
Foreign Affairs, Defence and Trade
References Committee

**Report on the inquiry into materiel
acquisition and management in Defence**

March 2003

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TERMS OF REFERENCE

On 13 March 2002, the Senate referred the following matters to the Foreign Affairs, Defence and Trade References Committee for inquiry and report by 2 December 2002. On 12 November 2002, the Committee sought and the Senate subsequently agreed to an extension of time to report to 27 March 2003.

1. Whether the current materiel acquisition and management framework of the Department of Defence is effective in meeting the organisation's equipment requirements.

2. In considering this matter, the committee is to examine and report on the following issues:

(a) whether the current materiel acquisition and through-life support system is meeting, and will continue to meet, the needs of Defence and Defence industries in a timely, cost-effective and qualitative manner;

(b) the impact of the Defence Materiel Organisation acquisition reform program on materiel acquisition and management;

(c) the current status of major equipment projects in meeting the organisation's requirements;

(d) the impact of the creation of decentralised System Program Offices on materiel acquisition and management; and

(e) any other issues relevant to the effectiveness of the current acquisitions framework which arise in the course of the inquiry.

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ACRONYMS AND ABBREVIATIONS

ABL	Australian Business Limited
AIG	Australian Industry Group Defence Council
AII	Australian industry involvement
ANAO	Australian National Audit Office
ASDEFCON	Australian Defence contract
ASPI	Australian Strategic Policy Institute
CA	Chief of Army
CAF	Chief of Air Force
CTD	Capability and technology demonstrator program
DCP	Defence capability plan
DIAC	Defence Industry Advisory Council
DMO	Defence Materiel Organisation
DSTO	Defence Science and Technology Organisation
DT&E	Development test and evaluation
DTRIALS	Director of trials of the review of test and evaluation in Defence
EA	Evolutionary acquisition
FIC	Fundamental inputs to capability
IPT	Integrated project team
JCPAA	Joint Committee of Public Accounts and Audit
OT&E	Operational test and evaluation
PMM	Project management methodology
PMT	Project management team
PSP	Professional service provider
R&D	Research and development
SAMS	Standard acquisition management system
SMART	Strategic materiel acquisition request for tender
SME	Small to medium enterprise
RFI	Request for information

RFT	Request for tender
SPI	Smart procurement initiative
SPO	System program office
TCD	Test concept documents
T&E	Test and evaluation
TLS	Through life support
TRA	Technical regulatory authority
TRAMM	Technical regulation of Army materiel manual
UK MOD	United Kingdom Ministry of Defence
USDM	Under Secretary Defence Materiel
VCDF	Vice Chief of the Defence Force

RECOMMENDATIONS

Chapter 1—The DMO's reform program

- The creation of a network of System Program Offices, dispersed across the country in an attempt to locate acquisition and logistics projects close to the service customers and the industry suppliers involved, was a key plank in the DMO's reform program. The Committee was generally impressed with the effectiveness of the SPOs it visited in the course of its inquiry. The feedback to the Committee provided from service personnel and from industry was largely positive. It is, however, relatively early days, and the Committee is aware that it encountered only a small sample of the SPO network. Given the crucial role of the SPOs in effecting then reform program the Committee intends to monitor their operations carefully.

The Committee recommends that in the years 2004 and 2006 the Defence Materiel Organisation seeks advice on the perceived effectiveness of System Program Offices from the Defence Industry Advisory Council, the Australian Industry Group Defence Council and the Australian Industry and Defence Network. That advice should be compiled into a short report, to include a response by the Under Secretary Defence Materiel, and submitted prior to the 2004 and 2006 Budget Estimates to the Senate Foreign Affairs, Defence and Trade References and Legislation Committees, and to the Defence Subcommittee of the Joint Committee on Foreign Affairs, Defence and Trade.

Chapter 2—Capability development and acquisition

- One of the significant problems hindering successful project outcomes in the past has been inadequate definition of capability requirements, and poor articulation of those requirements to those responsible for acquisition. In the capability development life cycle the nexus between the Requirements and Acquisition phases is crucial. The Committee is satisfied that the structural and procedural arrangements now in place to stabilize that nexus. It is imperative that all staff involved possess the skills, attitudes and understandings to properly implement the procedures.

The Committee recommends that special training and professional development be undertaken jointly by capability and acquisition staff to ensure that all staff have a clear understanding of, an unequivocal commitment to, and the skills and knowledge to fully implement the practices specified in the *Capability Systems Life Cycle Management Manual 2002*.

Chapter 3—The DMO and industry

- Australia's Small to Medium Enterprises (SMEs) have a distinctive and important contribution to make to Australia's defence capability. It is imperative that they receive the support necessary to enable them to be full participants in Australia's strategic industry development, and to be competitive in the global supply chain. SMEs must be able to undertake sufficient R&D if they are to retain a place at the 'knowledge edge'.

The Committee recommends that

(a) AusIndustry undertake a specific promotional initiative to encourage and assist Small to Medium Enterprises (SMEs) to properly register their R&D activities with AusIndustry; and

(b) the DSTO develop a special program to nurture partnerships between the DSTO, the CSIRO and SMEs with respect to research and development in areas of mutual interest, and to expand existing mechanisms by which SMEs can seek R&D and technology advice.

- A particularly useful initiative to strengthen relationships between Defence and industry, and to ensure that the project performance of each is visible to decision makers, is the development of the 360 degree scorecard. This provides structured feedback to each party and delivers an early opportunity to detect and remedy potential problems. The scorecard will also be a source of valuable information about DMO's progress in implementing procedural and cultural change.

The Committee recommends that during Budget Estimates the DMO table before the Senate Foreign Affairs, Defence and Trade Legislation Committee an audited summary of the feedback provided by industry to the DMO via the 360 degree scorecard process.

- While structural and procedural reforms are a necessary component of any strategic reorientation of an organization, they are not of themselves sufficient. They must be accompanied by the requisite cultural change, whereby people implementing the reforms adapt their attitudes and behaviours to the requirements of their new operating environment. The need for cultural change was emphasized by both Defence and industry witnesses. In the Committee's view, it is an aspect of the reform process that could easily be lost sight of. The Committee sensed a degree of unease about the DMO's capacity for, and readiness to embrace, the substantial cultural shift required.

The Committee recommends that

(a) the Senate request the Auditor General to direct that the proposed 2003–04 audit of DMO by the Australia National Audit Office include a cultural audit that will assess:

- **DMO’s espoused corporate values and standards and staff compliance with these;**
- **management and staff values, behaviours and competencies measured against the capability requirement;**
- **employee attitudes, morale, beliefs, motivation;**
- **employee understanding of, for example, the DMO’s customers, industry partners, strategies, business plans, roles and contributions to the overall mission of Defence;**
- **communication processes;**
- **the effectiveness of change management programs, employee commitment to them and the extent of the benefits materialising; and**
- **compliance with health and safety regulations; and**

(b) on the basis of that cultural audit the Under Secretary Defence Materiel shall engage a suitably qualified change management specialist to assist the DMO to respond to the findings and recommendations of the audit.

- The Committee received some expressions of dissatisfaction with the DMO’s manner of dealing with criticisms and complaints, and explored the phenomenon of the so-called ‘disgruntled contractor’. The Committee was not in a position to judge the merits of the particular claims of individuals that the DMO had failed to deal with their concerns in a timely and transparent way. It is important that industry has confidence in the processes adopted by the DMO to deal with grievances.

The Committee recommends that:

(a) a panel of suitably qualified case managers, endorsed by industry, be established within the Industry Division of the DMO to handle complaints or disputes that have not been resolved in a timely way between the two parties immediately concerned;

(b) the case managers be trained, and given broad powers to explore issues across all levels and divisions within DMO and the relevant Service arm;

(c) case managers shall report their findings and recommendations to the Under Secretary Defence Materiel, with copies to the Vice Chief of the Defence Force and the Project Governance Board (where applicable);

(d) the DMO publish an account of its complaint handling and dispute resolution method which sets out the timelines to be observed, the role and powers of case managers, and specifying the USDM as the ultimate decision maker in respect of a dispute.

- Encouraged by the policies and pronouncements encouraging much greater, and earlier, contributions by industry to capability development, many firms have sought to draw Defence's attention to ideas and opportunities developed by industry. Many of these 'unsolicited proposals' have the potential to enhance the efficiency and sophistication of Defence materiel. There is a feeling within industry that such proposals are not given appropriate consideration.

The Committee recommends that the Defence Industry Advisory Council commission the development of an efficient formal mechanism for the promotion and handling of unsolicited proposals from SMEs. That mechanism should be applied at the level of the System Program Offices and be coordinated by the DMO's Industry Division. Receipt of unsolicited proposals should be promptly acknowledged, and a time frame specified within which follow-up should occur.

- The 1998 Defence and Industry Strategic Policy Statement *Team Australia* has proven a key document in orienting Australian industry towards a serious commitment to, and investment in, the development of a viable defence industry that can be relied upon to deliver 'knowledge edge' capability to the Australian Defence Force. The Committee believes that it is timely to assess the success and relevance of that policy.

The Committee recommends that:

(a) in the latter half of 2003, the Defence Materiel Organisation convene a major seminar involving relevant Defence and industry representatives to assess the effectiveness of the 1998 *Team Australia* policy and to shape recommendations accordingly; and

(b) the proceedings of the seminar be tabled in the parliament along with a response from the Minister for Defence to the recommendations emerging from the seminar.

Chapter 4—Projects and project management

- The success of projects is fundamentally dependent on the capacity of project managers to measure progress, and of contractors to deliver products and services on schedule and to the standard required. With the establishment of rigorous project management methodologies it is imperative that any significant variation in expected progress or deliverables be dealt with as soon as such variation is identified. Information must be conveyed quickly to decision-makers, and thorough attention must be given by both Defence and the contractor to resolving the issue. The Committee believes that this can be best addressed by establishing a clear mechanism for such resolution which is triggered as soon as a scheduled item is missed.

The Committee recommends that:

(a) in the event that a project milestone is missed or that a supplier flags a delay in the provision of a contracted deliverable, then the project manager shall instigate a written report on the matter to the USDM, with copies to the Project Governance Board and the relevant Service Capability Management Board; and

(b) should agreement between project manager and contractor about how to remedy the matter not be arrived at within 15 days of such a report being submitted, a case manager from Industry Division shall be commissioned to negotiate a remedy. The case manager shall report to the USDM within 15 working days. In the event that a remedy has not been negotiated, the matter shall be referred to the Project Governance Board for a determination as to how to proceed. The USDM shall then make a final decision taking into account the advice of the Project Governance Board.

- While the Committee acknowledges that there have been noticeable improvements in the ways in which progress on major projects is being reported to government, there is still relatively poor visibility of projects as far as the parliament and the public are concerned. The Committee seeks dramatic improvements in this area, and points to the kinds of parliamentary accountability being delivered to the House of Commons in an annual report on acquisition projects prepared by the Comptroller and Auditor General.

The Committee recommends that the Senate request the Auditor General:

(a) to produce, on an annual basis, a report on progress in major defence projects, detailing cost, time and technical performance data for each project;

(b) to model the report on that ordered by the British House of Commons and produced by the UK Comptroller and Auditor General; and

(c) to include in the report such analysis of performance and emerging trends as will enable the parliament to have high visibility of all current and pending major projects.

Chapter 5—Tenders and contracts

- The advent of a strong policy commitment to partnerships between Defence and industry, and the development of sectoral plans to try and secure a long term future for key defence industries, has focused attention on how best to secure the benefits of collaboration without losing the efficiencies and innovation encouraged by competition. Given the relatively small scale of Australia's defence infrastructure and the industries that support it, a fully competitive approach to procurement is difficult to implement. The Committee acknowledges the imperatives as well as the merits of partnerships for capability, but believes that it is important to preserve some elements of competition among suppliers operating in any given sector.

The Committee recommends that, in the event of Defence entering a long term partnership with a particular supplier, the DMO should remain in regular contact with the unsuccessful bidders. The DMO should report progress with the partnership, update potential suppliers on any changes to capability requirements emerging during the course of the partnership, and keep them abreast of strategic developments. The DMO should assist potential suppliers to be in a competitive position if and when an existing partnership expires and renewal is sought.

- Under circumstances where partnering is encouraged, the need for transparency in dealings is greater than ever. Competing contractors need to have confidence in the tender process, and that in the event of them losing a tender bid, they have no reason to suspect that there has been preferential treatment of the chosen contractor. It is important, too, that the parliament and the public have good visibility of what contracts entail. The Committee believes that this can be done without prejudicing the commercial and intellectual property interests of the winning contractor, nor the ability of Defence to achieve proper security for its capability strategies.

The Committee recommends that:

(a) once a contract has been awarded for a Defence project valued at over A\$100,000, the details of the winning bid should be published, with the provision that information about specific matters which bear the necessary quality of confidentiality may be withheld from publication where detriment to either the contractor or Defence would ensue. Prior to publication of the details, Defence should seek a formal opinion from ANAO as to whether that publication meets the appropriate standards of transparency; and

(b) Defence should publish, with the contract details, a brief statement setting out its reasons for selecting the winning bid.

Chapter 6—Test and evaluation

- Successful project management demands successful risk management. Weapons platforms and support systems must be delivered to the specified levels of functionality and with safety-critical features assured. This can only be achieved if test and evaluation is given a prominent place in the management of capability development, acquisition and transition into service. The Committee is not completely satisfied that test and evaluation enjoys the status it deserves in capability development, and notes that a review of T&E policy is currently under way.

The Committee recommends that the Senate, under Standing Order 164, order the production, upon its completion, of the report by Director of Trials (DTRIALS) of the Review of Test and Evaluation in Defence, and that the Senate refer the document to the Senate Foreign Affairs, Defence and Trade References Committee for examination and report.

Introduction and summary

The Senate Foreign Affairs, Defence and Trade References Committee embarked upon its inquiry into defence materiel matters in the light of a long history of failed or troubled acquisition projects, and at a time of significant structural reform within Defence that included the creation of the Defence Materiel Organisation.

Background

On 6 December 2000 the Government released its White Paper *Defence 2000: Our Future Defence Force*. This document confirmed the reform and restructure of DMO:

To be fully effective, the new Defence Materiel Organisation requires organisation and in some cases cultural reorientation away from Canberra towards its operation base in the operational units. As part of this, the Government will improve support of its materiel personnel through a range of initiatives including improved conditions of service in keeping with changed mobility requirements, a stronger focus on selecting for and developing individual competencies, and improved usage of military personnel. Changes will go hand in hand with the clarification of personal responsibilities and accountabilities. Such improvements will facilitate a smarter and more focused use of external professionals and industry. Industry will be engaged earlier, through simplified process, which in combination with other measures will lead to reduction in unnecessary industry cost and improved project turnaround times.¹

On 27 February 2001 the Secretary of Defence provided an update on the reform and restructure of DMO.² Dr Hawke reported:

- The basic DMO structure is complete and in place.
- The two-pass Government approval process has been adopted in the form of the Defence Capability Management Cycle.
- A new SMART 2000 tendering and contracting proforma has been implemented for use on major projects.
- A standardised Project Management Methodology has been adopted to replace the centralised committee process for acquisition.

On 5 June 2001 the DMO's Head of Change Materiel Management provided an update to the Senate Foreign Affairs, Defence and Trade Legislation Committee on

¹ Australian Government *Defence 2000: Our Future Defence Force*, Canberra December 2000, p. 105

²² Dr Allan Hawke, Secretary of Department of Defence, *One Year On—Address to Defence Watch Seminar*, 27 February 2001, p. 2

the reform and restructure of DMO.³ On 25 October 2001 Major General Dunn provided a briefing to Defence personnel in Canberra on the progress of that reform.⁴ Major General Dunn stated, among other things, that:

- DMO expends 32% of the Defence budget and employs 8,568 Defence personnel.
- Project management staff were in the process of being re-located to 49 System Program Offices (SPOs) in Washington, London and all states of Australia.
- 42 percent of Australian Public Service staff in DMO had accepted the invitation to re-locate to SPOs.

The nature of the Senate inquiry

The Committee's approach to its inquiry into the acquisition and management of materiel was influenced by several considerations:

- the expenditure on Defence materiel was a major component of the Defence budget, and project delay or failure had already led to considerable waste of public money;
- the DMO was barely eighteen months into its reform program when the inquiry commenced;
- the Australian National Audit Office had, in recent years, undertaken several audits related to Defence acquisition, and had foreshadowed an investigation of DMO's management of major projects to commence in late 2003.

As a consequence, the Committee decided to 'take a snapshot' of the progress of the DMO's reform agenda and assess that progress against both the spirit and the implementation schedule of the reforms. The Committee also decided that it would try to determine a series of benchmarks against which future progress could be measured. These benchmarks would provide the pegs upon which the Committee could hang its ongoing scrutiny of the DMO's performance. In the event, these benchmarks emerged out of the evidence provided by DMO officials at public hearings, and from the various manuals and guides that document the procedures for the development and procurement of a weapons system and its logistical support. The Committee specifies, at various points throughout this Report, the particular events and timeframes that it will be monitoring to ensure that the DMO actually achieves the goals that its officials have declared to the Committee. The Committee will also be scrutinising closely DMO's compliance with its own documented procedures, especially for managing the capability systems life cycle. These benchmarks are summarised in an appendix to this Report.

³ *Committee Hansard*, 21 February 2001, p. 93 (Major General Peter Dunn, Head, Change Management Materiel Division)

⁴ Major General Peter Dunn, Head Change Management Materiel Division, *Briefing on Defence Materiel Organisation*, 25 October 2001

In seeking to obtain a comprehensive view of the DMO reforms, the Committee received preliminary briefings from Defence officials, undertook a number of visits and inspections to System Program Offices and industrial sites, received submissions and took evidence in hearings—both public and *in camera*—and examined an array of key documents related to strategic defence industry policy and Defence’s management of capability across its life cycle.

Findings

- The Committee is satisfied that the reform agenda set out in the 1998 *Team Australia* Defence and Industry Strategic Policy Statement, the 2000 Defence *White Paper*, and in numerous official statements thereafter constitutes an appropriate and workable mechanism for overcoming a legacy of failed or delayed major projects and for achieving capability for the Australian Defence Force.
- The Committee is broadly confident that the organisational, structural and process reforms being implemented by the DMO are providing the disciplined basis necessary to deliver project outcomes on time and within budget. In order to decide whether that confidence is truly justified, the Committee will monitor closely the operations of the DMO, and the progress of acquisition projects that are currently under way or scheduled to commence between now and 2005.
- The Committee recognises that cultural change is fundamental to the translation of new policies and procedures into effective day-to-day project management and to the nurturing of mutually rewarding partnerships with industry. The blue skies of optimism remain somewhat clouded by a lack of trust and a degree of cynicism on the part of both Defence and industry. This will continue to impede progress unless issues of cultural change are tackled head on. There is a serious obligation upon the leadership of both Defence and industry to attend closely to the ways in which their people engage with each other, and to the building of shared values, goals and expectations.
- The Committee remains concerned that some of the people reforms being sought by the DMO are proving difficult to implement. These include overcoming skill shortages in project management, contracting and software engineering; the difficulty of arranging industry exchanges and experience for DMO personnel; and ensuring appropriate levels of accountability, judgement and expertise at the middle management level. The retention of highly-skilled specialists in a remuneration environment which lacks congruence with the corresponding private employment market will remain a vexing issue.
- The dispersed System Program Offices seem to be proving effective in achieving efficiencies and better communications between the DMO and its customers. There is also an improvement in the stability of key personnel, thereby partially addressing one of industry’s frequent complaints about staff turnover in Defence. Some questions remain in the Committee’s mind about the location of some of the SPOs in terms of convenient interfaces between

relevant industry partners. Broadly speaking, however, the establishment of the SPOs and the increased personal accountability of SPO Directors for the projects managed by their Office has already started producing productivity and morale dividends. The Committee will continue to monitor the success of the SPO reforms.

