Australian industry's integral role in the national defence effort;
- savings in the amount of money and other resources Defence needs to outlay on in-service support; and
- shorter repair turn-around times, which flow through to improved operational capability.[183]

**92.** Throughout the project various skills and capabilities in Australian industry were established and developed through the AII Program. The AIG study noted that there was a potential for job losses and skill levels to decline unless there is on-going work for contractors. The study stated that a consequence of not having a TLS component at the time of contract was that subcontractors involved in the acquisition phase were reluctant to invest in TLS.[184] Owing to this uncertainty, some contractors moved skill sets to other projects.

**93.** Defence's Industry Division reviewed ADI Limited's AII Program on the MHC project.[185] It identified Australian industry sectors that benefited and were developed from the Program. The review also identified actual or potential export opportunities, and supported the results from the AIG study.[186] Some of the benefits identified in the Defence AII review and the AIG study include:

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[182] Survey results indicated that technology transfers were experienced by 25 per cent of firms. Some businesses (35 per cent) reported that export levels had increased since the business became involved with the MHC project. *Impact of Major Defence Projects: Minehunter Coastal Study*, 2002, pp. 21, 40.

[183] *Minehunter Project: A big win for the Australian economy*, Media release from Australian Industry Group, 29 January 2002.

[184] *Impact of Major Defence Projects: Minehunter Coastal Case Study,* 2002, p. 58.

[185] *SEA 1555 Minehunter Coastal Project: Australian Industry Involvement*, Contractor Specific Assessment, 12 December 2001.

[186] Over 80 per cent of MHC businesses report that they have improved capability to supply Defence as a result of involvement in the project. *Impact of Major Defence Projects: Minehunter Coastal Case Study,* 2002, p. 43.

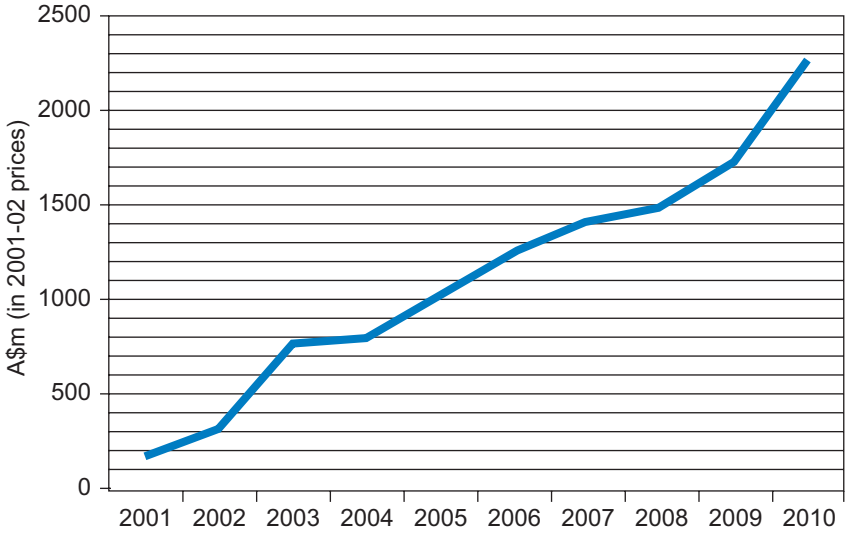
- the introduction of Australian innovations not used in Italy for the construction of MHCs, such as allowing hull construction and outfitting tasks to be carried out in parallel, thereby reducing scheduling risks;
- development of a combat system integration capability through investment in a shore-based integration facility to minimise risks associated with a complex integration task; and
- naval shipbuilding design development (detailed design) where Australian design work accounted for approximately 80 per cent of total ship design.