- The *Capability Systems Life Cycle Management Manual 2002* constitutes a comprehensive guide to all phases of capability definition, acquisition and implementation. The Committee will use the *Manual* as a key reference document in its ongoing scrutiny of the implementation of DMO's reforms, and in particular its examination of the extent to which its processes are realised in practice. There remains some doubt in the Committee's mind about the sustained rigour of the implementation of prescribed processes, and the depth of commitment within and across the DMO to the day-to-day implementation of strategic defence industry policy.

The Committee is satisfied that the current structural arrangements applying to capability development and acquisition are appropriate. However, a greater effort must be applied to ensuring that staff in both divisions understand the critical nature of the relationship between the capability definition and acquisition phases, and of their fundamental role in interpreting to each other the requirements and opportunities of each phase of the capability life cycle.

- Notwithstanding some strong representations to the effect that a corporatised DMO would enhance its capacity to work with Australia's defence industries, the Committee finds that such a proposal is not in the best interests of key relationships between the DMO, the three Services and other relevant sections of the Defence organisation. In the Committee's view, Australia's strategic capability interests can be met, and Australian industry properly integrated into these, as long as the present reform agenda is diligently implemented.
- The Committee was impressed with the intellectual and technological capacity of many of the Defence industry's Small to Medium Enterprises (SMEs). It is important that SMEs have the opportunity to participate in all acquisition and logistics projects. For major projects, such participation rests largely in the hands of the prime contractors. The Committee exhorts Tier 1 companies to engage Australian SMEs wherever possible consistent with their capacity and competitiveness. The Committee remains concerned that the research and development activity of Australian SMEs remains largely under-developed.
- The Committee regards the 'scorecard' approach to assessing relationships between the DMO and industry as an effective feedback mechanism. The system has not yet reached anywhere near its full potential, but the Committee is confident that it will enhance the transparency of projects at the boardroom level in companies, and will promote frank and mature dialogue between project partners concerning problems which may arise.

- The Committee was concerned by the intensity of criticism of the DMO voiced by some industry witnesses—and also occasionally from within Defence itself—and the frequent reluctance of industry to place its views on the public record. In part, the criticism went to the gaps between the rhetoric and the reality associated with the reform agenda. It also went to the manner in which the DMO dealt with criticism and complaints levelled at it. While the Committee makes no findings in respect of specific complaints or criticisms brought to its attention, it is important that the DMO establishes a comprehensive, consistent and transparent mechanism for handling complaints—and one which does not unduly interfere with the progress of tenders. The Committee regards a case management approach as the most likely to produce satisfactory outcomes all round.
- The Committee considers the question of Unsolicited Proposals from industry to be one requiring particular attention from Defence. There appears to be a gap between policy and practice that is denying Defence the benefit of the innovation and ferment that is characteristic of many Australian firms operating at the ‘knowledge edge’. To sustain that ferment and innovation, companies require early feedback on proposals that they submit to Defence. Time is not only money, but also affects competitive advantage. The Committee believes that the efficient handling of Unsolicited Proposals would not only deliver a significant boost to ADF capability, but would encourage firms to even greater heights of innovation, and would assist these firms to consolidate their place in the global defence supply chain.
- The Committee is satisfied that the DMO has made substantial efforts to enhance project management and to develop a sound project reporting system. The risk of failure of new major capital acquisition projects is therefore correspondingly reduced, but for the so-called ‘legacy projects’ such risk may remain relatively high. The Committee remains concerned that while the internal reporting of projects, including to cabinet level, may have been enhanced, projects still remain largely invisible to the parliament and the public. Significant improvements are required in both the quantity and quality of information made publicly available.
- The Committee is encouraged by DMO’s progress in making tender processes more efficient—in particular through the use of contract templates. A reasonable balance seems to be being achieved between the degree of functionality that needs to be specified by Defence, and the flexibility available to industry to offer innovative solutions to the procurement of capability. Some work still needs to be done to ensure that all DMO staff incorporate the revised practices and values into their negotiating behaviour. As well, the Committee sees room for greater transparency in the contract process, including the publication of as much detail as possible about winning bids.
- Systematic test and evaluation is an area that requires greater attention and resources in order to provide the level and sophistication of feedback necessary

to ensure the integrity, functionality and safety of the materiel entering into service. The Committee notes the review of test and evaluation policy being undertaken by Defence, and will be looking for an outcome that embeds test and evaluation firmly into all phases of the capability development cycle, while ensuring that T&E is carried out with the requisite independence and rigour. Test and evaluation policy and procedures should be a key responsibility of the VCDF, and its implementation should be closely monitored by the Service chiefs.

The Committee has made a number of recommendations consistent with the findings summarised above. The Committee will persist with a high degree of scrutiny of the DMO's operations and of the acquisition projects for which DMO is responsible. Some recommendations are geared explicitly to the direct enhancement of the Committee's capacity to carry out such a task.

The forthcoming audit of major projects by the ANAO will also assist the Committee in this work. The Committee will seek a formal reference from the Senate to examine and report upon the effectiveness of the DMO over the period to the end of 2005. In the meantime, the Committee may meet with relevant parties to explore particular aspects of the matters addressed in this Report. Should this activity produce material that the Committee regards as relevant to Defence acquisition reform, the Committee will table a supplementary report to that effect.

The Committee is grateful for the cooperation of Defence officials and senior members of the Defence Materiel Organisation in providing a range of important background documents for the Committee's examination, and in assisting the Committee to undertake visits and inspections of Defence and industry facilities in most states of Australia. The Committee also thanks the many people from industry who gave freely of their time and knowledge to help the Committee gain insights into the contribution of some remarkable companies to the defence capability of Australia.



Senator the Hon Peter Cook

Chair

Chapter 1

The DMO's reform program

I think the amalgamation of Acquisition and Logistics functions, which is at the very heart of the reform process they have under way at the moment, is unlikely to be a solution in itself to the problems... but it is potentially, if well managed, a good foundation, a good starting point for reform process. Obviously the creation of SPOs, the system program offices, looked like a good way to go about reaping the potential benefits that ought to be derivable from an amalgamation of Acquisition and Logistics, but it will be—and it already is—a very complex and disruptive process. There is a question as to how well that process is being implemented and what it will deliver in the long run, but it is not a bad model to start with.¹

1.1 These remarks were offered to the Committee early in its inquiry by Hugh White, the Director of the Australian Strategic Policy Institute. They convey the essential tenor of the overall advice placed before the Committee by a range of well-informed witnesses from outside the Defence organisation.

1.2 The Defence organization itself consistently presented a much stronger view of the efficacy of the reforms, both current and potential. This is hardly surprising. The Committee tested the claims of Defence both in public hearings and in discussions with industry and Defence personnel during numerous site visits and inspections. The Committee's assessment draws on the full range of its exposure to the issues.

1.3 The structural and procedural reforms of the DMO have, in the Committee's view, the potential to improve considerably the acquisition and management of Defence materiel. These reforms constitute necessary, but not sufficient, conditions for the achievement of best practice in materiel matters and the successful implementation of defence industry policy.

1.4 Beyond organizational and process factors lie the somewhat less tangible issues of cultural change—both within Defence, the DMO and industry. These 'softer' factors will have a significant bearing on the extent and efficacy of reform activity. The Committee has heard some rather depressing claims about the cultures on both sides of the DMO—industry divide. It has also heard that such pessimistic views are not warranted. And there are surveys and scorecards which offer mixed messages.

1.5 The Committee's considerations of DMO cultural change later in this Report are framed in terms of questions like: Will the DMO become an organization "skilled at creating, acquiring and transferring knowledge, and at modifying its behaviour to

1 *Committee Hansard*, p. 57 (Mr Hugh White)

reflect new knowledge and insights”² Will it become “a type of organization we would truly like to work within.”³

1.6 Before exploring these matters further, it is important to reflect briefly on the DMO reforms in the context of a longer history of reform activity within Defence as a whole.

The establishment of the DMO

The net result was that, by late 1999, Defence had dug itself into a hole. Our operational skills and courage were matchless, but our organisational and project management skills undermined our capability.

Defence Annual Report 2000–02

1.7 On 22 June 2000, the Minister for Defence approved the establishment of the Defence Materiel Organisation (DMO) to equip and sustain the Australian Defence Force (ADF). It is responsible for acquisition and through-life support of equipment and systems used by the ADF.

1.8 The DMO brought together the Defence Acquisition Organisation, Support Command Australia and part of National Support Division. The goal was to improve delivery of ADF materiel by integrating acquisition and through-life support activities into a whole-of-life capability management system. This integrated organisation came into being on 1 July 2000 and structural changes to the organisation were completed by December 2000.

1.9 The formation of DMO was not the first initiative to improve materiel support—a point that was reiterated to the Committee by several witnesses.

We keep using the word ‘reform’ as if it is something novel and recent. My own observation is that it is more a case of continuous reform. DMO is pretty much an overnight sensation which took years, if not decades, to come about. Over a period of 20 or 30 years... there has been a gradual process of evolutionary change and continuous reform... focused on aligning ourselves better with capability and its development, management and implementation.⁴

I think we have to set the context for these remarks. The Defence organisation has gone through an incredible amount of change over the last three or four years—in fact, over the last 10 years. My own service [Air Force] has gone from a force of 23,000, to just over 13,000... There has been a lot of organisational change, there has been a lot of operational

2 A definition of a ‘learning organisation’ offered by David Garvin in the August 1993 Harvard Business Review.

3 Kofman, F & Senge, P ‘Communities of Commitment: The heart of the learning organisation’ in Cawla & Renesch (ed) *Learning Organizations: Developing Cultures for Tomorrow's Workplace* (Productivity Press, Oregon, 1995), p. 31

4 *Committee Hansard*, p. 82 (Mr John Pluck)

change and there has been a lot of cultural change. The effect of all that change is that we now have more capability than we had 13 years ago. A lot of our support functions have, obviously, been outsourced. Some of the things that are mentioned in that article are a consequence of the reform program. In Air Force we talk about gaining a soft landing from the effects of the reform program.⁵

1.10 In the early 1990s, a Force Structure review led to a joint approach to capability development and the Defence Logistics Redevelopment Project rationalised Defence warehouses. About the same time, the Air Force introduced Electronic Purchasing by Units for local procurements, while Army trialed its Direct Unit Purchasing model.

1.11 On 1 July 1997 Support Command Australia was established to integrate and rationalise the three former Navy, Army and Air Force materiel support systems. In this combined Support Command, and under the impetus of the Defence Reform Program, numerous non-core activities were market tested to achieve better value for the Government's money.

1.12 During the mid-term review of Support Command's progressive development, consultants KPMG were asked to consider the amalgamation of Support Command and the Defence Acquisition Organisation. KPMG noted that a change of this size would bring financial costs and tensions between people, but added:

The risks ... are considerable, but the risks of doing nothing are even greater, for no other reason than that the latter diminishes the ability of the Government to acquire total capability. The benefits associated with such a merger are very significant and the Review believes that, while there will also be regrets that will be of short-term and longer-term impact, the likely rewards to be gained will outweigh the regrets.⁶

1.13 The Committee acknowledges that the establishment of the DMO was the culmination of many years of ongoing reform, and agrees with the judgment that 'it will take five years to bed [the DMO] down'.⁷

1.14 Already, the implementation of aspects of the reform process has demonstrated to the Committee's satisfaction that there is cause for optimism. There is much that has impressed the Committee—for example in the operation of System Program Offices, and the articulation of very clear processes for the management of capability systems life cycle.

5 *Committee Hansard*, p. 214 (Air Marshal Angus Houston)

6 KPMG report 2000, p. 3, cited in *Submission 10* (Department of Defence)

7 *Committee Hansard*, p. 215 (Air Marshal Angus Houston)

1.15 There are 'about 110-odd individual new processes'⁸ that the DMO has introduced to the way it does business. The Committee has listened carefully to the accounts of those processes, and examined the documentation associated with many of them. It all looks very promising. However, as the Committee has stated clearly in the Introduction to this Report, it is determined to sustain a high level of scrutiny of the DMO over the period to 2005. The purpose of this close monitoring is to enable the Committee to satisfy itself and the parliament concerning the implementation and efficacy of the DMO reform agenda.

The nature of DMO's reforms

1.16 In its submission to the Committee, DMO stated that it has three fundamental types of reform under way: organisational reforms, process reforms, and people reforms.

The organisational reforms, which are well advanced, include the integration of the acquisition and support elements of Defence and locating them with their customers or supplier to provide greater focus on effective outcomes.

The process reforms include identifying and adopting best acquisition and asset management practice (including commercial practices where these are appropriate to Defence) and developing strategic relationships with industry.

The people reforms are aimed at creating a climate where the personnel responsible for Defence materiel are suitably trained, valued and motivated to do their best in a complex work environment that requires an innovative work ethic.⁹

1.17 According to the Defence Portfolio Budget Statements 2002-03, the Defence Materiel Organisation's reform program:

... encompasses a comprehensive range of measures to:

- integrate the acquisition and support elements of the Defence Materiel Organisation's business and locate them appropriately with customers;
- reform its processes based on commercial approaches and best practice;
- adopt a more strategic approach to its relationship with industry;
- improve its relationship with stakeholders and customers; and
- create the climate where people are valued and can do their best.¹⁰

8 *Committee Hansard*, p. 143 (Mr Michael Roche)

9 *Submission 10*, p. 4 (Department of Defence)

10 2002-03 Budget Related Papers No. 1, Portfolio Budget Statements (Defence), p. 98

Organisational structure reforms

1.18 At the corporate level, DMO is organised into divisions according to the operating environment for their systems. The main System Divisions are Aerospace, Maritime, Land, Electronic, and Airborne Surveillance and Control. These divisions are supported by the Finance and Management Information divisions. A separate Industry Division is dedicated to industry programs and initiatives, while Joint Logistics Command directly supports the three Services with warehousing, transport, and commonly used commodities.¹¹

1.19 A series of integrated System Program Offices (SPOs) have replaced the previously separate acquisition project offices and support units. In most cases, a single commander or director (at Colonel level or equivalent) is responsible for the acquisition projects affecting a weapon system, as well as the support and ultimate disposal of these assets.

1.20 To reinforce this through-life responsibility, most of the SPOs have been relocated to work alongside the Force Element Groups and industry, in capital cities and regional centres outside Canberra.¹²

Process reforms

1.21 The whole process of materiel acquisition and management has its roots in the definition of a future capability. It had become clear to Defence that inadequate definition of capability requirements prior to the acquisition phase, and the subsequent adjustments to capability requirements, was a major cause of changes in the scope of projects. This led invariably to cost overruns and delayed delivery of product. Defining capability without reference to cost and risk drivers had also significantly increased the risk of cost and schedule overruns.

1.22 To address these problems, the then VCDF Lieut. General Mueller issued (in December 2001) a *Capability Systems Life Cycle Management* Guide which emphasized the front end of the life cycle, especially the management of Major Capital Investment projects. This was modified and re-issued as a *Manual* in November 2002.

1.23 The Committee is impressed with the comprehensiveness of the *Manual* and regards it as providing a most suitable benchmark against which the future performance of the DMO and Defence's capability development process can be measured. The *Manual* also serves as an important reference document for the issues discussed by the Committee in this Report, and will be used systematically by the Committee in its ongoing detailed scrutiny of the materiel acquisition and management processes.

11 *Submission* 10, p. 5 (Department of Defence)

12 *Submission* 10, p. 5 (Department of Defence)

1.24 The DMO’s submission to the Committee listed a series of specific process reforms to overcome the identified shortcomings that had plagued the capability and acquisition domain. The reforms are intended to operate across the capability-acquisition life cycle. Some of the more significant are outlined briefly hereunder.

- Capability requirements will now be accompanied by a set of documents to specify the details of those requirements and guide the acquisition process. These are:
 - an Operational Concept Document that clearly articulates how the equipment will be used and supported, and will provide a reference for determining ‘fitness for purpose’.
 - Function and Performance Specification documents will specify system requirements and provide the basis for the design and qualification testing of the system.
 - Test Concept Documents will specify the warfighter’s intended test approach and the strategy for acceptance between the DMO and the customer. The TCD will also be used to prepare a Test and Evaluation Master Plan.
- A Defence Business Model will guide in-service support after the project phase. The mature model includes a cascading set of agreements:
 - Organisational Performance Agreements between CDF/Secretary and each Defence Group head,
 - Customer Supplier Agreements between Output Executives and Enabling Executives, and
 - Service Level Agreements between the DMO SPOs and the Force Element Groups.
- A two-pass approval process has been introduced for the acquisition of new ADF equipment. In the first pass, Defence will identify the gap in capability and will provide the Government with a range of options. Defence will identify approximate costs, risks and timing issues. At the second pass, Defence will provide the necessary level of detail to make an informed decision on acquisition and through-life support.
- Tender documents are to be less technically prescriptive and more functional. Tender processes will be shorter and companies will be progressively stood aside as they become uncompetitive. A new tendering and contracting template has been developed for use in high risk, software intensive projects. Templates for lower risk acquisitions and in-service support are currently being developed in consultation with industry.
- DMO has introduced a reform program aimed at developing policy, guidelines, training programs and technical expertise for software-intensive

projects. The Standard Acquisition Management System (SAMS) and a systems engineering improvement program are part of a revised approach.

- DMO has introduced a commercial-in-confidence company scorecard system. The company scorecard enables DMO to collect, assess and monitor contractor performance using an objective set of measures. DMO is piloting the 360 degree view scorecard, intended to measure DMO's performance from an industry perspective.
- Project governance boards have been established to review the technical, financial, contractual, risk, and schedule performance of projects. The boards provide independent advice to delegated decision makers, to relevant Division Heads and to the Under Secretary Defence Materiel. The aim is to assure accountability, transparency, disclosure and independence.
- DMO reports monthly to the Defence Committee and to the Minister on the status of its largest projects, other projects of concern and any critical issues, including through-life support.

1.25 Accounts of these reforms were provided in considerable detail by DMO witnesses at the Committee's public hearings. Interested readers should consult the Committee Hansard transcripts of proceedings. These may be downloaded from the internet at <http://www.aph.gov.au/hansard/senate/commtee/s-fadt.htm>.

1.26 There is also an excellent overview of Defence Materiel Reform initiatives in the *Defence Annual Report 2001–02*. The Committee commends the Department for providing such a convenient and comprehensive overview of its reforms in its key reporting and accountability document.

1.27 The Committee regards the process reforms outlined earlier as fundamental to achieving robust capability definition and efficient acquisition of materiel. It seems, however, that some aspects of these reforms have already been present in previous incarnations of Defence's capability development and acquisition policy, and should thus have already been implemented. On this account, some of the reforms are not 'new', and the Committee is assuming that their restatement in the recent *Guides and Manual* constitutes both a re-affirmation of the importance of certain procedures and a re-commitment to their rigorous implementation. The Committee will be closely monitoring the congruence between theory and practice.

People reforms

1.28 The DMO has advised the Committee that a holistic approach to people reforms has been adopted and deals with six separate but complementary initiatives:

- workforce planning,
- career streaming,
- training and development,

- performance management,
- developing a remunerations policy, and
- work value analysis.

1.29 Workforce planning will help DMO predict its future workforce requirements in terms of personnel numbers, distribution and skills. To date initial pilot studies have been conducted on the critical job disciplines of project management, contracting and software engineering.

1.30 The work undertaken has indicated substantial shortages in each of these areas. To address these shortages, Defence has begun a series of recruiting initiatives, but a critical factor in recruiting and retaining people with these skills is their general shortage in Australia.

1.31 A succession planning tool is being developed, which will reduce the cost of vacancies to the organisation.

1.32 A career management framework will assist employees make choices within the DMO. It will identify the skills and qualifications required for a particular job discipline, such as project management. A training and development framework, to identify the appropriate training needed by DMO personnel, will link to the career management framework.

1.33 A review of remuneration and conditions to attract and retain employees has been completed and the outcomes were incorporated into the Defence Employees Certified Agreement. A work value analysis has also been completed for some positions at Executive Levels 1 and 2, to determine if there are any anomalies in the DMO structures in terms of accountability, judgement and expertise. This work will be extended to other positions.

1.34 The Materiel Graduate Scheme is a DMO recruitment strategy to attract and develop university graduates from specific disciplines. The scheme also recognises the distributed nature of DMO by encouraging Materiel Graduates to spend at least one of their six-month work rotations in a regional area.

1.35 Among DMO's training initiatives for middle managers are its Leadership Program and Project Managers Development Program. The DMO Project Managers Development Program provides advanced qualifications (Master of Engineering Studies, with a Project Management major) and experience to become project managers. In its fourth year, 41 people have completed the program and 39 are still in the organisation.

Turnover, retention and the loss of expertise

1.36 A common theme in many hearings, and in conversation with industry representatives, was the difficulty associated with uniformed Defence personnel

moving on every few years, thereby disrupting the continuity of contact between an industry supplier and the Defence customer.

That is a very big issue. A typical Defence project—anything from five years through to 15 or 20 years—is quite a reasonable, normal project. With a defence posting cycle of every two years and most project managers being Defence personnel, while sometimes they do not always turnover on those two-year frequencies, that can mean you have seven or eight project managers throughout the life of a project. If the documentation is not 100 per cent up to scratch when that new project manager hits the deck, you can be looking at three to six months to really get that person up to speed, and that can create major issues.¹³

1.37 The Committee notes that senior Defence officials are alert to the problems associated with posting cycles, and have already taken steps to ensure longer appointments for key people involved in significant projects.

One of the great criticisms in the past has been churn of key staff. The head of the AEW&C project has been put in place for five years. He is an air vice marshal and he is there for five years. The project manager for Air 87 is a brigadier and he is in place until the first aircraft is delivered. The project manager for JSF is also from Air Force and he will be in position for, I think, the next five years, so he will be there until one of the next major milestones. We are starting to get that right.¹⁴

1.38 The department is also attempting to manage the 'churn' problem by adopting a more systematic approach to appointments while retaining opportunities for career development and advancement.

We have recognised, not just in project management but in areas such as personnel, that this rapid turnover ... is not good for our business. So ...we are looking at streaming people into project management, such that, if you were to follow the project management stream, you might go through staff college and your first appointment post ... might be in the DMO at the acquisition end of the cycle. Following that, you could come back into capability systems to work on the requirements end. In the ideal world, you would go back to perhaps the systems program office. That sort of career structure is being worked on ... We are trying to build career streaming such that we can overcome that problem.¹⁵

1.39 Industry witnesses, and others who place a high value on technical and engineering expertise in particular, were frequently critical of the erosion or absence of what they called 'domain expertise'.

13 *Committee Hansard*, p. 46 (Mr Raymond Ahern)

14 *Committee Hansard*, p. 147 (Mr Michael Roche)

15 *Committee Hansard*, p. 212 (Vice Admiral Russ Shalders)

The loss of in-house expertise over the last five years has exacerbated the already significant problem of mismatch of experience and expertise between Defence and industry. This mismatch causes difficulty in contract formation and management and is at the core of many problems of project risk and cost.¹⁶

The fashionable management theory cant that places the inexpert, inexperienced and even unsympathetic, over the expert, experienced and personally involved end-user cannot be further justified by the results. There have been too many disastrous choices of equipment, which have acted against the best interests of the military users.¹⁷

1.40 The issue of domain expertise is taken up in discussions elsewhere in this Report that deal with proposals for corporatisation of the DMO.

1.41 The Committee has outlined earlier in this section the variety of ways in which the DMO is tackling issues of expertise among its own staff—with training and development linked to career development, special graduate courses (including programs with the United States), and industry placement schemes. In the Committee’s opinion it will be some years before these initiatives really start to bear fruit.

1.42 The DMO does not have the capacity under its current certified agreement ‘to be that flexible in the way we remunerate our civilian staff’.

I believe that the philosophy has often been that we know that remuneration is a key factor but not the only factor. A lot of the information that comes back into the Defence level about why both civilian and military staff choose to stay or choose not to stay is about other factors such as job satisfaction and the quality of the leadership they experience in the work place. Those are also important factors. It has been the philosophy of the Secretary and the CDF to date that we perhaps need to put greater emphasis on those sorts of issues rather than see remuneration as the only way to retain our people.¹⁸

1.43 The Committee appreciates the difficulties associated with establishing fair remuneration schemes that are flexible enough to attract and retain people with high, specialist expertise in skill areas where there is considerable national or global demand. But the Committee also has sympathy with the view expressed in a submission by an experienced engineer lamenting the departure of fully qualified personnel from key positions.

A consequence of this has been much loss of engineering appreciation and corporate knowledge—the appreciation/knowledge of how things work, of

16 *Submission 11*, p. 3 (SAAB Systems Pty Ltd)

17 *Submission 7*, p. 2 (Mr John Elliott)

18 *Committee Hansard*, p. 264 (Ms Kim Isaacs)

why they are done or done in a particular way, of what is sensible, of what is risky; the instinct for the scope of the project/problem etc. which might permit corrective action before the problem manifests itself seriously etc. etc. In short all those things which cannot sensibly be committed to paper or floppy disk but are passed down, discussed and/or experienced which enable a senior person in any field to exercise professional judgement. What remains of both is incomplete by an amount that we do not know and fragmented between various closed shop offices, both within and without DMO. The ability to *anticipate* problems inevitable in the procurement of complex systems is reduced and worse, is still reducing¹⁹

1.44 The Committee acknowledges the DMO's efforts to enhance the skills, knowledge and efficiency of its staff. There are several discrete staff management, professional development and operational matters that the Committee addresses in more detail under various headings in this Report. The Committee also gives further consideration to 'people reforms' when it turns its attention to issues of cultural change.

Overall impact of reforms thus far

1.45 The Committee received a range of evidence concerning the overall impact of the DMO reforms thus far on Defence customers and industry contractors. The impact of the structural reforms involving System Program Offices received substantial attention by witnesses, and is dealt with separately by the Committee in a later section of this Report. The impact of process reforms is also dealt with separately as part of the Committee's consideration of tender processes and project management. People reforms are considered more thoroughly under the heading 'cultural change'.

1.46 The Defence Science and Technology Organisation (DSTO) is one group that has discerned considerable beneficial impact arising from the DMO reforms.

[T]he first message that I would like to leave with you today is that the new materiel acquisition and through-life support system has allowed DSTO to take a major initiative of greater engagement and support to DMO and DMO has responded positively and effectively to this engagement. The practical result of this engagement is the improved direct support to high-priority projects such as the SEA4000 future destroyer, the Collins improvement project ... and the AEW&C ... A further result has been the coordinated DMO-DSTO approach to research and development into finding better ways of reducing operating costs for defence capability when it is in service.²⁰

1.47 Positive reactions to the DMO reform agenda were also forthcoming from representatives of companies—although almost all insisted that there was still more to be achieved.

19 *Submission 5* (Mr David Truelove)

20 *Committee Hansard*, p. 164 (Dr Timothy McKenna)

ABL’s [Australian Business Limited’s] Defence Industry Committee is of the view that recent DMO acquisition reforms are delivering positive outcomes. These include: benefits from the formation of the DMO; more refined and informed approaches to tendering... and the decentralisation of the System Program Offices.²¹

In comparison to equivalents in other countries, [the DMO] holds its own well, and I acknowledge that there have been a number of significant improvements recently, most importantly I think the combination of acquisition and logistics into the single organisation.²²

The Australian Industry Group Defence Council has been working with the Defence Materiel Organisation to develop a ‘360 degree ScoreCard’ process. It is envisaged this would provide companies involved in major capital acquisitions (at this stage) the opportunity to provide their view of the Defence Materiel Organisation’s performance. This is a very positive development and needs to be seen as indicative of a mature relationship.²³

The previous Defence acquisition organisation tended to say, ‘Here it is.’ The DMO has been more consultative... I think [the reformed DMO] creates a more productive working environment. It creates one where problems are likely to be highlighted earlier and fixed, rather than ‘Let’s keep it secret’ until it becomes a major problem and a complete fiasco. So I think it is an important development.²⁴

1.48 The Committee discerns from its encounters with both industry representatives and Defence personnel a generally favourable disposition towards the DMO’s reform agenda, and guarded optimism about its continued success. The Committee is sufficiently encouraged by these views to proceed on the assumption that the DMO has established an adequate basis—structurally and procedurally—from which to secure capability for the ADF that is fit for its purpose and that represents value for money.

1.49 However, the uneven history of Defence procurement, and the persistence of strongly critical, and often cynical, voices among long-time observers of these matters cannot easily be ignored by the Committee. The Committee will therefore persist with its close scrutiny of the performance of the DMO, moderately confident of the diligence with which the reforms will be pursued, but by no means certain that, by themselves, they will produce the thoroughgoing changes that are so desperately required.

21 *Submission 23*, p. 2 (Australian Business Limited)

22 *Committee Hansard*, p. 181 (Mr Nicholas Hammond)

23 *Submission 20*, p. 7 (Australian Industry Group Defence Council)

24 *Committee Hansard*, p. 189 (Mr Nicholas Hammond)

Creation of the System Program Offices

1.50 A major organizational reform has been the decentralisation of key functions of the DMO through the establishment of System Program Offices (SPOs) at various locations around the country.

...System Program Offices (SPOs) have replaced the previously separate acquisition project offices and support units... To reinforce [their] through-life responsibility, most of the SPOs have been relocated to work alongside the Force Element Groups and industry, in capital cities and regional centres outside Canberra. Soon, less than 20 percent of DMO staff are expected to be located in Canberra. Currently there are almost 50 SPOs, employing about 3,500 people.²⁵

1.51 The concept of a dispersed series of SPOs was endorsed during the Committee's inquiry on several occasions, including by Mr Hugh White, the Director of the Australian Strategic Policy Institute:

For people involved in the delivery of capability, and particularly on the latter stages of acquisition and into the support and through life support sides, getting out there close to where people are trying to make these things work and turning them into real life capability is a pretty good idea. My instinct is that it is conceptually a good proposal.²⁶

1.52 The Under Secretary Defence Materiel (Mr Roche) summarised his assessment of the decentralisation exercise in the following terms:

It is still very much early days. The move out of Canberra has gone fairly well. There has been a certain amount of personal disruption, which is inevitable and which we have been doing our best to mitigate. Most of the system program officers are now in operation and we are getting very good feedback from the customer. I think the committee has talked to a number of customers. The relationship is working well.²⁷

1.53 The Committee concurs broadly with the USDM's view. There were indications from some that the transition was not conducted in an optimal fashion, and that it may be some time before the difficulties caused by the process have worked themselves through. It has been asserted, for example, that:

The exercise was conducted without a business case or cost benefit analysis. The cost of the exercise was unfunded and therefore was inevitably carried out at the expense of project deliverables. At the end of the day:

- project activities and deliverables were confounded and delayed during the period of disorganisation, discontent and uncertainty;

25 *Submission* 10, p. 5 (Department of Defence)

26 *Committee Hansard*, p. 76 (Mr Hugh White)

27 *Committee Hansard*, p. 150 (Mr Michael Roche)

- few expert staff relocated, their places being often taken by those with little relevant experience but eager to relocate for personal reasons and glad of the windfall offered by the relocation packages;²⁸

1.54 Given that the issue of 'domain expertise' arose frequently during the course of the Committee's inquiry, the Committee has sought to assess the extent to which the above criticism applies. The DMO advised the Committee that:

Work is now under way to replace specialist expertise in the new SPO locations. In the past, DMO and its predecessors have experienced difficulties in attracting a highly trained workforce to Canberra from other capital cities. DMO now has access to a larger workforce based outside Canberra, particularly for acquisition. In addition, regional staff have enhanced career options by being able to apply their knowledge of a particular weapon system in different roles. DMO SPO staff will have the opportunity to work across the life cycle of their weapon systems, rotating from acquisition roles, to in-service logistics support, to working directly with end-users and industry, and ultimately disposals. There is also greater opportunity for movement of experienced people from industry to Defence.²⁹

1.55 The Committee intends to monitor the issue of domain expertise in the DMO generally, and the capacity of the SPOs in particular to maintain adequate levels of such expertise among the staff assigned to the projects for which each SPO is responsible.

1.56 On several occasions the Committee invited comment from various sources concerning the opportunity for people to flow from industry to Defence. Such a flow appears not even to constitute a trickle. Indeed the Committee was hard pressed to discern any such movement—a matter which is taken up in more detail elsewhere in this Report.

1.57 Industry witnesses were invariably favourably disposed towards the establishment of SPOs and were complimentary about the enhanced service and support delivered by SPO personnel. For example, the National President of the Australian Industry and Defence Network (Mr Michael Turner) reported that:

[T]he DMO has explicitly opened the doors to SMEs by providing avenues of contact and then acting upon the questions asked by SMEs and expeditiously returning with answers. That previously was not available... In talking to SMEs, they find them [SPOs] to be a major advantage. ... We think it is a good idea.³⁰

28 *Submission 13*, p. 2 (Confidential)

29 *Submission 10*, p. 6 (Department of Defence)

30 *Committee Hansard*, p. 230 (Mr Michael Turner)

1.58 An important consideration for industry generally is the continuity of the Defence personnel with whom they have to deal.

I am speaking from experience here in dealing with [a Victorian SPO] whereby the director, Bev Lyttle, one of their officers, Malcolm Best, and the other guys there have been there for a number of years. Therefore, the rapport that they build up with industry is fantastic. They can pick up the telephone and call me by my first name, and I them. That is very important in giving industry the feeling that they have a direct route resource... There is continuity. That is sound commercial practice. In commerce, a person gets into a project, and they are there for the term of the project. That is of vital importance to the success and expedition of the project. The difficulty arises—especially with Defence, as I have said before—when these guys get moved on in three years.³¹

1.59 Some questions have been raised by industry about the locations of certain SPOs given the distance of those SPOs from the head offices of key partners.

The approach of locating most Army SPOs in Melbourne adjacent to their support organisations is certainly sound. In a number of cases, however, the location of the System Program Offices does not appear to have been thought through and the more complex interfaces with other organisations have been made more difficult by relocation. As an example, the ANZAC Ship SPO is located at Rockingham WA. While close to those WA-based ships that happen to be in their home port at the time, the office is six or more hours travelling time from the organisations in Melbourne, Adelaide and Canberra with which its most numerous, closest and most complex interfaces exist.³²

1.60 The Committee is encouraged by the general consensus between Defence and industry on the merits and effectiveness of the System Program Offices. For example, the company Nautronix has already had 12 years experience with the Sonar and Ranges Program Office, and reports that:

[T]his office has performed to a very high standard throughout the twelve years of Nautronix experience with the group. The team is well led and focuses tightly on good outcomes for defence and for industry. This group has established some significant capabilities not only in Nautronix but also in other Australian companies and the recent changes to decentralise the SPO appear to have enhanced this already capable organisation.³³

1.61 Defence personnel working under the new arrangements in SPOs were uniformly enthusiastic about the opportunities and responsibilities that these arrangements provided. The Committee was struck by the passion with which SPO personnel spoke about the enhanced personal and professional satisfaction that came

31 *Committee Hansard*, p. 231 (Mr Michael Turner)

32 *Submission 11*, p. 7 (SAAB Systems Pty Ltd)

33 *Submission 9*, p. 3 (Nautronix Ltd)

with their new roles, and also with the conviction that they were delivering a quality service to their customers.

The situation has brought the old Support Command and the Acquisition Organisation together so we can cradle to grave. Many of us have, over the years, said that this would be a good move and we should do it. Now we have done it. We are getting a lot out of it...The key difference is that we own the whole process. ... Because we are now in the same location and the same team goes to all the meetings and is part of the whole process, we very clearly understand what we have to do.³⁴

1.62 The capacity of SPO personnel to be closely involved with their customers, and to be associated with both the acquisition and through-life support of systems and equipment is seen by the Committee as a key benefit of the dispersed SPO arrangement. It has clear advantages for the Defence customer and industry, and appears to have re-energised, and secured 'shop floor' commitment from, those responsible for managing the process and achieving the outcomes.

Group Capt. Sheedy—I have had over 25 years in the Air Force, during which time I have worked in support command, operational command areas and also in the previous acquisition areas. What we have here within DMO is the greatest opportunity to get things right, from my perspective as a SPO director... As the director of my particular SPO, I am ultimately responsible for all aspects associated with the projects that I run and the through life support aspects. I think the synergy of that is absolutely fantastic. It adds responsibility to the task but it makes eminent sense to me and it actually provides a clear direction...

CHAIR—You are saying that, in your 25 years, this is the best deal that has come along.

Group Capt. Sheedy—That is correct.

CHAIR—That's a fairly big wrap. Give us your view about what are the most notable changes for you, at your level, that cause you to make that statement.

Group Capt. Sheedy—From my perspective, basically it is the fact that I have to take full account of the long-term aspects of any consideration I make, from a project point of view, to ensure that it serves as a full life type consideration, so that a decision I make early on, from a project point of view, ensures that I have the best value for money for the longer term future of the running system. That would be the key feature I see.³⁵

1.63 The Committee is pleased to report that such positive views expressed by SPO personnel are shared by those who are the recipients of SPO services. The Chief of Air

34 *Committee Hansard*, p. 81 (Colonel Peter Acutt)

35 *Committee Hansard*, p. 193 (Group Captain Stephen Sheedy)

Force, for example, who must rely on the effectiveness of SPOs if he is to ensure the delivery of the capability for which he is responsible, reported to the Committee as follows:

My force element groups are getting fantastic support from the System Program Officers. It is not perfect but, as I think as you saw when you were at Edinburgh the other day, it works wonderfully well and I am sure you found a very happy customer in Air Commodore Phil Byrne. So I would support what you say, Chair, in terms of perhaps allowing the DMO time to bed down because, sure, there is still a lot of work to be done, particularly in the systems area and the logistics process areas at the higher level, but we are well on the way. Give us the time and I am sure that, at the end of five years, you will see a model organisation which is world's best practice.³⁶

1.64 Additional endorsement of the SPO concept was also forthcoming from an industry consultant who has worked closely with Defence over several years in matters of project management. From the perspective of the company Tanner James:

...the creation of SPO's has been a strong positive for project management systems. The dispersed nature of the SPO's makes support more difficult. However, the SPO's appear to be very focused on delivery of quality equipment within specified time and cost. Smaller co-located groups appear more able to focus on whole-of-capability solutions and much more attention seems to be given to support requirements and costs. The chain of command appears to be much clearer in these organisations and Tanner James finds that, when it is engaged to assist projects, the projects are themselves committed and enthusiastic about 'doing it right'. The smaller structures seem to mean that there is less time spent editing documents and more time spent thinking about the project direction.³⁷

1.65 While acknowledging and applauding the good work being undertaken in many of the SPOs, the Committee is cognisant of the risks associated with very close relationships between two parties. One such risk relates to a potential lack of transparency.