## Appendix 2

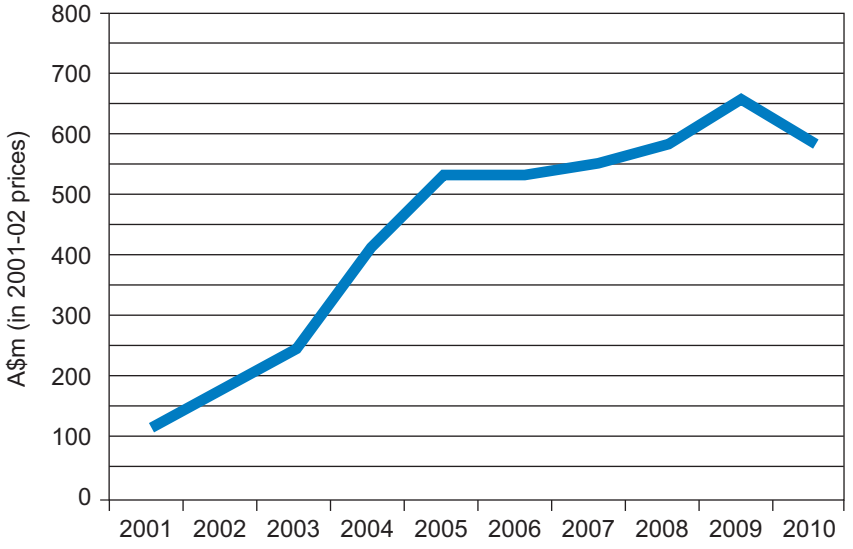
# Proposed New Expenditure by Principal Industry Sector

*The following charts from the Defence Capability Plan 2001–2010 illustrate the large amount of new expenditure that Defence proposed to spend in the various industry sectors over the 2001–2010 period.*[187]

### *Aerospace Industries*

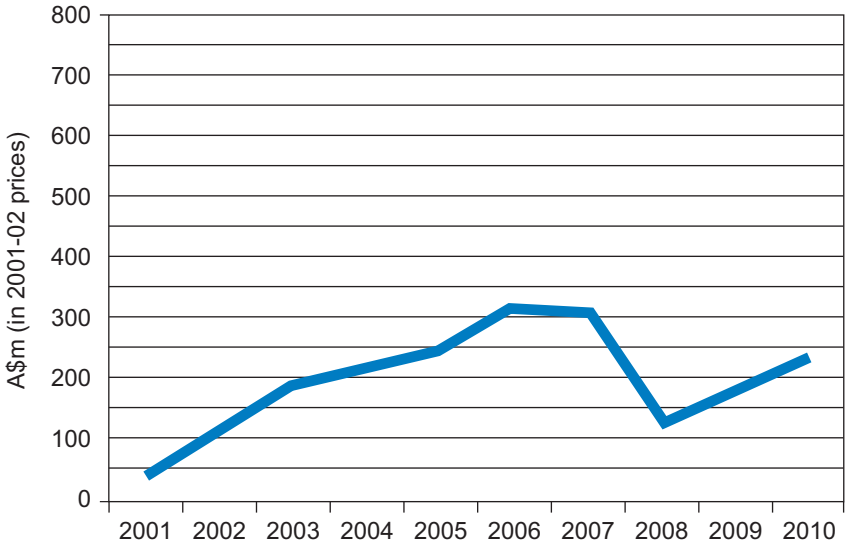



### *Electronics, Communications and Information Technology Industries*

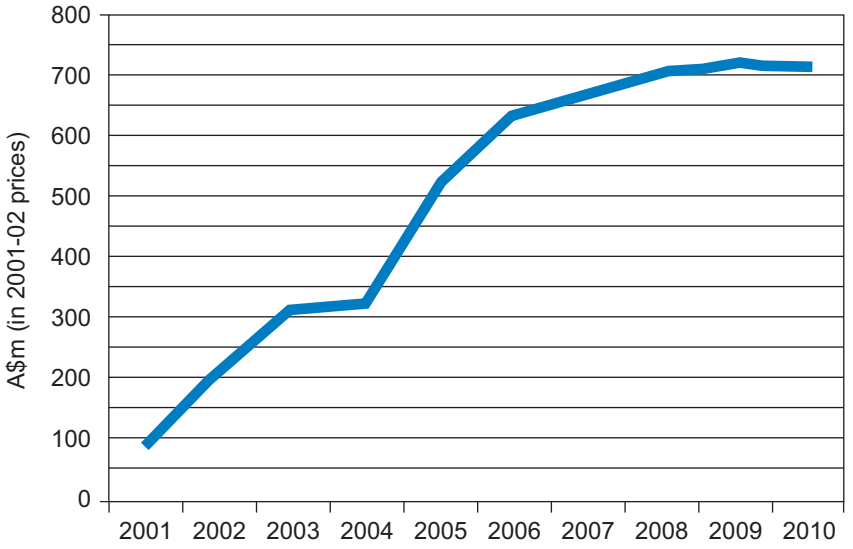



[187] Department of Defence, *Defence Capability Plan 2001–2010*, pp. v-vi.