Given that ... managers will work in daily contact with contractor staffs, and that both are committed to the production/construction of the contracted equipment, it is not surprising that a cooperative relationship based on monitoring and control can on occasion degenerate into a collaborative one based on a mutual desire to protect "the project" from unwelcome scrutiny or criticism.³⁸

1.66 Another risk relates to rigorous management of a contract when the two parties have, in certain quite significant ways, different and important needs and obligations which transcend those that apply to their immediate joint enterprise. What

36 *Committee Hansard*, pp. 216–217 (Air Marshal Angus Houston)

37 *Submission 8*, p. 14 (Tanner James Management Consultants)

38 *Submission 12*, p. 9 (Mr Gary Brown)

happens when 'crunch time' arrives at, say, a milestone point in a project? Drawing on his own experience of relationships between a SPO and its industry customers, the Director of the SPO concerned responded:

We do not have a cuddly relationship; we have a professional relationship but not a cuddly one. They have to produce at certain times. If they do not produce then, we inform them of what is required. So, while we have constant communication between the two parties, it is certainly not like a love relationship. This is a key professional relationship that we would see develop between any two commercial companies³⁹

1.67 The Committee accepts the validity of the Director's statement with respect to his own bailiwick. However, the emergence of project difficulties in other areas and on other occasions, suggests to the Committee that failure to differentiate the interests and responsibilities of Defence (representing the Commonwealth) from the interests and responsibilities of the industry contractor, and/or the failure to manage such differentiation, may have been a significant contributing factor in project losses.

1.68 This problem was brought home strongly in the following submission that made reference to the management of the Collins submarine project, but which has more general resonance.

[O]ne of the most disturbing things I have ever read was the following observation (made in 1992) by the Audit Office on the relationship it perceived between the Navy's Submarine Project Office and the contractor, the Australian Submarine Corporation:

Despite the Contractor's often strong tactics the Project Office continues to view the Contractor as almost an extension of itself... *At times it has appeared to the ANAO that the Project Office has a perspective that its role is to act as an agent of the Contractor in its dealings with the Commonwealth rather than as an arm of the Commonwealth monitoring and controlling the Contractor.*

It is essential that an appropriate distance be maintained between agents of the Commonwealth, tasked with project management and contract compliance monitoring, and those of the contractor, whose ultimate objective, as in any commercial operation, is to make a profit. If this does not happen on a given project, the seeds of serious trouble are already there.⁴⁰

1.69 The Committee's interim assessment of the decentralized SPO concept is that it seems to be delivering benefits across the parties—the Defence acquisitions and logistics personnel themselves, the warfighters in their Force Element Groups who are the SPOs' customers, and the firms and contractors with whom Defence is involved.

39 *Committee Hansard*, p. 98 (Colonel Peter Acutt)

40 *Submission 12*, p. 5 (Mr Gary Brown)

1.70 The Committee will continue to monitor the effectiveness of the System Program Offices.

Recommendation

1.71 The Committee recommends that in the years 2004 and 2006 the Defence Materiel Organisation seeks advice on the perceived effectiveness of System Program Offices from the Defence Industry Advisory Council, the Australian Industry Group Defence Council and the Australian Industry and Defence Network. That advice should be compiled into a short report, to include a response by the Under Secretary Defence Materiel, and submitted prior to the 2004 and 2006 Budget Estimates to the Senate Foreign Affairs, Defence and Trade References and Legislation Committees, and to the Defence Subcommittee of the Joint Committee on Foreign Affairs, Defence and Trade.

Chapter 2

Capability development and acquisition

A robust capability development process is critical to a successful acquisition. In the past, Defence capability requirements for some projects were inadequately defined before acquisition projects began. When the capability requirement evolved subsequently, causing changes in the scope of the project, the inevitable results were increased costs and delayed deliveries. In other cases, when the capability was defined at an early stage, it was sometimes done without reference to cost and risk drivers. This significantly increased the risk of cost and schedule overruns. To overcome these problems, the Vice Chief of the Defence Force and his capability staff are working with DMO staff to define a revised capability development process. This process emphasises a team-based approach involving both acquisition and through-life support specialists from the outset.¹

2.1 The Committee has earlier indicated that the *Capability Systems Life Cycle Management Manual 2002* is a key reference document for the Committee's deliberations on materiel matters. It will form the basis for the ongoing monitoring and assessment by the Committee of the effectiveness of Defence's materiel acquisition and management strategies.

2.2 The *Manual* defines capability as 'the power to achieve a desired operational effect in a nominated environment within a specified time and to sustain that effect for a designated period'.² Capability is 'delivered by systems' which draw on many inputs including people, doctrine, materiel, facilities, through-life-support and command and management.³

Capability systems have life cycles which begin with the identification of the need to reduce a current or prospective capability gap. The need is progressively translated into a working physical system which is operated and supported until it is withdrawn from service and disposed of. Capability must therefore be managed with both a system and life cycle perspective. The challenge of life cycle management is to bring into being a capability system that meets a specific requirement in the most cost effective way.⁴

2.3 It is the capability systems life cycle that provides the framework within which the DMO must work. The life cycle comprises four phases:⁵

1 *Submission 10*, p. 7 (Department of Defence)

2 Dept of Defence, *Capability Systems Life Cycle Management Manual 2002*, point 1.2

3 *Manual*, point 1.3

4 *Manual*, point 1.5

5 *Manual*, point 1.16

- a. Requirements phase—in which the capability needed is **defined** in terms of the functions it is to perform, the standards to be achieved under what conditions, the estimated costs to be incurred and the schedule to be met.
- b. Acquisition phase—in which the solution to the required capability is procured and transitioned into service.
- c. In Service phase—in which the capability is operated, supported and modified as necessary.
- d. Disposal phase—in which the capability is progressively withdrawn from service and materiel items are disposed of.

2.4 It is abundantly clear from this sequence that effective acquisition depends critically upon the proper definition of the capability to be developed. The requirements phase includes the determination of costs and schedule. Given that those involved in acquisition are bound to operate within those cost and time parameters it is vital that those involved in defining capability are fully cognisant of the practicalities of acquisition. Correspondingly, the knowledge of acquisition personnel can make an insightful, even transformative, contribution to the deliberations of those working on the definition of capability and how it might be realised as, say, a weapons platform.

2.5 The difficulties of achieving mutuality between the capability requirement and acquisition phases seem to have been somewhat legendary, as indicated in the following remarks by the DMO client manager for Tanner James Management Consultants:

The jargon used to go something along the lines of ‘the dead cat coming over the fence from Capability Systems into DMO’. That was a common term around Defence... The dead cat being a project that was supposed to be revived by DMO when the budgets were unrealistic and the capability was not well defined. I believe that that is becoming less and less common. I have some confidence in some of the budgets that I see coming out now, particularly out of these ones where there is an integrated project team in place. When I first arrived three years ago in Aerospace Systems, it seemed that with almost every project that I dealt with, I would go in and talk to the project manager, who would say, ‘I don’t know what I’m doing here. I can’t do this.’ A lot of those problems are being resolved. That is why I am deliberately not sledging DMO. To DMO’s credit, they have become a lot tougher on that.⁶

2.6 While the DMO has reported that ‘in the past’ acquisition projects were hampered, and it seems sometimes fatally undermined, by inadequately defined capability requirements, there is some evidence to suggest that similar problems still occur at present and are likely to persist into the future. In the opinion of one DMO insider:

6 *Committee Hansard*, p. 50 (Mr Raymond Ahern)

The CS [Capability Staff] deliver poorly articulated requirements to the DMO and expects the DMO to deliver materiel against those requirements. The fundamental reason the CS cannot articulate requirements with sufficient speed is that they are simply under staffed to address all the issues with the degree of detail required in any reasonable time frame. Furthermore, the Committee systems the CS is forced to negotiate are intractable. If a Committee decides to defer a decision (which happens more often than not) the next round of deliberations will often fall to the next desk officer (as the first has moved on). This is inefficient and, again, wastes time and money.⁷

2.7 The Committee considers that there is a role for industry in assisting Defence to clarify its capability requirements, and notes that provision for this is included in the *Capability Systems Life Cycle Management Manual*.

The early, close and continuous involvement of industry is essential to the effective life cycle management of capability. Industry involvement should commence during the Requirements Phase with the aim of ensuring the range of options for reducing capability shortfalls are technically feasible, affordable and represent all the practical alternatives.

Engagement of industry in the Requirements Phase promotes the generation of innovative options, a better understanding by industry of Defence's capability requirements and better prospects for the early identification of costs and risks. Industry's improved understanding of the capability requirement may subsequently reduce the effort required to reach a satisfactory acquisition proposal, thereby saving industry and Defence time and money.⁸

2.8 While the arrangements specified in the *Capability Systems Life Cycle Manual* seem eminently rigorous to the Committee, it is concerned by evidence which casts doubt on the actual practices being pursued.

I think it would be fair to say that, notwithstanding the very significant reform process which is under way in the DMO at the moment, it would be a widely shared view that the quality and discipline of the capability development process in Defence whereby these decisions are made has not improved in recent years and has probably deteriorated somewhat.⁹

2.9 These alleged shortcomings correspond to the advice provided by the Australian Industry Group Defence Council, which noted that:

... within the environment in which it works, the Defence Materiel Organisation has a difficult task. This is compounded by a capability development process which remains product rather than outcome focused.

7 *Submission 14*, p. 4 (Confidential)

8 *Capability Systems Life Cycle Management Manual*, paras 6.78–6.79

9 *Committee Hansard*, p. 61 (Mr Hugh White)

This ensures that sustainability of capability, in-country support and, importantly, through-life support costs remain side issues within the capability development process and to a lesser extent during acquisition decisions. Also, the Defence Materiel Organisation still has to deal with the problems associated with insufficiently or inappropriately developed proposals from capability development areas. These increase the time it takes for the release of tender documentation, help to add to the time taken for a decision to be reached and exacerbate the costs of doing business with the Defence Organisation as a whole.¹⁰

2.10 If the AIG Defence Council is correct, and logistics and support costs ‘remain side issues’ in the capability development process, then the requirements of the *Manual* (and the *Guide* that preceded it) are simply not being adhered to. The *Manual*, at the beginning of its account of the Requirements Phase declares:

Of particular importance is the need to consider all FIC [Fundamental Inputs to Capability], especially people and TLS [Through Life Support], from the beginning of the life cycle. The aim is to influence the development of a capability in order to improve its supportability and minimise Life Cycle Costs (LCC). **Careful attention must be given to all Fundamental Inputs to Capability from the beginning of the Requirements Phase. People and through life support matters are especially important. Input should be sought from SMEs [Subject Matter Experts] and TRAs [Technical Regulatory Authorities].** (*emphasis in original*)¹¹

2.11 Given the crucial nature of the relationship between the requirement and acquisition phases, and the criticism that was coming from some quarters, the Committee pressed Defence officers to offer their account of the level of articulation of the capability section with the DMO as acquisition agent. The Vice Chief of the Defence Force, who has a major role in capability development, stated:

I think we could do better... I think if we can specify in as much detail as possible what the ultimate capability requirement is going to be, it will allow DMO to satisfy that requirement better. Money spent up front is money that you save tenfold further down the acquisition track. So if we can define the requirement in sufficient detail for the DMO to then try to meet that requirement, that will assist them in the future. The other thing I would say is that we need to ensure that we have this teaming approach between my side—the requirements development people—and the DMO... I think our current two-pass approval process does assist in driving us towards meeting both of those aims.¹²

2.12 Further indications that Defence was beginning to take seriously the vital relationship between capability development and acquisition were presented in the evidence provided by the Head of DMO’s Electronic Systems Division.

10 *Submission 20*, p. 8 (Australian Industry Group Defence Council)

11 *Manual*, point 3.2

12 *Committee Hansard*, pp. 206–207 (Vice Admiral Russ Shalders)

Our work to date has focused on requirements development. We have been working with the capability staff on the guidelines for developing operational concepts documents, functions and performance specifications and test concept documents. Our focus on requirements definition came from our consultations with industry. They thought we needed to improve requirements development. They wanted to understand more about how things were going to be used rather than just getting a specification. We also asked ourselves: if function and performance specs have been our policy for some time, what has been the difficulty with implementing that policy? We found that because we did not have a good requirements analysis process in terms of developing operational concepts and understanding the functions that need to be performed, the next part of that is obviously the function and performance spec.

In addition, we did some analysis of our work and, certainly in my division, we found that a large number of the delays in the projects getting to contract were because the DMO had to do substantial work in further defining requirements. That was leading to delays on our side because we had to add the additional information. Under our new approach, which the VCDF outlined this morning, we will have a greater level of requirements definition before we go to government approval. This will allow us to have a better understanding of the costs, the risks and the likely schedules that it will take to deliver on the requirements. It will also mean that the DMO will have a much more detailed definition of what is required from the capability staff, rather than high-level statements of intention and capability.¹³

2.13 A debate which emerged in the course of the Committee's inquiry centred on the question of whether a closer structural integration of the capability and acquisition functions should be pursued. The matter was first raised by ASPI's Hugh White, who elaborated in the following terms:

My suggestion ... would be a fairly radical one, and that is to change in a fairly deep way the relationship between ... the DMO function as it is performed at the moment—and the capability development function. A very high proportion of the cost-capability trade-offs are choices, and therefore a very high proportion of the decisions—which, if made correctly, can produce a good project and, if done incorrectly, can produce problem projects of the sort we are discussing—are made during the process of source selection, somewhere between the time at which a senior committee in Defence produces a one-page specification of what is required in a broader sense, and somebody signs a contract that might be several feet thick, specifying exactly what is required on the other.

I think the best way to improve that interaction would be to move a lot more of the source selection process into the capability development end of the structure... I have often been struck by how quickly the centre, the headquarters with a strategic perspective, loses control of and loses track of the cost-capability trade-offs, which really drive the cost and schedule and

13 *Committee Hansard*, p. 249 (Ms Shireane McKinnie)

technical risk of the projects as they are actually delivered. I think a better approach would be to move more of that responsibility back into the centre.

...

It seems to me one of the enduring problems in Defence on these issues has been that, although there are a large number of very talented people in the centre, I do not think it has had a sufficient depth of expertise on the very complicated range of technical issues, operational issues and market issues which are required.¹⁴

...

It is entirely feasible—and I would say pretty urgent—to rebuild within the headquarters a much stronger capability development element. ...

It is not unachievable because it does seem to me that a high proportion of the reforms that have been undertaken within the DMO as part of the DMO reform program since amalgamation have been focused on what you might call the downstream ends of what the DMO does, the way it manages projects and, of course, manages the assets once they are in service. In a sense the amalgamation of Acquisition and Logistics has drawn the focus of the DMO further away from the beginning of the process that we are talking about—the capability development end—and closer towards the actual delivery of the capability once it has been produced and in service.¹⁵

2.14 The Committee acknowledged some *prima facie* merit in Mr White's 'radical proposal', especially given the importance of the capability/acquisition nexus and the claims that there were ongoing weaknesses in the capability definition phase. The Committee sought responses from Defence officials to Mr White's proposal.

I think there is some merit in the basic principle. [Mr White] and I [Dr Williams] have discussed those issues and probably have similar views. The first issue is: should we go out with a firm requirement and say, 'We want X,' go to industry, tell them exactly what we want, get a price and then deliver it? Or, at the other extreme, should we go out and say, 'What will you give us, industry, and what will it cost?' then go back and weigh up the options? The former process is easier, cleaner, perhaps even simpler, from a procurement point of view, but you run the risk of asking for something which may push it just over the limit of some step function. You may finish up asking for a bigger engine which, if you had only known, you would not have asked for.

On the other hand, if you keep it too broad and have a huge range of options, you make it very expensive for industry and somewhat of a nightmare for evaluation. You run the risk then of constantly shifting and you will never get to the end point. So I suspect the truth is a little bit

14 *Committee Hansard*, pp. 64–65 (Mr Hugh White)

15 *Committee Hansard*, p. 67 (Mr Hugh White)

between what Hugh is saying. I think we probably are too requirement focused—that is a personal opinion—and we are trying to be a little more functional in what we ask for. I think the two pass approval process lends itself to that, because the first pass can keep it broad. In coming back, you can then go back to government with some flexibility and options, but there is balance.

Should the people go into the headquarters? No. My view would be that it is much better to have the experts where they are and define the roles and the interactions. I think a small outposted team would lose touch with the reality. I come from a similar background to Hugh's. Quite frankly, two years in the DMO is quite a revelation. Things that you think are just oh so simple are a hell of a lot harder when you get there. In part what he is saying is right, but I would not go as far as he suggested.¹⁶

2.15 The Committee notes the emphasis placed by Dr Williams on the realities and complexities of dealing with cost–capability trade offs. It appreciates the challenges associated with defining capability so as to optimize it within the realms of the financially possible, the technically feasible and the logistically supportable. The Committee also notes the commitment of Defence to properly acquitting a life cycle approach to capability development which insists on acquisition and logistics considerations being taken into account right from the beginning of the cycle. The Committee is therefore disinclined to support a 'radical change' at this stage.

Vice Adm. Shalders—I would like to give our current arrangements a chance to work. As I said to you before, I am very keen that the teaming approach be forced to work. I do not think we are too far off the mark in our current structures, provided both sides of that very complicated activity are working together as well as they should. I do not think that Mr White's proposal is necessarily the way to go. I fall down on Dr Williams's view, which is: let us leave it where it is. The reason that I take that point of view is that Dr Williams has worked on both sides of the equation. As Hugh White has indicated, he has only worked at one end of it... My personal point of view is that I think we are okay, provided the teaming arrangement—the partnership activity—works as well as it should.

Air Marshal Houston—If I could add to that, I think if you go back about 20 years our approach was very much where the source selection was done at the capability development end. Looking at some of the equipment we bought, we bought a lot of customised equipment when perhaps we would have been better off buying something that was more off the shelf or something that was common with other operators. I think the way we are doing it now is much more sophisticated. I would strongly support what the Vice Chief of the Defence Force has just said, in that the teaming approach is really the key to it all. I think the last thing we need is to make the decision in isolation in some part of the organisation. What is important is

16 *Committee Hansard*, p. 121 (Dr Ian Williams)

that we work together in a very cooperative way as a team and make a corporate and collegiate decision.¹⁷

2.16 The Committee reiterates its requirement that Defence adhere strongly to the processes and values articulated in the *Capability Systems Life Cycle Management Manual 2002* and the *Guide* that preceded it. The Committee has marked the nexus between the requirement and acquisition phases as critical to success of projects, and will monitor very closely the diligence with which that nexus is observed by both the DMO and Capability Systems.

Recommendation

2.17 The Committee recommends that special training and professional development be undertaken jointly by capability and acquisition staff to ensure that all staff have a clear understanding of, an unequivocal commitment to, and the skills and knowledge to fully implement the practices specified in the *Capability Systems Life Cycle Management Manual 2002*.

17 *Committee Hansard*, p. 211 (Vice Admiral Russ Shalders, Air Marshal Angus Houston)

Chapter 3

The DMO and industry

Industry is a vital component of defence capability. A combination of government policy and market pressures has brought significant improvement in the capability of Australian defence industry. In many areas, it is now highly cost-competitive. Major projects, when well managed, can introduce new technologies and skills into Australian industry. The Government's objective is to have a sustainable and competitive defence industry base, with efficient, innovative and durable industries, able to support a technologically advanced ADF...

Australian defence industry needs to be competitive on an international basis. ... The Government is committed to strengthening the defence industry base, without encouraging inefficiency or dependence.¹

3.1 The above extract from the White Paper *Defence 2000* describes the policy framework within which the Defence Materiel Organisation has sought to reform its engagement with industry. This engagement is taking place at a time when other significant developments are also being realized—for example the individual plans for discrete sectors of the Australian defence industry.

3.2 Another key document which helps to frame the debate about industry's role in defence is the 1998 Defence and Industry Strategic Policy Statement *Team Australia*. That document identified six strategies for change and improvement:

- Integrate industry into capability development.
- Enhance industry's contribution to the nation's capability edge.
- Reform procurement.
- Establish new ways to involve Australian industry in Defence business.
- Increase Australian exports and materiel cooperation.
- Commit to cultural change and improved communication.²

3.3 In the Committee's view, the current reform activity being pursued by the DMO is fully consistent with the 1998 *Team Australia* commitments. Indeed it is clear to the Committee that the DMO has been conscientious in tailoring its reform agenda to the requirements of both the 2000 White Paper and the 1998 Statement.

1 Commonwealth of Australia, Defence White Paper *Defence 2000—Our Future Defence Force* (December 2000), pp. xv, 101–102

2 Commonwealth of Australia, Defence and Industry Strategic Policy Statement *Team Australia* 1998, p. 1

3.4 The Committee's positive view of DMO's efforts to fulfill the requirements of the various policy statements is somewhat at odds with the assessment by the Australian Industry Group of the overall policy outcomes for industry.

Regrettably, Defence has a poor record of implementing policy which impacts Australian industry. While the 1998 Defence and Industry Strategic Policy Statement did not necessarily represent a fundamental shift in approach, it stands out from previous declarations because it was a detailed policy which was Cabinet endorsed. Additionally, it recognised that implementation was going to be the key to the policy's success. Unfortunately, its implementation was patchy at best.³

3.5 A third significant document affecting the levels of engagement between Defence and industry is the Defence Capability Plan, which has a 10 year planning horizon, and is reviewed annually.

The publication in December 2001 of a public version of the Defence Capability Plan (DCP 2001) was a significant reform in the relationship between Defence and industry. Covering Defence requirements for the next ten years, it involved a new level of openness with industry, with a view to achieving any mutually beneficial planning, innovation and strategic commitment. This and future DCPs provide the means to link Defence needs to a sustainable and competitive Australian defence industry.⁴

3.6 The Committee addresses hereunder a range of discrete issues and concerns raised by industry witnesses, and Defence's responses to those concerns. These matters range from the funding of policy implementation to the details of contracting templates and the handling of grievances.

3.7 The Committee situates its analysis firmly within the framework of current government policy and Defence practice. The Committee's perspective in this exercise draws on the overarching assessment by the Australian Industry Group Defence Council that:

a strategic, and positive, agenda for reform has been established by the Government and senior Defence executives. However, key delivery organisations within Defence continue to struggle with the existing reform framework and this is compounded by insufficient progress in cultural change.⁵

3.8 To use the word 'industry' as all-embracing is somewhat misleading in that there are effectively three different tiers of industry doing business with Defence.

Defence deals with many companies spread broadly across the three tiers of Australia's defence industry—with major local and foreign primes, their

3 *Submission 20*, p. 9 (Australian Industry Group Defence Council)

4 *Submission 10*, p. 15 (Department of Defence)

5 *Submission 20*, p. (i) (Australian Industry Group Defence Council)

subsidiaries and systems integrators in Tier 1; moderately sized overseas and Australian companies able to play a major subcontracting role in Tier 2; and small to medium enterprises (SMEs) comprised almost totally of Australian firms in Tier 3. Companies in each tier make a unique contribution to the nation's defence.⁶

3.9 The *Defence Materiel Guide* published in June 2002 outlines Defence's approach to 'acquiring and supporting specialist military equipment for the Australian Defence Force'. The *Guide* describes DMO's Australian Industry Involvement Program as one that:

Develops, sustains and enhances strategically important capabilities in Australian industry and focuses on developing and sustaining in-country capabilities needed to repair, maintain and adapt materiel capabilities.

Small to medium enterprises have a unique role in Australia's defence industry base and the DMO sources at least ten per cent of its purchases through small to medium Australian enterprises.⁷

3.10 The *Defence Materiel Guide* declares that the benefits of its reforms for industry include 'lower transition costs, certainty and continuity of work, better planning guidance and greater capacity for it to make a long-term investment in infrastructure, skills, training and research and development.'⁸

3.11 The *Guide* also outlines the various mechanisms by which the DMO seeks to keep in touch with industry, including:

- Close liaison with the Defence Industry Advisory Council (DIAC) and industry associations
- Supporting industry forums and a Recognised Supplier Scheme
- Administering a 360 degree Company Scorecard process
- Running an annual Defence+Industry Conference
- Operating a Defence and Industry Study Course for both Defence personnel and people from industry
- The one-stop-shop facility of the dispersed System Program Offices

3.12 In the course of its inquiry, which included site visits and inspections as well as public hearings and informal briefings, the Committee received a diversity of views from Australia's defence industry. One problematic feature of the Committee's consultation with industry was that there was frequently a reluctance by company managers to place their views 'on the record'. They tended to fear that any criticism

6 Commonwealth of Australia, *Team Australia* (1998), p. 33

7 Defence Materiel Organisation, *Defence Materiel Guide* 2002, p. 10

8 Defence Materiel Organisation, *Defence Materiel Guide* 2002, p. 11

they might make of Defence, or the articulation of any proposals that were not favoured by Defence, would somehow result in adverse consequences, including jeopardizing their company's success in future contract bids.

3.13 It has been very difficult for the Committee to assess whether such anxieties are simply the inevitable consequence of firms competing for business in a market where Defence is often the sole customer, or whether there is truth in the allegations about the attitudes and behaviours of some DMO personnel. The Committee explores these matters in more detail when it deals with issues of cultural change, and the handling of grievances associated with contracts and tendering processes.

3.14 The Committee has been most grateful for the public contribution of some of the defence industry's peak bodies and of individual CEOs. Their evidence has been valuable in assisting the Committee to test views put privately by others. But there remains an undercurrent of 'bad form', expressed or implied, in confidential submissions and other communications from industry than demands more than cursory examination.

Funding and budget issues

3.15 Any consideration of defence industry matters must first take into account the levels of funding that are available to pursue the strategies outlined in strategic and policy statements.

[C]apability priorities established by successive White Papers have been dependent on funding increases. While the Defence Organisation has continued to program capital expenditure on that basis, these funding increases have not been forthcoming and this has put immense pressure on the budget. And second, the short-term pressures applied by continually increasing personnel and operating costs have subsumed the long-term capital needs of the Defence Force. Clearly these are expenses that must be met and recently, for example, have resulted from largely unforeseen and extreme international developments. However, it is critical for long-term Australian Defence Force capability—of which in-country support and therefore industry sustainability are key components—that this situation does not become an ongoing feature within the Defence budget.⁹

Undoubtedly, compared to a decade ago, significant elements of defence capability are now provided by Australian industry, and this has shown to be more cost effective than before, not only in terms of capital expenditure per se but also in terms of the entire through-life support. Having said that, nonetheless when we look at actual dollars spent in Australian industry in the last 10 years, it has dropped from about 70 per cent of the capital expenditure budget to about 40 per cent. This is significantly due to a change in some of the capital expenditure programs, from shipbuilding to,

9 *Submission 20*, p. 2 (Australian Industry Group Defence Council)

say, aerospace and electronics, where there is not the same capability in Australia as overseas.¹⁰

3.16 The ministerial foreword to the 1998 *Team Australia* document contains several statements emphasizing *partnership* between Defence and industry. Such a partnership is to be ‘a means to achieving Australian Defence Force capability’. As a result ‘industry will be able to look to the defence market as one in which it can invest with confidence’.¹¹ These goals are substantially dependent upon the availability of funds. *Team Australia*’s affirmation of ‘smart’ companies will ring hollow if the Commonwealth is unable to make the necessary dollar investment.

In recent times Defence funding has been insufficient to make use of the capability that has been developed in Nautronix. While apparently important strategic capability has been established in Nautronix, funding to implement the capability in the ADF has been less readily available. Unfortunately the actions necessary to sustain the Defence capability in Nautronix require a braver act of charity than the company or its shareholders are able to provide. This issue is not a criticism of the Department or the Defence Materiel Organisation. It is recognition that the Defence budget is not adequate to meet to provide a coherent Defence industry strategy.¹²

3.17 In the Committee’s view, one of the significant determinants of Australia’s capacity to sustain a viable defence industry base is the scale of the exercise. Unlike the United States, for example, which has an enormous defence infrastructure and budget and an industrial capacity which is both broad and deep, Australia has relatively few major defence companies, with small to medium enterprises scattered across the country trying to optimize both defence-oriented and commercial opportunities. This constitutes a challenging environment in which to sustain even a moderate level of self-sufficiency in capability, or to maintain the continuity of work necessary to ensure the viability of firms.

3.18 The Committee acknowledges the inevitable tensions between what is desired in terms of ‘industry partnership for capability’, and what is possible in terms of whole-of-government budgets and the disbursement of the Defence budget across the full range of its responsibilities. There are also further debates that could be had about the place of defence industry policy in broader industry and regional development policy. This is not the place to engage with those broader debates, but the Committee explored the extent to which industry appreciated those tensions and debates.

We are not coming to this inquiry asking for some sympathetic support for Australian industry. We are talking about hard-nosed commercial benefits to the Australian economy, to the defence organisation and to the global competitiveness of very significant industries here... We are not here about sentiment. We are not putting our hand on our heart and saying, ‘Support

10 *Committee Hansard*, p. 301 (Mr Leigh Purnell)

11 Commonwealth of Australia, *Team Australia* (1998), p. (iii)

12 *Submission 9*, p. 2 (Nautronix Ltd)

the good old Aussie battler.’ We are talking about world-capable technology. The two studies that we have already done on the minehunter and the ANZAC projects, which I have detailed in our submission, show the real benefits to defence, to the Australian economy and to the people at large.¹³

3.19 The Committee has neither the capacity nor the authority to specify budgetary arrangements that will deliver to industry the resources necessary to achieve the vision of ‘a technologically advanced ADF... supported in close partnership by efficient and innovative industries’.¹⁴ It is a vision which the Committee endorses. The principle of partnership is explored in more detail in the section of this Report dealing with projects and project management.

3.20 The Committee is persuaded that the kinds of industry support and engagement envisaged in the 2000 Defence White Paper, in the 1998 *Team Australia* document, and captured in the Defence Capability Plan is entirely consistent with Australia’s best interests.

3.21 However, the Committee makes the point that a sound defence industry policy, and a forcefully stated commitment to it by government, will inevitably—and reasonably—raise expectations, especially within the ‘smart’ companies that possess the intellectual resources, the passion and the patriotism to take up the challenges and respond to the opportunities that are presented.

3.22 If there are insufficient grounds for those expectations, and inadequate government support and follow through—financial, procedural, promotional—then disillusionment and frustration will rapidly erode the momentum and good will achieved during the policy development phase. All the policy statements, structural reforms and revised procedural frameworks in the world remain impotent until put into practical effect.

Industry agrees that the processes do exist. However, for us, the real issue remains policy execution.¹⁵

While the new policy is a significant advance and has the potential to build an industry with real capability to influence the defence of Australia, it will fail unless the Government forces Defence to account for progress by measurement of outcomes.¹⁶

If you look at the defence and industry strategy paper that was brought down by the government a couple of years ago, if all of those objectives

13 *Committee Hansard*, p. 397 (Mr Leigh Purnell)

14 Commonwealth of Australia, *Team Australia* 1998, p. 7

15 *Submission 20*, p. 8 (Australian Industry Group Defence Council)

16 *Submission 11*, p. 5 (SAAB Systems Pty Ltd)

were able to be fully implemented, we would be pretty close to what we were wanting anyway.¹⁷

3.23 The Committee intends to closely monitor the implementation of Defence industry policy. The Committee is confident that the vision is right and is shared by industry. The bureaucratic structures and processes are being reformed along lines which appear to have the blessing and broad support of industry and of defence observers. If the policy fails in its implementation, accountability belongs with government. The failures will most likely be traceable to inadequate resourcing, either in terms of Defence dollars invested in locally produced capability, or to the effectiveness of managers, project leaders and those who sit on project governance boards. It is here that the Committee's scrutiny will be most searching.

How industry perceives DMO and the reform agenda

The first message we want to give to this inquiry this morning is that we [Australian Industry Group Defence Council] believe that we are doing things better now than we were a few years ago. The second message we want to give very strongly is that, while our submission is heavily focused on reforms to the DMO, there are reforms on both sides. There are a lot of things that industry is working on and believes it can do better... But I want to make the point very strongly that the defence contracting industry in Australia knows that all of the reform is not just within the DMO; it is also on industry's side.¹⁸

3.24 The Committee was pleased to have drawn to its attention by an industry peak body that the defence procurement reform agenda was not confined to the bureaucracy alone. The Committee notes also the strong endorsements of the DMO coming from Australian Business Ltd, an organisation that supports more than 250 defence related contractors, big and small, across all industry sectors.

At the outset we wish to make very clear the genuine support and cooperation provided by the Defence Materiel Organisation to Australian industry... Commencing in 2001, with the active support of the Under Secretary... ABL initiated a regular program of visits to defence firms by DMO executives. These tours have helped the communication process and demonstrated an active interest on the DMO's part in better understanding the concerns of Australian SMEs... ABL is regularly consulted by DMO project staff on issues relevant to industry. The DMO has ensured that industry is provided with every opportunity to exploit opportunities to tap global supply chains... ABL's Defence Industry Committee is of the view that recent DMO acquisition reforms are delivering positive outcomes.¹⁹

17 *Committee Hansard*, p. 310 (Mr Leigh Purnell)

18 *Committee Hansard*, p. 301 (Mr Leigh Purnell)

19 *Submission 23*, pp. 1–2 (Australian Business Limited)

3.25 It is important that industry accepts its responsibility to cooperate with the DMO in bedding down efficient project management practices. Companies, too, need to be diligent in their own analyses of risks and cost-drivers as they enter tender processes.

3.26 The Committee also exhorts industry to acknowledge the distinctive responsibilities of a government agency in matters of transparency, accountability and due process. Normal commercial practice is not the standard for organisations that are accountable to parliament for the expenditure of huge sums of public money. Industry has every right to expect efficiency, and that commercial practices will be accommodated as far as possible within the bounds of prudence and accountability expected of public servants bound by, among other things, the *Financial Management and Accountability Act 1997*. Industry personnel should remember that they are also citizens, along with their public sector counterparts, with a stake in the Commonwealth purse.

3.27 Strong representations were received from some industry representatives to the effect that a (wholly or partly) corporatised DMO would optimize its capacity to deal efficiently with industry. Their arguments were couched in terms of overcoming gaps between policy intent and implementation, reducing time between requests for tender and contractor selection, and promote a stronger commercial ethos amongst DMO personnel. The proposal was first put to the Committee by the managing director of SAAB Systems Ltd, Mr Nick Hammond.

While specific reform initiatives may be individually beneficial, the most productive approach to improvement of performance of the DMO would be to create an environment where delay and poor performance had real and evident outcomes. One way to achieve this would be to link the organisation's own administrative and salaries budget to its acquisition budget so that delays in letting contracts and in achieving expenditure on contracts already in place would translate directly into a reduction in the DMO's budget, engendering the same "time is money" attitude that motivates industry.²⁰

3.28 Mr Hammond also drew to the Committee's attention what he regarded as a serious problem for the DMO, namely the capacity to provide the salaries and other conditions necessary to attract the kind of high level experience and expertise that its tasks required.

[I]n terms of a structure that would allow it to compete in the marketplace, ... I referred to a corporatised organisation... [I]ntuitively it seems to me that that is a possibility. In other words, there would be a defence procurement agency which would be run under corporate lines and it would be freed from the constraints of public service salaries and things like that. Perhaps rolling in the two ideas together, its budget could be a percentage of the money it was spending on acquisition and so there would be then an

20 *Submission 11*, p. 2 (SAAB Systems Pty Ltd)

incentive to spend the full defence budget and to minimise its cost. It is an idea which I think is worth pursuing or at least exploring.²¹

3.29 Similar views were advanced by representatives of the Australian Industry Group Defence Council.

The Australian Industry Group Defence Council view is that the quasi corporatisation of the Defence Materiel Organisation would enable it to take a more commercial focus. It would be contracted by the Government for its activities and, therefore, must be in a position to accept or reject proposals emanating from capability development areas that are insufficiently developed or are unlikely to produce a value for money outcome... [W]e are of the view that while a strict corporatisation model is not fully applicable for the DMO, with some changes reflecting its unique agency role, many of the benefits flowing from a corporatisation process can be achieved with no significant hurdles—whether they be capability, legislative or processes—which would hinder this approach.

The Australian Industry Group...believes that the Defence Materiel Organisation's quasi corporatisation, with its increased capability of recruiting, retaining and developing the appropriate skills base to achieve its objectives outside normal public service processes and culture, would be a positive stimulus for the Defence Materiel Organisation. Additionally, it will be critical to ensure that further reform of Defence processes, particularly in relation to the development of capability proposals is achieved... [T]he result of this approach would be a more effective capability outcome for the Australian Defence Force, a more sustainable outcome for Australia's defence industry and a more cost-effective outcome for the Government and the Defence Organisation.²²

3.30 The Committee explored the corporatisation proposals on several occasions and in some depth. The Australian Industry and Defence Network was another peak Organisation that saw merit in the corporatisation proposal. But among Defence officials there was a general resistance to the idea, based on the conviction that the DMO should not become too far removed from its main customers—the three Services—and that the DMO's reform agenda would address many of the industry's concerns. The Under Secretary Defence Materiel expressed those views as follows:

I can see some attractions in terms of giving me some flexibility on the remuneration front, because I do have difficulties in attracting and retaining some key skills, particularly aerospace engineers and software engineers. I have two concerns about it. The first is that the most important relationship is between my customers—the three service chiefs and the vice chief, who is in charge of capability—and me, and I would not want to see any distance put into that relationship. The second is, if you want a really clear cut interface between us and the rest of Defence then you are starting to look at

21 *Committee Hansard*, p. 186 (Mr Nicholas Hammond)

22 *Submission 20*, p. 11 (Australian Industry Group Defence Council)

a degree of formality of that process that involves almost contractual obligations over that interface. All that does is shift the contractual specification requirement closer into the centre of Defence. On balance, the way we are structured at the moment is probably best but, if I could find a way through the attraction and retaining of key technical resources, I would be happy.²³

3.31 The Chief of Air Force, Air Marshal Houston, emphasized the key relationship between DMO and the three armed Services, and expressed concerns that a commercially discrete procurement agency would undermine key features of that relationship and weaken Defence's capacity to fulfill certain statutory responsibilities.

I do not think that a commercial agency operating outside the department would necessarily work as well as the current arrangement. One of the advantages of the current arrangement is that we have a nice blend between military and civilian people who provide a great service to the services. The main customers are obviously Army, Air Force and Navy. It is important that people within that materiel organisation have an understanding of what is done at the sharp end. If you had a commercial agency that, essentially, worked outside the department, there is no guarantee that we would have that sort of operational appreciation and that sort of operational understanding. Another thing that is probably important for you to realise is that I have airworthiness responsibilities. I am the ADF airworthiness authority. I have to exercise that responsibility through military, aeronautical and other specialist engineers within Air Force. I think a function like that would be much harder to perform if you had a commercial organisation basically doing all the work.²⁴

3.32 The Committee explored possible models for corporatisation with representatives of the Australian Industry Group.

I guess the ABC could be seen as one particular organisation. It is a very different organisation, but it could be seen as something similar...

Australia Post is a good example. It is a very efficient operation. It remains in government hands but it has been given the corporate governance arrangements that allow it to operate as efficiently and as effectively as it possibly can. The DMO is a good example of an organisation that could have similar achievements. It is certainly heading down that path already. I think it could be helped along and progressed further by putting appropriate governance arrangements in place.²⁵

3.33 The Committee does not object in principle to a quasi-corporatised model for the DMO, but is reluctant to advocate for such a model to be applied to the DMO. The Committee notes the difficulties raised by the Chief of Air Force regarding his

23 *Committee Hansard*, p. 374 (Mr Michael Roche)

24 *Committee Hansard*, p. 219 (Air Marshal Angus Houston)

25 *Committee Hansard*, pp. 309–310 (Mr Lucio Di Bartolomeo)

statutory responsibilities for airworthiness, for example. The Committee is also taking into account the more streamlined tendering and contract procedures that have been introduced by the DMO, and is aware of the improved engagement at senior levels between the DMO and industry. In short, the promise of benefits to industry from the DMO reforms is sufficient to restrain the Committee from pressing for corporatisation at this stage.