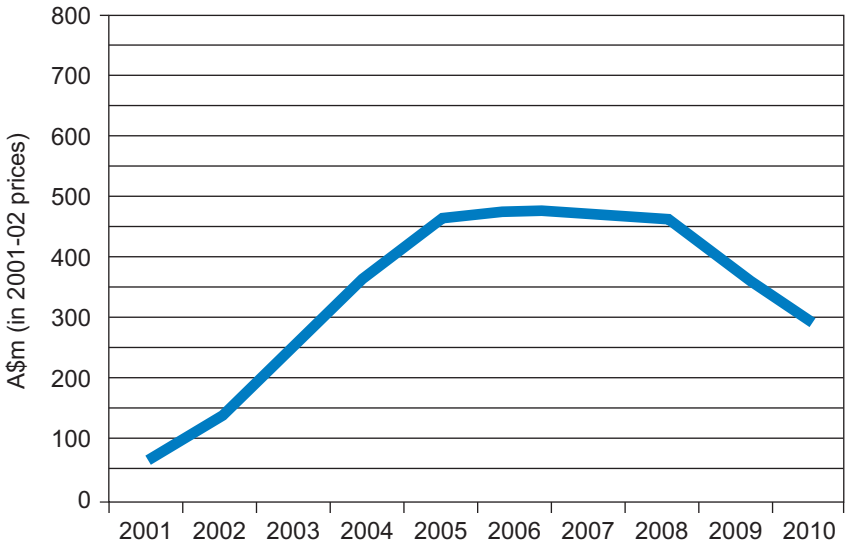
*Heavy Engineering, Vehicles and Land Systems Industries*




*Maritime Industries*



*Weapons and Munitions Industries*



## Appendix 3

# Previous Performance Audits in Defence

*Set out below are titles of previous ANAO performance audit reports on Defence.*

Audit Report No.5 1997–98 *Performance Management of Defence inventory*

Audit Report No.34 1997–98 *New Submarine Project*

Audit Report No.43 1997–98 *Life-cycle costing in Defence*

Audit Report No.2 1998–99 *Commercial Support Program*

Audit Report No.17 1998–99 *Acquisition of Aerospace Simulators*

Audit Report No.41 1998–99 *General Service Vehicle Fleet*

Audit Report No.44 1998–99 *Naval Aviation Force*

Audit Report No.46 1998–99 *Redress of Grievances in the Australian Defence Force*

Audit Report No.13 1999–2000 *Management of Major Equipment Acquisition Projects*

Audit Report No.26 1999–2000 *Army Individual Readiness Notice*

Audit Report No.35 1999–2000 *Retention of Military Personnel*

Audit Report No.37 1999–2000 *Defence Estate Project Delivery*

Audit Report No.40 1999–2000 *Tactical Fighter Operations*

Audit Report No.41 1999–2000 *Commonwealth Emergency Management Arrangements*

Audit Report No.45 1999–2000 *Commonwealth Foreign Exchange Risk Management Practices*

Audit Report No.50 1999–2000 *Management Audit Branch—follow-up*

Audit Report No.3 2000–2001 *Environmental Management of Commonwealth Land—follow-up*

Audit Report No.8 2000–2001 *Amphibious Transport Ship Project*

Audit Report No.11 2000–2001 *Knowledge System Equipment Acquisition Projects in Defence*

Audit Report No.22 2000–2001 *Fraud Control in Defence*

Audit Report No.26 2000–2001 *Defence Estate Facilities Operations*

Audit Report No.32 2000–2001 *Defence Cooperation Program*

Audit Report No.33 2000–2001 *Australian Defence Force Reserves*

Audit Report No.41 2000–2001 *Causes and Consequences of Personnel Postings in the ADF*

Audit Report No.51 2000–2001 *Australian Defence Force Health Services—follow-up*

Audit Report No.16 2001–2002 *Defence Reform Program—Management and Outcomes*

Audit Report No.24 2001–2002 *Status Reporting of Major Defence Equipment Projects*

Audit Report No.30 2001–2002 *Test and Evaluation of Major Defence Equipment Acquisitions*