3.34 The Committee gives particular weight to the requirement that DMO must relate intimately with the Services and the VCDF, especially given the crucial nexus between capability development and acquisition, and between the procurement of a platform by the DMO and its acceptance into service. This is fundamental to the achievement of operational capability, and there should be no artificial boundaries created between the DMO, Capability Systems and the three Services which might impede that relationship.

3.35 On balance, a move to a corporatised DMO is not regarded as appropriate to the Defence mission. Moreover, the Committee feels that it could be severely destabilizing to attempt a radical restructure at this time.

The relationship of SMEs to DMO

3.36 The Committee has already referred to encouraging evidence from industry representatives about DMO's understanding of the nature and role of Small to Medium Enterprises (SMEs) in contributing to Australia's defence capability.

3.37 However, there still appears to be a gap between the current and potential contribution that could be made by SMEs, and their current and potential level of engagement with the DMO. A fairly comprehensive account of the SMEs situation was provided by the President of the Australian Industry and Defence Network, which represents around 1,300 SMEs.

These SMEs individually display a degree of agility and responsiveness as well as an entrepreneurial spirit that is ideal to meet the demands of transformational warfare that, with international events today, I fear we are in the process of moving towards....

One of the things with SMEs is that they are primarily under-recognised as being a strategic Defence resource, primarily due to their ability to meet what we call surge demands. Surge demand is generally obtained when something like Timor arises and there is an immediate requirement for assistance to Defence in order to resolve issues or problems... Because of the experience that SMEs have with trends and with responding to orders both nationally and internationally, the SMEs are very well placed to meet these surge demands. From a Defence point of view, this is most worthwhile. With the majority of SMEs in Australia, Defence business is currently only a small proportion of their business. They often find it very frustrating due to the itinerant nature of Defence's purchasing—the long-term nature of Defence's ordering but with time frame demands that are usually greater than those which are acceptable or are currently

commercially accepted practice. So there are some issues that SMEs would have with Defence.²⁶

3.38 The Committee undertook several site visits to SMEs, and a frequent theme emerging in discussions with them was that the SME often felt that it did not have the opportunity to contribute early enough to projects. SMEs often felt that they had ideas, innovations and products that would enhance capability, but their involvement came much later in the acquisition phase, preventing them from having input into the capability requirement/definition phase. This appears to be attributable largely to where SMEs sit in the defence industry hierarchy.

There are two ways in which SMEs meet Defence. One is via the linking of the SME underneath prime contractors to Defence, where the prime contractor is awarded a tender or a contract from Defence and the SME then supports that prime contractor with the supply of materials and/or components and/or technology to enable that prime contractor. Alternative to that is the methodology whereby the SME has a capability or a product or a service which is stand-alone sought by Defence. Because the SMEs have only a portion of their business with Defence, they are not in a position to be able to survive entirely on Defence work. It is therefore incumbent upon that SME to ensure that they have a good foundation with respect to civilian market orientation both in national and export markets and support those commercial orientations.²⁷

3.39 The Committee encourages SPO Directors to seek a deeper familiarity with the SMEs that operate in their areas of interest. While SMEs will continue to contribute to capability largely through their role as sub-contractors to larger defence companies, consolidated relationships between SMEs and SPOs are bound to enhance the opportunities for SMEs to bring their ideas and capacities to bear upon defence acquisition and logistics.

3.40 The Committee has been impressed with the intellectual and technological capacity of many of the SMEs it encountered. It is possible that some SMEs have a slightly inflated view of their capacity for innovation, but to the Committee it appears that the quality and potential of SME contributions remains somewhat opaque to Defence. No doubt this is largely due to the ‘tiered’ industry structure where Tier 3 (SME) firms are usually engaged by the Tier 1 primes who have won major Defence contracts.

3.41 As discussed elsewhere in the Report, there is a generally favourable view of System Program Offices (SPOs) amongst industry personnel, including SMEs. Except where an SME has a direct involvement with DMO on a project, the links between SMEs and SPOs are usually constrained by the commercial/contractual relationship between the SME and the prime contractor who has been contracted to undertake the

26 *Committee Hansard*, pp. 222–223 (Mr Michael Turner)

27 *Committee Hansard*, p. 223 (Mr Michael Turner)

project concerned. The Committee explored this issue with some of the System Program Offices.

The reality is that we [in a SPO] are not in a position to go in and take all the risk of contracting with every SME direct and then be responsible for the pulling together and the risk of the integration et cetera. That would be unacceptable risk. The minute something goes wrong, the prime would say, ‘Well, you picked them.’ So it is important that we recognise that there will be a lot of the larger projects where the SMEs will need to come in [under a prime]. I would have to say my impression is that some of the primes do play it fairly rough, but there is a limit to what we can do...

Again, in the land case, there are some things where we go direct to a range of companies—for boots, uniforms, webbings, sandbags, you name it. A lot of things we get are very low scale and we do go direct into the companies. If you are asking with something like an M113 or a Bushranger—something of that size—would I want to go and dictate who the SMEs will be and what the conditions are between them and the primes, no, I would not, because I would bear the risk. To some extent, we had some of those tensions in the M113 project with Tenix in dealing with potential subcontractors. The subcontractors would come to us and want us to direct and whatever. There is no way that we are going to dictate who will team with whom. We would then bear the full risk. So I think on the big projects we need to be careful.²⁸

3.42 The Committee pursued the apparent contradiction of having the SPOs in place to promote closer relationships with industry, when many SMEs cannot do anything other than go through the prime contractor to the SPO. By the time it gets through from the SME to the SPO, the message is lost. How does one overcome that problem?

From one point of view, we certainly have very regular dialogue with the companies. They come through regularly and, if they have concerns, they raise them and we will, where we can and where there is a genuine issue and a concern, address them. But at the end of the day, it is difficult.²⁹

I will give you an example. We [SPO] had a relationship with a subbie. The prime and the subbie were having a problem. We became aware of it because we have dialogue with all of these people. We said to the prime, ‘You have a problem in this area. We understand there is a problem. We won’t tell you where we got the information but there is a problem. We would like you to fix it.’ It went on. They said they would fix it but not too much happened. We set up a meeting in Canberra between the prime, the subbie and us. We sat in the same room and said, ‘There is a problem here. We want you to sort it out.’ They said, ‘Yeah, all right.’ And then we sorted it out that way.³⁰

28 *Committee Hansard*, pp. 113–114 (Dr Ian Williams)

29 *Committee Hansard*, p. 114 (Dr Ian Williams)

30 *Committee Hansard*, p. 114 (Colonel Peter Acutt)

3.43 The Committee became aware that research and development is another area in which the SMEs are less visible than perhaps they should be.

A surprising number of Australian SMEs do not bother to register their research and development projects with AusIndustry. The disappointing thing about that is that the ABS then does not pick up the correct statistics with respect to SME research and development because the SMEs perceive that there is a plethora of paperwork attached to it. Therefore, because they do not have the time to do that, they miss out on the 175 per cent taxation benefit available through AusIndustry and/or the possibility or the opportunity of working with AusIndustry for research and development grants under R&D Start when it comes back on stream, ostensibly next year.³¹

3.44 The Committee notes that some attempts have been made to link SME research and development efforts with the activities of the DSTO. These efforts are to be applauded and encouraged in a more systematic fashion.

Recommendation

3.45 **The Committee recommends that**

(a) AusIndustry undertake a specific promotional initiative to encourage and assist Small to Medium Enterprises (SMEs) to properly register their R&D activities with AusIndustry; and

(b) the DSTO develop a special program to nurture partnerships between the DSTO, the CSIRO and SMEs with respect to research and development in areas of mutual interest, and to expand existing mechanisms by which SMEs can seek R&D and technology advice.

Industry—DMO feedback mechanisms

To provide an objective basis on which to assess company performance, DMO has introduced a commercial-in-confidence company scorecard system. The company scorecard enables DMO to collect, assess and monitor contractor performance using an objective set of measures. This gives contractors an unprecedented insight into DMO's view of their performance, while identifying areas for discussion and improvement and providing a basis for considering past performance in source selection. For companies without a scorecard, techniques such as reference sites, demonstrated domain expertise and company capability assessments based on international models are being used.³²

31 *Committee Hansard*, p. 224 (Mr Michael Turner)

32 *Submission 10*, p. 10 (Department of Defence)

3.46 The Committee regards effective, formal feedback mechanisms to be fundamental to the development and maintenance of good relations between the DMO and industry, and to the promotion of best practice. The Committee was pleased to note that provision is also being made for industry to prepare an assessment of DMO's performance.

[P]erformance evaluation is not just one-way. DMO is piloting the 360 degree view scorecard, intended to measure DMO's performance from an industry perspective. It should highlight systemic and project-specific shortfalls, so that policies, practices, and new training may be introduced. It complements the continuing industry survey program.³³

3.47 Despite the occasional criticism of the scorecard system from individuals, the evidence coming to the Committee from industry representatives was overwhelmingly positive.

This process is taken very seriously within industry—with some companies linking performance bonuses to improvements in their company ScoreCard—and it is understood that some significant improvements in project performance have been seen.

Equally... it is important that industry has the opportunity to assess Defence's performance. The Australian Industry Group Defence Council has been working with the Defence Materiel Organisation to develop a '360 degree ScoreCard' process... This is a very positive development and needs to be seen as indicative of a mature relationship. This approach is currently being trialled and the Australian Industry Group Defence Council will be working to ensure that a short-term focus in reporting is balanced by a long-term, strategic view of the relationship.³⁴

3.48 During one of its site visits to a major facility the Committee observed the details of the company's scorecard being prominently displayed on the shop floor, along with a comprehensive commentary on the company's progress. The Committee is encouraged by the extent to which firms are incorporating scorecards seriously into their assessments of their own, as well as the DMO's, performance.

[C]ompany scorecards ...[record a]... company's performance over about 10 items, and we [DMO] have now found that we are getting visibility at board level within companies which have problems. One of the things that struck me was that, in companies where we had problems, very frequently the board level people were not aware of it. Possibly people down the line would sit on the problem.

The scorecards are going to the board and most companies are dealing with them at board level. If there are poor outcomes then we generally get a very high-level response. We have moved to a 360-degree scorecard, where we

33 *Submission 10*, p. 10 (Department of Defence)

34 *Submission 20*, p. 7 (Australian Industry Group Defence Council)

have invited industry to report on our performance as a contracting authority. There are a few home truths shared with us in that process. It is starting to work.

We are having difficulties getting industry to divorce views about budget issues and so on from their views about us as a contracting authority but we are working on that.³⁵

3.49 The Committee commends the DMO on the development of the 360 degree scorecard arrangement, and as part of its ongoing scrutiny of DMO's performance the Committee will seek from DMO summaries of industry's scorecard feedback to it.

Recommendation

3.50 The Committee recommends that during Budget Estimates the DMO table before the Senate Foreign Affairs, Defence and Trade Legislation Committee an audited summary of the feedback provided by industry to the DMO via the 360 degree scorecard process.

Requirements for cultural change

3.51 The concept of 'cultural change' emerged on several occasions throughout the Committee's inquiry, and in a variety of contexts. When industry people spoke about the need for 'cultural change' they tended to refer to both 'organisational culture' and the behaviours and attitudes of individuals inhabiting that organisation.

3.52 The Australian Industry Group Defence Council regarded cultural change as the *sine qua non* of policy effectiveness.

Defence has a poor record in implementing policy which impacts on Australian industry and it is the Australian Industry Group Defence Council's view that the cultural change required can only be achieved through a paradigm shift...

Key delivery organisations within Defence continue to struggle with the existing reform framework and this is compounded by insufficient progress in cultural change. Ultimately, this will be to the detriment of Australian Defence Force capability.

3.53 It is clear to the Committee that questions of cultural change are also prominent in the minds of those leading the reform agenda in Defence. Witnesses from Defence emphasized the cultural changes that they believed had already been achieved, while acknowledging that there was still much more to be done.

We have put an awful lot of effort into cultural change. I think one of the great achievements in the last three years—and, to be fair, to give Dr Hawke his credit—is that we now have got a leadership, values based culture within

35 *Committee Hansard*, p. 146 (Mr Michael Roche)

Defence that was never there before. If I go back 20 years, the whole environment in Defence was one of tribal infighting, a lack of cooperation, hidden agendas and so on... I have not seen any service rivalry like we used to have, say, back in the mid-eighties when we were fighting over scarce resources. We now recognise that resources are scarce and we work very well together. At the highest level, we take collegiate decisions and decisions that are in the national interest, not in the interests of individual services or individual groups within the organisation. So we have ... moved to a much more positive culture of leadership, cooperation and a focus on people and on results, and I think it is a huge step in the right direction. ...[W]e need to give the DMO time to bed in. It is working very well at the highest level, and it is working wonderfully well down at the force element group level.³⁶

We are doing a lot with our people. We are trying to change the culture in the organisation... We are now trying to get people to use more judgment but still within an overall accountability framework. We are putting major efforts into training, both on the leadership front and on the technical and professional front... We have introduced a range of performance measures—plan on a page—and so on. We are at the early stages of work force planning, to ensure that we have the right number of people to do the task.³⁷

There has been a lot of organisational change, there has been a lot of operational change and there has been a lot of cultural change. The effect of all that change is that we now have more capability than we had 13 years ago.³⁸

3.54 Notwithstanding the claims of these senior Defence witnesses—and the Committee does not doubt the genuineness of those claims—the message coming to the Committee from industry emphasised cultural gaps, and how considerable progress still needed to be made in Defence culture if reform was to prove efficacious.

In the Australian Industry Group Defence Council's view, [the Organisational Renewal (or "Results through People") initiatives of the Secretary and the Chief of the Defence Force] is a most welcome move and recognises the critical contribution that people make to the delivery of the Defence function and establish a basis for cultural change within the organisation. This cultural change must be evidenced across the full procurement and in-service life cycle.

It is these changes in culture and practice which are at the heart of improving the relationship between Defence and industry and, consequently,

36 *Committee Hansard*, p. 216 (Air Marshal Angus Houston)

37 *Committee Hansard*, p. 148 (Mr Michael Roche)

38 *Committee Hansard*, p. 214 (Air Marshal Angus Houston)

enhancing the outcome for the Defence Force. It is our view that a radical change is required to progress this cultural change.³⁹

3.55 It has been difficult for the Committee to gain a clear picture of the current culture of the DMO as an Organisation in its own right or as one half of the much vaunted ‘Defence–industry partnership’. With respect to the latter, the Committee notes the reported results of the New Focus Research Defence Purchaser and Supplier Attitudinal Survey of 2001 which show:

...dramatically lower levels levels of agreement [between the 1999 and 2001 surveys] amongst the Defence Materiel Organisation’s key large industry clients that Defence is meeting twelve [out of 27] performance criteria (NFR 2001: 7).

According to the Report, the most frequently cited barriers to the relationship were:

- lack of trust of both parties/poor communication/lack of open discussion;
- lack of understanding of industry;
- lack of commitment by Defence to contract schedules; and
- favouring large, often foreign owned corporations. (NFR 2001: 11).

This lack of trust is mirrored in responses to the survey from the Defence Materiel Organisation personnel where close to 40% of respondents agreed or strongly agreed with the statement that “industry is out to ‘get what they can’ at the expense of Defence” (NFR 2001: 24).⁴⁰

3.56 The Committee explored with DMO officials the extent to which they felt that a more concentrated and effective engagement with industry was ameliorating cultural differences between bureaucracy and industry. The Committee had received some quite positive comment from industry about improved access to Defence and more efficient processes.

3.57 Is there a sense in which the Defence–industry relationship is shedding mistrust and building mutual confidence? The USDM and Head of DMO’s Industry Division were both strongly of the view that such was the case.

Mr Roche—...[M]y instinct was that we are starting to get some pretty good results back from industry and industry were making some pretty positive comments about the way that Industry Division was supporting them. That certainly came out with the joint strike fighter project. It has come out with our industry days, our industry trade missions and so on. My instinct was that they actually thought we were getting on and doing it. We have certainly been putting considerable effort into improving our knowledge of Australian industry. We have been out doing regional visits.

39 *Submission 20*, p. 2 (Australian Industry Group Defence Council)

40 *Submission 20*, p. 9 (Australian Industry Group Defence Council)

We have been out there with small to medium enterprises. All of that has had very positive responses.

Mr Learmonth—If I can amplify that, I would say that I spend quite a lot of time talking to senior industry leaders and others and the pretty uniform message I get out of all of them is that what they have experienced in the last couple of years has been, to this point, unprecedented levels of access and unprecedented levels of support, influence and communication on industry policy and other issues. They have not experienced before the level of support they are getting in relation to trade missions and export facilitation, not just in relation to the joint strike fighter but in other initiatives we have, such as the littoral combat ship, Team Australia and others. A number of proactive steps were taken in areas that do not get quite so much publicity at this point, for example in relation to sonar buoys. I confess I hear nothing but very positive messages out of industry and messages which suggest we are actually getting something right.⁴¹

3.58 The Committee sought additional information from the DMO about the results of Defence's own staff attitudinal surveys. The 2001 results revealed that at that time DMO scored second lowest on good leadership, beaten only by DSTO. As well, the DMO had the least confidence in the senior Defence leadership. At its final hearing of the inquiry, the Committee was advised that:

... the latest survey results [July 2002] indicated that there was improvement in the DMO results. This survey is conducted across Defence. My notes tell me that the two areas of improvement were in the sense of job satisfaction for personnel in DMO, and that they have greater clarity about what is expected in their jobs.⁴²

3.59 While the Committee takes some encouragement from the more positive survey results, it is aware that at least some individuals remain highly critical of DMO workplace behaviours and ethics, and the attitudes of some DMO personnel towards contractors who are considered 'difficult' or 'disgruntled'. It is extremely difficult for the Committee to adequately assess the merits of these claims and counter-claims. The Committee has formed no judgments about those claims that have been conveyed to it in confidential submissions and other communications.

3.60 However, the Committee considers it important to place before the readers of this Report the kinds of matters that have come to the Committee's attention, to indicate the nature of the Committee's concerns in relation to them, and to suggest how those concerns might be addressed.

3.61 One example which received explicit attention in the final public hearing related to the contents of a paper presented in October 2002 to SETE 2002—a Conference of the Systems Engineering Society of Australia and the Southern Cross

41 *Committee Hansard*, p. 361 (Mr Michael Roche, Mr David Learmonth)

42 *Committee Hansard*, p. 373 (Ms Kim Isaacs)

Chapter of the International Test and Evaluation Society. The Committee Chair (Senator Cook) sought a response from the DMO to the trenchant criticism contained in the following extracts from the paper:

Parts of the DMO are now dominated by a culture of bullying and rule by fear, where no-one is safe to suggest that decisions or initiatives may be wrong, or to make constructive suggestions. For DMO employees, 'stepping out of line' is likely to damage their careers within Defence. ... There is also a great fear of whistle-blowing..... One supposes that, in a climate that suppresses criticism and has a tendency to shoot the messenger, those who can see the problems are expected to grit their teeth and continue on regardless.

.Don't blame the workers... I've generally found DMO staff, both uniformed and civilian, to be at least on a par with their industry counterparts... I've also found their work ethic to be well above average, particularly with regard to their honesty, dedication to their tasks and loyalty to their employer. They deserve better.

Perhaps the saddest reflection on Defence's attitudes to acquisition reform is the fact that I could not have expressed these opinions in public unless I had retired from this sort of work. I could just not have afforded to take the risk in the current atmosphere of DMO.⁴³

3.62 The Under Secretary Defence Materiel responded as follows:

It is disappointing. That person obviously felt that... From my getting out and about in the organisation, I believe it is a pretty open organisation. Certainly people feel pretty free to say things to me and to put their views forward. We are trying to create a culture: we want people to argue with us and debate the issue. In an engineering based organisation, the last thing you want is people who are not game to say when they think they have a problem. If people think there is a better way of doing the job, then we are keen—we are all ears—to hear about it. I am sorry about the individual, but it is not consistent with the culture of the organisation we are trying to build. I do not think that a single one of my senior executives here would say that there is any culture within their part of the organisation that is consistent with what that person complains about.⁴⁴

Last year for the first time we brought together all the executive level 1s who were 'direct reports' to one stars and a certain number of others. There would have been I think nearly 300 of these people at the National Press Club. Basically it was about 'me and them'. The opportunity was there—through syndicate work, people could be de-identified—to put forward any number of suggestions. I have to say that none of the flavour of what that person complained about came through in that meeting. There were a hell of a lot of suggestions and a hell of a lot of proposals about doing things better

43 Extracts from paper prepared by Mr A Gabb and presented at *SETE 2002* Conference

44 *Committee Hansard*, p. 369 (Mr Michael Roche)

and differently. But there was certainly none of that feeling that this was an organisation ruled by fear. It was a very open and interactive session.⁴⁵

3.63 The Committee notes the Under Secretary's observation that the complainant was 'one person in 8½ thousand.', and also acknowledges his remark that: It is really a 'Have you stopped beating your wife?' sort of allegation.⁴⁶

3.64 However, the Committee cannot ignore the fact that the criticisms were strongly made in a public forum, and that the criticisms resonate with other claims made to the Committee in some confidential submissions and private communications. The Committee's concerns are reflected in the comments by Senator Johnston at a public hearing.

We have some anonymous submissions that border on that sort of commentary, obviously from people who want to intimate the sort of flavour that this particular person has enunciated. I have a lot of sympathy for your position on this, because an organisation of your size is bound to run into the odd bod who wants to take ... issue. But it strikes me that we are seeing more than just the odd bod. I am not overly concerned, but... [w]hen, early in the piece, we get these submissions both at this table and in writing—we are talking about something between half a dozen and a dozen submissions, comments and informal meetings with industry—that have an air of disquiet about the flavour of the relationship both internally and across contractual lines, it is something that we have to raise with you.⁴⁷

3.65 The Committee acknowledges that the criticisms of the DMO may be the random claims of the disaffected who have seized the opportunity of a Senate inquiry to make their point.

3.66 But when the flavour of the critical commentary seems to coalesce with the results for the DMO coming out of the Staff Attitude Survey; when its tone is set alongside that conveyed in the reported remarks of LtGen Des Mueller in his farewell speech to Defence personnel; when industry people are reluctant to speak in public and express fear of 'pay back' for criticism, articulating their views privately with considerable passion—then the Committee cannot lightly dismiss what has been placed before it.

3.67 Clearly the Committee is not in a position to form solid judgments on these matters, and has no power to enter the fray as mediator or arbiter. However, given that 'cultural change' has been a concept raised frequently by both Defence officials and industry representatives in the course of this inquiry, and that terms such as 'culture of blame', 'group think' and similar have found their way to the Committee's ears, the Committee wishes to address these matters if only in a preliminary way.

45 *Committee Hansard*, p. 370 (Mr Michael Roche)

46 *Committee Hansard*, p. 371 (Mr Michael Roche)

47 *Committee Hansard*, p. 371 (Senator David Johnston)

3.68 ‘Culture’ is a notoriously slippery word to define. In this context, the Committee regards the ‘culture’ of an organisation to be the sum total of workplace behaviours, attitudes, values and assumptions as these are manifested in the management style, decision making processes, client treatment and interpersonal dynamics of those who serve the organisation.

3.69 Dealing with an organisation’s ‘culture’ goes to questions of how people do things and how things get done; how things are communicated within the organisation and to those outside; how people are rewarded; how leaders model the values and behaviours they wish to inculcate in others; how the organisation and its people adapt and innovate in response to changes in their environment.

3.70 The Committee regards these matters as best addressed through an ‘auditing’ of the existing culture in order to identify suitable strategies for effecting cultural change, and urges the DMO to devote substantial effort to such a task.

3.71 The following remarks are adapted from advice posted by a British company specializing in cultural change.⁴⁸ The Committee regards them as having a serendipitous relevance to the DMO’s present circumstances:

- When a new organisation is born, there is a burst of energy among its members. A corporate culture seems to form rather quickly. The policies and work procedures that are formally documented articulate what kinds of behaviour and attitudes are considered important for success. The corporate culture may be very functional at first, but over time the culture becomes distinct from the formal strategy, structure and systems that sought to shape it. The DMO is not a new-born organisation. Its reformed ‘culture’ is probably still largely embodied in its ‘strategy, structure and systems’ rather than fully embedded in people’s actual workplace behaviours and attitudes. In reality, DMO’s ‘new and improved’ culture is probably still a blend of old and new attitudes, processes and values, all being acted upon, and in turn reacting to, the functional/structural reforms.
- Achieving cultural change means probing below what is visible, in flowcharts, rule books, manuals and manifestos, into the world of people’s actual feelings, beliefs, perceptions, attitudes, and behaviours. The DMO, and Defence generally, seems eminently skilled at devising and documenting processes. Getting the good practice out of the manuals and into the mindsets is where the challenge really lies. The Committee will monitor DMO’s response to this challenge over the next few years, using information from staff surveys and industry scorecards as well as careful scrutiny of the efficiency of project management.
- Situational forces, while important in shaping culture, cannot compete with actions of key individuals. For example, the managers’ objectives,

48 Available at <http://www.organisationalchange.co.uk>

principles, values and especially behaviour provide important clues as to what is really wanted from all employees. Employees take note of all critical incidents that stem from management action. These become an enduring part of the organisation's folklore, indicating what the organisation really wants, what really counts in getting ahead or, alternatively, how to stay out of trouble. They are the unwritten rules of the game.

- Effecting cultural change requires accurate information (from all areas), commitment (from top to bottom), and multi-levelled and functional groups actively participating in cultural change management techniques to promote new norms. Just as old cultures can become out-of-date and dysfunctional, the same can happen with new ones. If the cultural change is not managed explicitly, it may be just a matter of time before the organisation is once again disrupted. But, if cultural change in the DMO is managed explicitly, it can expect significant improvements in both morale and performance.

3.72 These remarks are intended both as guidance and encouragement to the DMO. The Committee invites the organisation to reflect on its own practices in the light of the principles that they express.

Recommendation

3.73 The Committee recommends that

(a) the Senate request the Auditor General to direct that the proposed 2003–04 audit of DMO by the Australian National Audit Office include a cultural audit that will assess:

- **DMO's espoused corporate values and standards and staff compliance with these;**
- **management and staff values, behaviours and competencies measured against the capability requirement;**
- **employee attitudes, morale, beliefs, motivation;**
- **employee understanding of, for example, the DMO's customers, industry partners, strategies, business plans, roles and contributions to the overall mission of Defence;**
- **communication processes;**
- **the effectiveness of change management programs, employee commitment to them and the extent of the benefits materialising; and**
- **compliance with health and safety regulations; and**

(b) on the basis of that cultural audit the Under Secretary Defence Materiel shall engage a suitably qualified change management specialist to assist the DMO to respond to the findings and recommendations of the audit.

Complaint handling and disputes

3.74 Before it departs from the realm of ‘cultural change’, the Committee wishes to address the phenomenon of the so-called ‘disgruntled’ Defence supplier. It embraces both the apparent reluctance of Australian industry suppliers—disgruntled or otherwise—to publicly criticise Defence, and also the manner in which their complaints are dealt with by the DMO. This phenomenon has revealed itself to the Committee in various guises:

- The witness who says: “I did seek counsel from a colleague who runs a defence manufacturing business far greater than mine. His advice to me was not to appear at this hearing... I am sure that if [DMO] people wanted to make it hard for me they could”.
- The submitter who writes: “The Defence community is a network of contacts... We hear many disturbing stories of challenges to those who try and buck an inappropriate procurement system, including threats to serving personnel who are related to those civilians creating waves... As long as the culture of threat and fear presides within the defence supplier’s area, procurement will not be effective”.
- The reluctance of people in industry, including those approached directly by the Committee, to give evidence in public.
- The confidential emails and letters to the Committee that claim: “Before entering any discussions with Admiral ‘X’ we were warned not to upset him as he would walk out”; “...other cultures pervade Defence, namely the culture of blame, the culture of arrogance, the culture of denial, the culture of perception-is-reality. ... These issues are not only process related but also people related...”

3.75 The Committee is disturbed by all of the above. It cannot test the claims, nor can it remain totally unresponsive to them. The Committee cited the case of a particular complainant and asked the Under Secretary Defence Materiel how he felt about claims that to publicly criticise Defence would have adverse consequences. Mr Roche replied:

I have to say that I find it offensive to have it even suggested by those people. I think that we are big enough and ugly enough to take criticism... I do fear sometimes that some people confuse the loss, for good and valid reasons, of a tender in competition with a drought or being...victimised. In the time that I have been in the DMO, I have had a number of criticisms made to me by people who are concerned that they have been victimised. I have yet to find a case that I believe stood up... Any complaint along these lines concerns me. I certainly look at them in considerable detail and my staff will tell you that we certainly put them through their paces in testing this. I quite commonly appoint an independent person to look at complaints. We use the inspector-general. There are a variety of ways we test these things. To date, as I said, I have yet to see one case stand up. I have seen cases where we perhaps have not explained ourselves as well as we might

and cases where the process has not been as robust as you would like, but I have not seen cases where people have been victimised.

3.76 The Committee accepts Mr Roche's evidence in good faith, appreciates the requirements for due process that are mandated in public service codes, and does not question Mr Roche's commitment to, or the sincerity of his actions in seeking to honour, those codes.

3.77 But the Committee has no way of actually assessing the adequacy or effectiveness of the processes undertaken within the DMO to deal with complaints when they arise. For example, how commonly *are* independent persons used to deal with complaints? Does that occur in a *timely* way? Are complaint handling procedures *systematic and transparent*?

3.78 In one instance, the Committee has had the benefit of reading the report of an independent assessor brought in to deal with a complaint. It is not appropriate to expose its full detail, but some of the assessor's conclusions and recommendations are germane to several of the issues explored above. These are a *selection* only.

- There was no evidence that the complainant had been 'sent to Coventry' by Defence, nor was there any conspiracy involved.
- There was evidence that rumours spread by individuals within Defence had adversely affected the complainant. Attempts to deal with rumours had had limited effect.
- Documentation in one contract was confused, did not meet standards and was a major factor in the contract's failure.
- In proceeding to a decision to terminate the contract insufficient weight was given to the part played by defective administration by Defence.
- There was no evidence of any duress or unconscionable conduct by Defence in terminating the contract.
- Communication failures played a major part in fomenting the problems between the complainant and Defence.
- There is a view within some enterprises that DMO lacks the understanding and skills to work effectively with industry.
- A case management approach should be adopted to dispute resolution, involving the appointment of a suitably qualified person at an appropriate level and with a clear understanding of their role and authority and with access to senior management.

3.79 At this stage the Committee merely notes—neither endorses nor rejects—these findings, but considers the extracts helpful in forming the Committee’s views about the handling within the DMO of complaints from industry, especially from the so-called ‘disgruntled supplier’.

3.80 Because the focus here is on complaints from industry, the Committee is inclined to seek a solution to these kinds of problems through the auspices of the DMO’s Industry Division. That Division has an express responsibility to liaise and consult with industry, to translate its advice and interpret its needs to other sections of the DMO. To that extent, Industry Division is the suppliers’ friend at court, the home of those Defence officials whose job includes advocating on industry’s behalf and who would facilitate, promote and monitor internally the DMO’s engagement with industry.

3.81 The Committee is supportive of a case management approach to dispute resolution—but would not see every complaint automatically referred to a case manager. The Committee imagines that, in most instances, complaints from a contractor or supplier are made in the first instance to their usual contact in, say, a DMO Project Team or SPO.

3.82 It is only after a failure in genuine attempts to resolve the complaint at the level of the two parties most immediately concerned, or possibly after further referral to a section head, that a case management process should be instituted. Australian Business Ltd submitted firm views about their preferred approach to industry grievances.

[W]e do see the need for more effective and reliable consideration and handling of the concerns of industry resulting from the acquisition process. Our view is that the Industry Division and the Contracting Policy Branch of Land Systems Division ... are well suited to ensure... that grievances with the tendering process are properly investigated.

3.83 The Committee concludes that case managers should be drawn from a panel of appropriately qualified and experienced officers from Industry Division whose appointment to the panel has been endorsed by the Defence Industry Advisory Council or by other relevant defence industry peak bodies. Case managers should be given suitable training and be granted considerable licence to deal with whomever they deem appropriate within the Defence Organisation in the course of resolving a dispute. Their report and recommendations should go direct to the USDM, with copies to the relevant Project Governance Board (where applicable) and the VCDF.

3.84 The Committee is alert to the risks of a dispute process impacting adversely on the progress of business—for example, on the timeliness of a tender process. The fact that a dispute has arisen should not, in the normal course of events, mean that a tender process is placed on hold pending the dispute’s resolution. But the Committee believes that the case manager should have the power to recommend to the USDM an immediate pause in tender proceedings if the case manager regards the problem as sufficiently serious to warrant that course of action.

3.85 The Committee notes that the Defence Service Charter sets out in general terms what people can expect if they contact Defence with a question or complaint. It is not clear, however, whether a systematic complaint handling process has been specified for the DMO. When asked whether DMO has a formal complaints mechanism or complaints officer, DMO officials replied:

Complaints can come into the organisation at any stage. People use everyone from the minister onwards. It is really up to the individual. I do not know that we actually have a formal place... But as I said to you earlier, anything significant about a process or whatever will land on my [USDM's] desk. At the very least it will be on a two-star's desk, and I would expect them to consult with me if there is any significance in it at all. Then, generally, I will make the judgment as to whether we appoint an independent person, either somebody within the organisation who has not had contact with it before or somebody from outside the organisation to follow it through.

Ms McKinnie—Indeed, the process that usually operates, although it is not written down as a formal process, is that if an industry player has a complaint associated with a particular contract manager, they will usually escalate it to the next level. If it is dealt with there, then the complaint is finished. If they are not satisfied, then they will go to the next level. That is a fairly established process, and it generally works.⁴⁹

3.86 There is an element here of 'Caesar judging Caesar' and the Committee believes that it would be extremely helpful if the DMO developed a systematic approach to complaint handling and published a clear account of the process so that potential complainants would know exactly what to expect in terms of how their concerns will be dealt with.

3.87 The outcome of any dispute resolution process—that is, a decision on the matter by the USDM—would not preclude the complainant appealing against such a decision to the Minister for Defence. The Committee believes that in the event of such an appeal, each case would have to be determined by the Minister on its merits.

3.88 The Committee suggests that the '15 working days' rule specified in the Defence Service Charter for responding to written correspondence is also an appropriate time for a complaint to be resolved by the DMO, with provision for referral of the matter to more senior levels as follows: The official most directly involved with the complaint, and who presumably is the first to receive it, has ten working days to effect a resolution. If the matter is not resolved at that level, the matter shall be referred to the next level (section head or above). If after 5 working days the matter referred is not resolved, a case manager should be appointed. The case manager has 15 working days to conduct an investigation and make recommendations to the USDM. If it is not possible for the USDM to make a decision on the recommendations within 5 working days, the complainant shall be so advised in

49 *Committee Hansard*, pp. 362–363 (Mr Michael Roche, Ms Shireane McKinnie)

writing, and a time specified by which a decision shall be forthcoming. That specified time shall be no later than 10 working days from the date at which the written advice is dispatched to the complainant.

Recommendation

3.89 The Committee recommends that:

- (a) a panel of suitably qualified case managers, endorsed by industry, be established within the Industry Division of the DMO to handle complaints or disputes that have not been resolved in a timely way between the two parties immediately concerned;**
- (b) the case managers be trained, and given broad powers to explore issues across all levels and divisions within DMO and the relevant Service arm;**
- (c) case managers shall report their findings and recommendations to the Under Secretary Defence Materiel, with copies to the Vice Chief of the Defence Force and the Project Governance Board (where applicable);**
- (d) the DMO publish an account of its complaint handling and dispute resolution method which sets out the timelines to be observed, the role and powers of case managers, and specifying the USDM as the ultimate decision maker in respect of a dispute.**

Other issues raised by industry

Unsolicited proposals

3.90 The context for the pursuit by Defence of unsolicited proposals from industry seems to lie in the Defence and Industry Strategic Policy Statement *Team Australia* of 1998. Among other things, the Statement declares:

- Defence will establish new ways to involve Australian industry in Defence business (p. 1)
- Industry is fundamental to the *development* of new capabilities (p. 5)
- Defence needs capabilities customized to its unique environment. (p. 6)
- Defence looks to Australian enterprise... particularly to sharpen the knowledge edge (p. 6)

3.91 The Statement provides quite explicitly for industry to take the initiative in bringing its innovations and ideas to Defence's attention.

Firms that offer a constructive flow of *information to Defence* will have the opportunity to influence decision-making and receive recognition as 'key players'. Industry advice can assist Defence to face the challenges of the future in innovative and efficient ways. Defence will benefit from industry advice on issues such as technology trends and trade-offs between cost and

capability. This information is a key input to its long term planning for capability development...⁵⁰

3.92 *Team Australia* also states that ‘Defence will expand the CTD (Capability and Technology Demonstrator) program to provide much greater scope for industry initiated R&D proposals’.⁵¹ The CTD program aims to show ADF users how leading edge technology can be integrated quickly into existing, new, enhanced or replacement high-priority capabilities. Proposals for the CTDs focus on activities in which the risk element relates to the application to Defence’s priorities rather than the underlying basic science.

3.93 The DSTO is essentially responsible for the CTD program through its CTD Program Office in Canberra. The Committee notes that some of the features of the CTD policy include:

- CTD proposals compete against each other to determine the best proposals for that financial year.
- CTDs can be proposed by any interested party.
- CTD proposals must have an ADF sponsor.

The final area where [DSTO and DMO] cooperate is in our CTD program. The thing that distinguishes the CTD program from a normal project in the end is that you generate intellectual property. That is effectively what the CTD program does. I have embarked on a program, as the CTD program has matured, to improve the way that we manage our intellectual property in the CTD program, but that is another strand to the intellectual property issue in DSTO... The CTD program is now starting to mature and [USDM] is very interested in how that is developing. I would like to see that continue.⁵²

3.94 The Committee understands that the CTD program is a discrete program, distinguishable from ‘unsolicited proposals’. However the Committee has been unable to establish any clear account of the success or otherwise of ‘unsolicited proposals’ to date.

3.95 The Committee notes that the June 2002 edition of the booklet *Doing Business with Defence* contains brief directions on submitting ‘unsolicited proposals’. There is, however, no mention of ‘unsolicited proposals’ in the Australian Industry Involvement Manual, and a search of DMO’s website revealed only that policy and guidelines on UPs would be ‘released in 2003’. UPs are not mentioned in the June 2002 edition of the Defence Materiel Guide, nor the Defence Annual Report.