Audit Report No.38 2001–2002 *Management of ADF Deployments to East Timor*

Audit Report No.44 2001–2002 *Australian Defence Force Fuel Management*

Audit Report No.58 2001–2002 *Defence Property Management*

Audit Report No.3 2002–2003 *Facilities Management at HMAS Cerberus*

Audit Report No.30 2002–2003 *Defence Ordnance Safety and Suitability for Service*

Audit Report No.31 2002–2003 *Retention of Military Personnel—follow-up*

Audit Report No.39 2002–2003 *Navy Operational Readiness.*

# Index

## L



## M



## O



## P



## R



## S



## T



## V



## W

# Series Titles

Audit Report No.1 Performance Audit
*Information Technology at the Department of Health and Ageing*
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*Audit Activity Report: January to June 2002*
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*The Strategic Partnership Agreement between the Department of Health and Ageing and the Health Insurance Commission*
Department of Health and Ageing and the Health Insurance Commission

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*Fraud Control Arrangements in the Department of Veterans' Affairs*

Audit Report No.7 Performance Audit
*Client Service in the Child Support Agency Follow-up Audit*
Department of Family and Community Services

Audit Report No.8 Business Support Process Audit
*The Senate Order for Department and Agency Contracts (September 2002)*

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Industry Research and Development Board

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*Benchmarking the Internal Audit Function Follow–on Report*

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Department of Family and Community Services
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Department of Employment and Workplace Relations

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*Performance Information in the Australian Health Care Agreements*
Department of Health and Ageing

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*Payment of Accounts and Goods and Services Tax Administration in Small Commonwealth Agencies*

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*Physical Security Arrangements in Commonwealth Agencies*

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*Energy Efficiency in Commonwealth Operations—Follow-up Audit*

Audit Report No.25 Financial Statement Audit
*Audits of the Financial Statements of Commonwealth Entities for the Period Ended 30 June 2002*
Summary of Results

Audit Report No.26 Performance Audit
*Aviation Security in Australia*
Department of Transport and Regional Services

Audit Report No.27 Performance Audit
*Management of Commonwealth Guarantees, Warranties, Indemnities and Letters of Comfort*

Audit Report No.28 Performance Audit
*Northern Territory Land Councils and the Aboriginals Benefit Account*

Audit Report No.29 Audit Activity Report
*Audit Activity Report: July to December 2002*
Summary of Outcomes

Audit Report No.30 Performance Audit
*Defence Ordnance Safety and Suitability for Service*
Department of Defence

Audit Report No.31 Performance Audit
*Retention of Military Personnel Follow-up Audit*
Department of Defence

Audit Report No.32 Business Support Process Audit
*The Senate Order for Departmental and Agency Contracts (Spring 2002 Compliance)*

Audit Report No.33 Performance Audit
*Management of e-Business in the Department of Education, Science and Training*

Audit Report No.34 Performance Audit
*Pest and Disease Emergency Management Follow-up Audit*
Department of Agriculture, Fisheries and Forestry—Australia

Audit Report No.35 Performance Audit
*Fraud Control Arrangements in the Australian Customs Service*

Audit Report No.36 Performance Audit
*Monitoring of Industry Development Commitments under the IT Outsourcing Initiative*
Department of Communications, Information Technology and the Arts

Audit Report No.37 Performance Audit
*Passport Services*
Department of Foreign Affairs and Trade

Audit Report No.38 Performance Audit
*Referrals, Assessments and Approvals under the* Environment Protection and Biodiversity Conservation Act 1999

Audit Report No.39 Performance Audit
*Navy Operational Readiness*
Department of Defence

Audit Report No.40 Performance Audit
*R & D Tax Concession*
Department of Industry, Tourism and Resources, the Industry Research and Development Board and the Australian Taxation Office

Audit Report No.41 Performance Audit
*Annual Reporting on Ecologically Sustainable Development*

Audit Report No.42 Performance Audit
*Managing Residential Aged Care Accreditation*
The Aged Care Standards and Accreditation Agency Ltd

Audit Report No.43 Performance Audit
*The Sale of Sydney (Kingsford Smith) Airport*

Audit Report No.44 Performance Audit
*Review of the Parenting Payment Single Program*
Department of Family and Community Services
Centrelink

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