50 *Team Australia* (1998), p. 12

51 *Team Australia* (1998), p. 18

52 *Committee Hansard*, pp. 171–172 (Dr Timothy McKenna)

3.96 There is, however, a reasonably detailed account in the *Capability Systems Life Cycle Management Manual* setting out how unsolicited proposals are to be handled. The *Manual* declares that ‘a web based information tool will be established that will provide the necessary information for a potential proponent to prepare and submit a UP to Defence. The tool will incorporate detail on the handling of confidential information and Intellectual Policy.’⁵³ This appears still to be unavailable at the time of this Report.

3.97 A significant reference to ‘unsolicited proposals’ appears in a ministerial speech to the Defence National Procurement Conference in June 2001.

I am pleased to announce that cabinet has agreed to consider proposals for private financing if they provide value for money. Government has recognised the potential benefits of accessing private capital to bring forward major infrastructure proposals and in allowing access to efficiencies through private sector expertise and management structures... I have recently had discussions with the DIAC about the criteria that might identify projects as suitable for private financing.

In addition, noting that an increasing percentage of the unsolicited proposals that Defence receives from industry have a private financing element, it is time that Defence had a structured process for dealing with such proposals. Accordingly, a review also has been initiated at my direction this subject and will report to DIAC in due course.⁵⁴

3.98 The Committee is aware that several firms have submitted unsolicited proposals to Defence, but the general feedback from industry is that they are frustrated by the lack of progress.

Additionally, 12 months ago, I was involved in working with Defence policy in regard to the handling of unsolicited proposals. One of the main issues in research and development for SMEs is the ability for that SME to ascertain whether the project or the technology which they have identified as being a possible research and development project has any future value to Defence. We were looking to instigate with Defence a methodology or a pathway for unsolicited proposals whereby Defence could say, ‘Yes, that has potential’ or, ‘No, it doesn’t’ prior to the SME expending considerable funds and assets in researching the capabilities for that unit.

It is now some 12 months since Defence flagged the unsolicited proposals capability. They have now been through three different Defence officers in that period and they are still deliberating on the non-finalisation of IP issues over that. From this hearing, we would like to see acceleration given by Defence to the finalisation of that and the opening up of a pathway for unsolicited proposals. Certainly from the other side of it, and talking to

53 *Capability Systems Life Cycle Management Manual*, para 4.57

54 Minister for Defence (Hon P Reith, MP) *Australia Needs a Strategic Approach to Defence Industry Policy* Presented at The Defence National Procurement Conference, 26 June 2001

Defence, there is a great deal of deliberation on the quality of unsolicited proposals that fall to them. That can be overcome by the promulgation of a formatted requirement for the submission, as well as the submission being required to include certain technical explanations to ensure that it has potential viability from a commercial point of view.⁵⁵

3.99 The Committee notes that the confidential report of an independent assessor dealing with a firm that had concerns about the handling of an unsolicited proposal concluded that there were ‘growing perceptions’ within industry that the current arrangements for unsolicited proposals are ‘not working effectively and are becoming counterproductive in terms of relations with Defence.’

3.100 The Committee has had the benefit of inspecting the laboratories and workshops of several SMEs, including some who are very much at the ‘knowledge edge’. It is clear to the Committee that the potential benefits of providing for these firms to bring their ideas and innovations before Defence in a systematic way are considerable.

Recommendation

3.101 The Committee recommends that the Defence Industry Advisory Council commission the development of an efficient formal mechanism for the promotion and handling of unsolicited proposals from SMEs. That mechanism should be applied at the level of the System Program Offices and be coordinated by the DMO’s Industry Division. Receipt of unsolicited proposals should be promptly acknowledged, and a time frame specified within which follow-up should occur.

Private financing initiatives

3.102 Along with representations concerning unsolicited proposals, the Committee received similar concerns with respect to shortcomings in the government’s commitment to the so-called ‘private financing initiative’ or ‘public private partnerships’ (PPPs).

3.103 A submission from ABN.AMRO Australia Pty Ltd set out for the Committee a detailed argument for, and a documented account of, public private partnerships.⁵⁶ The company describes PPPs as ‘a partnership which leverages respective skills of public and private sectors’, which is eminently suitable for ‘the delivery of infrastructure and other capital assets’ where the ‘government is responsible for core services’, and where risk is allocated ‘to the party best able to manage it.’ The submission presses the benefits of a PPP over traditional procurement arrangements in terms of both cost and time, and claims a greater value-for-money outcome for government.

55 *Committee Hansard*, pp 225–226 (Mr Michael Turner)

56 *Submission 6* (ABN.AMRO Australia Limited)

3.104 The Committee was impressed by the examples of existing successful PPPs across various enterprises and services from hospitals and waste management to vehicle fleets and court buildings.

3.105 Australian Business Ltd, which represents over 250 defence contractors of various sizes, was similarly emphatic about the need to activate opportunities based on private financing initiatives.

Since it was first identified [in 2000] as offering genuine potential to help address defence funding challenges... the Private Finance Initiative (PFI) has left industry frustrated and searching for a way forward. We believe that progress can be achieved on two fronts: earlier consultation of industry by government in terms of selecting those projects most suited to PFI and secondly a more informed and whole-of-government approach to the policy pertaining to PFI and the manner in which PFI bids are addressed.⁵⁷

3.106 The Committee did not explore the extent to which Defence has already been involved in discussions with potential private financing partners, but notes that in December 1998 the Department commenced a review of options for the greater use of Private Financing as a procurement method. The report provided a framework of guiding principles and a series of recommendations to ensure a more comprehensive use of Private Financing in Defence. In addition to the departmental review, the Defence and Industry Advisory Council (DIAC) was commissioned to consult industry to examine opportunities and constraints.

3.107 Private financing also receives attention in the *Capability Systems Life Cycle Management Manual*. According to the *Manual* Defence's interest in private financing turns on the question of Value for Money (VFM), and the potential to transfer some risks normally managed by Defence to the private sector. Consideration of private financing initiatives is best undertaken during the Requirements Phase.

3.108 The Committee notes that the Defence website includes a specific link to Private Financing Initiatives, which reports:

The Directorate of Private Financing and Commercial Support (PFCS) assists the effective implementation of Private Financing across the Defence Organisation. PFCS's role is primarily based on coordination and advice, ensuring that opportunities for Private Financing are brought to the attention of senior Defence personnel, and that group Managers and their staff use PFCS to validate the suitability or otherwise of proposals for Private Financing.

The key point is that PFCS provides advice and assistance - it is not a decision-making body. Group managers and their staff must, at least initially until processes are more mature, consult with PFCS on the feasibility of proposals for Private Financing. Ultimately, accountability for decision-making resides with existing approval authorities.

57 *Submission 23*, p. 2 (Australian Business Limited)

PFCS is located in Group Performance Branch in Business Strategy Division of the Chief Finance Officer's Group.⁵⁸

3.109 The Committee appreciates that private financing initiatives—especially in the form of public-private partnerships—tend to appear in infrastructure projects for which state governments are responsible. To date, the Commonwealth has not entered into a privately financed project.⁵⁹

3.110 Perhaps the clearest statement of the government's present position is to be found in a speech by the Minister for Revenue and Assistant Treasurer (Senator the Hon Helen Coonan) to the Australian Financial Review Infrastructure Summit in August 2002:

The Minister for Finance and Administration recently indicated that there currently appear to be limited opportunities for the use of private financing at the Commonwealth level. However, in saying that, it is important to emphasise that individual proposals will continue to be evaluated on the basis of their ability to offer value for money to the Commonwealth.⁶⁰

3.111 The Committee received no evidence concerning the outcome of the DIAC consultations with industry about public private partnerships. It appears, though, that any real progress with private financing initiatives will only be achieved through a whole-of-government approach.

3.112 The Committee notes that in June 2002 the Minister for Finance and Administration issued the Commonwealth Policy Principles for the Use of Private Financing. This builds on the Commonwealth's resource management framework and budgeting processes. It establishes policy principles and processes for the use of private financing by Commonwealth departments and agencies who are subject to the *Financial Management and Accountability Act 1997*.

3.113 A Private Financing Branch has been established within DOFA to assist Commonwealth agencies considering private financing proposals. The Branch has several roles: it provides advice to Government and agencies on the use of private financing arrangements, it assesses specific proposals, and it will oversee, on behalf of Government, the application and development of the Private Financing Principles.

Defence—industry partnerships

3.114 The language of 'partnership' has been prominent in Defence industry policy for many years and received particular emphasis in the 1998 Strategic Policy Statement *Team Australia*. Defence–industry partnership continues to be stressed

58 <http://www.defence.gov.au/cfo/privfin/>

59 Dept of the Parliamentary Library Research Paper No. 1, 2002–03, *Public Private Partnerships: An Introduction*, p. 14

60 Cited in Research Paper No. 1 2002–03, *Public Private Partnerships: An Introduction*, p. 15

throughout recent key documents, the 2000 *White Paper*, and the Defence Capability Plan.

3.115 The Committee will address the nature of specific partnerships between firms and Defence in the chapter dealing with contracts and projects. At this stage the Committee is focusing on the principles and policies of partnership as a strategic concept.

3.116 The Committee notes the strong statements on Defence–industry partnerships made by the government in 2001.

The unclassified Defence Capability Plan... has 21 different cost bands, compared with only 8 cost bands in the previous paper. It now covers a ten-year forward period rather than the previous five years and it has doubled in size to almost 300 pages. This means that those of you who are in the defence industry have a solid and more predictable base for your long term corporate planning. The government recognises—as we said in the Defence White Paper—that it has an important role to play in setting out clear long term directions for the development of the ADF to provide a more predictable and sustainable basis on which industry can plan...

The Defence White Paper... enables Australian defence industry, for the first time in peacetime, to plan ahead in the knowledge that there is sustainable defence business in Australia.

We must now think about how we can link defence acquisition projects together strategically so that we can create an environment that will lead to a sustainable defence industry in Australia. ... but I recognise that Defence's military requirements of industry, and its monopsony purchasing power, give rise to some peculiar characteristics that make it different from normal commercial business.⁶¹

3.117 These views seem to resonate strongly in the advice which has come to the Committee from industry during this inquiry. The Australian Industry Group, for example, identified among its three main goals:

to ensure that Australian industry capabilities are integral to Defence requirements on the basis of a genuine partnership between Defence and industry.⁶²

3.118 The AIG also reported its close involvement in the development of the 2000 *White Paper* in which the Group called for:

- recognition that a strong defence industry is an inseparable component of national Defence capability;

61 Minister for Defence (Hon P Reith, MP) *Australia Needs a Strategic Approach to Defence Industry Policy* Presented at The Defence National Procurement Conference, 26 June 2001

62 *Submission 20*, p. 1 (Australian Industry Group Defence Council)

- a clear understanding that, as opposed to 15 years ago, significant elements of defence capability are now provided by Australian industry;
- recognition of, and belief in, the long-term benefits of involving Australian industry in capability development, acquisition and through-life support;
- the Government’s articulation of its strategies to sustain and enhance Australian industry’s contribution to defence capability;
- adoption across all levels of the Defence Organisation of these strategies and commensurate changes in culture and practice; and,
- the Government’s articulation of its expectations of industry.⁶³

3.119 The Committee is strongly of the view that a strategic approach to Defence–industry partnerships is critical to the nation’s capability development and to enabling Australian firms to consolidate their business and become significant contributors to the global export chain.

3.120 The Australian Industry Group Defence Council expressed support for the 2001 ministerial statements regarding the problematic nature of project–by–project procurement when what is required is a strategic approach to capability development. They argued that :

...the sectoral plans should result in true alliances being developed with sustainability of Australian Defence Force capability, and therefore, appropriate in–country development and support being their goals. Regardless of their final structure, the Australian Industry Group Defence Council would expect that the key elements of the plans would be consistent with:

- a more strategic relationship between Defence and industry;
- the adoption of a whole-of-life approach to the development and management of capability for the ADF; and
- a clearer view of the industry outcome required as well as a long-term view of how that is to be achieved.

The Australian Industry Group Defence Council would expect, also, that underpinning this approach would be a strong focus on targeted exports, a commitment to maximising the use of Australian industry and the involvement of local small and medium enterprises, and a stronger commitment to indigenous research and development—not only within government and tertiary institutions but also facilitating this research in industry.

63 *Submission 20*, pp. 1–2 (Australian Industry Group Defence Council)

The Australian Industry Group Defence Council's view is that a sustainable defence industry base will be achieved through this combination of Defence, the industry champions and their supporting network of contractors and suppliers throughout all the tiers working together, rather than through the establishment of arbitrary targets in single project stovepipes.⁶⁴

3.121 The Committee understands that the Australian Industry Involvement (AII) program has been revised 'to cement the involvement of a sustainable local industry in the nation's defence.'⁶⁵ In particular, the AII Program now aims to 'link more clearly to Defence's strategic priorities' and 'target strategic priorities more clearly'.⁶⁶

3.122 In June 2003 it will be five years since the launch of the 1998 Defence and Industry Strategic Policy Statement *Team Australia*. The Committee believes that it is time to capture a snapshot of the extent to which that policy has been successful.

Recommendation

3.123 The Committee recommends that:

(a) in the latter half of 2003, the Defence Materiel Organisation convene a major seminar involving relevant Defence and industry representatives to assess the effectiveness of the 1998 *Team Australia* policy and to shape recommendations accordingly; and

(b) the proceedings of the seminar be tabled in the parliament along with a response from the Minister for Defence to the recommendations emerging from the seminar.

3.124 The Committee will monitor closely all aspects of the relationship between industry and Defence, paying particular attention to the strategic dimensions of Defence industry policy. It will be guided in this monitoring task not only by the *2000 White Paper* and the Defence Capability Plan, but also by the document *Defence Needs of Australian Industry*. This last document describes the key capabilities identified by Defence and Australian companies that are strategically important and commercially realistic for the defence of Australia, and is used to inform priority settings in areas such as export facilitation and capability and technology demonstrators.

64 *Submission 20*, p. 3 (Australian Industry Group Defence Council)

65 Defence Materiel Organisation, *Australian Industry Involvement Manual 2001*, p. (i)

66 Defence Materiel Organisation, *Australian Industry Involvement Manual 2001*, Chapter 2, point 8

Chapter 4

Projects and project management

I have a saying which goes, ‘No process saves you from a dumb idea.’ It does not matter what process you have in place, there is a personal element to it and if the people running that process and those controls are not up to the mark or prepared to let it go, then there is nothing we can do about it. All I can say is that the PMM process, which is the structure upon which we are based, is a very sound project management system. It is widely used throughout the world. If you follow it correctly, we should at least know the problems are coming. We can therefore highlight that they are coming and not put them under the carpet for two years until they really come and hit us hard. Again, it comes down to the people and the judgments of those people. If those people are not at the point where they do that, then we are still going to have those sorts of problems you have talked about.¹

4.1 The Committee regards the above statement, by a System Program Office Director working at the sharp end of acquisition and logistics, to be extremely insightful as well as down-to-earth.

4.2 The well publicised failures of many Defence projects will not be rehearsed again here by the Committee. It is worth noting here the following remarks from a 2003 Canadian report *Legislative Audit for National Defence*:

It is unlikely that any part of the public sector can rival weapons procurement for waste and loss. No country is immune from a history of weapons that cost far more than expected, took far too long to field, and were ineffective when put into service. Certainly Canada has not been an exceptional case in this race to the bottom.²

4.3 This chapter of the Report will focus on what it is about the management of those projects that seems to have caused them to fail; what is being done by the DMO to address and rectify those problems in a systematic way; and what else needs to be done to ensure that the remedies are effective and will result in successful projects in the future.

4.4 In this context the Committee is again struck by the remarks of the aforementioned Canadian auditor.

While Tolstoi remarked that while all happy families are the same, each unhappy family is unhappy in its own way, failed weapons projects tend to

1 *Committee Hansard*, p. 115 (Colonel Peter Acutt)

2 Kasurak, P. *Legislative Audit for National Defence—The Canadian Experience*, The Claxton Papers, Queen’s University (2003), p. 26

have quite a bit in common. Generations of ... auditors have identified most (though likely not all) of the high risk areas.³

4.5 He went on to nominate developmental projects, poor capability definition, lack of strong doctrinal concept, shortage of funds, poor risk assessment and risk management, and inadequate test and evaluation as key characteristics of projects that fail.

4.6 Knowing the features of projects that fail is very useful. It is also useful to explore the positive suggestions which have emerged from the plethora of analysis, audit and debate that surrounds Defence projects, and to consider the principles of sound project management which have emerged. The Committee draws heavily on the submission and oral evidence from the ANAO in formulating that account.

4.7 The Committee notes, as it pursues this formulation, that:

Defence acquisition project management has been the focus of consideration by the Australian National Audit Office (ANAO) and the Joint Committee of Public Accounts and Audit (JCPAA) for some time, beginning with a 1983 Audit Office report on this topic.⁴

4.8 Defence projects require expenditure of substantial amounts of public funds. The private sector is contracted to deliver the equipment, but Defence remains accountable for overall project outcomes. Projects must be managed in a business-like manner, consistent with the statutory requirement (*Financial Management and Accountability Act 1997*) that Defence's Chief Executive must manage Defence's affairs in a way that promotes efficient, effective and ethical use of Defence resources. The management of the 'time, cost and quality' aspects of these projects is a substantial task, involving significant corporate governance issues.

4.9 Audit Report No. 24 2001–2002 *Status Reporting of Major Defence Equipment Acquisition Projects* was an interim report, pending a full audit that was postponed in 2001 at the request of DMO, which was concerned to be able to progress its reform agenda prior to the audit being conducted. The report commented that periodic and accurate reporting of project status is an important element of good project management. DMO project status reports have in the past not always indicated whether major projects are meeting agreed timeliness, cost performance or quality criteria, or report against key performance indicators.

4.10 The Committee is pleased to hear that the DMO has been developing a new system for reporting project progress on cost and time performance. A sound project reporting system will obviously assist DMO's reform program and in managing risks in major projects.

3 Kasurak, P. *Legislative Audit for National Defence—The Canadian Experience*, The Claxton Papers, Queen's University (2003), p. 27

4 *Submission 2*, p. 1 (ANAO)

We have ... a project under way at the moment to improve our project scheduling and reporting. The process we use is to adopt the same methodologies that we ask our contractors to use to develop good quality work breakdown structures, develop a schedule against the work breakdown structures, allocate resources in terms of our own people's time to those work breakdown structures and also integrate our work breakdown structures with those that we get from industry through their reporting. This will also allow us to use an earned value approach of looking at cost and performance of schedule variances to monitor our project performance in a more holistic way.⁵

4.11 The Committee notes that the process described in the above quote is already specified in the *Capability Systems Life Cycle Management Manual 2002*.

4.12 According to the ANAO, a recent Defence analysis indicated that the risk of failure of Defence's major capital equipment acquisition projects was very high, and will continue to be so for several years. The ANAO expects to conduct a full audit of status reporting in 2003–04.

4.13 In its submission to the Committee the ANAO listed what it considers to be the factors in successful project outcomes. It is worth presenting these in some detail:

- Given that each project is unique, with its own construction method and contract form, it is important that projects are managed under a standardised method, preferably one recognised internationally such as the Standard Project Management Method. This should be accompanied by a standardised process for internal reporting that gives Defence's senior management a clear view of project progress and early warning of any need to take remedial action.
- External reporting is important, too. Frank disclosure of project progress enhances accountability and helps to promote good project management.
- Equipment to be produced from other than an established design may need prior development as a prototype model before full production, in order to learn from prototype testing and to avoid producing units that may need costly and time-consuming correction or modification later. A research and development contract may need to precede a production contract.
- Experienced commercial legal advisers are needed at the critical stages of tender preparation, contract negotiation and contract preparation. Such advisers should be available during contract management. The client Service should also participate at those stages.
- Contracts should have adequate provision to encourage performance and to deal with any under-performance. This could be by provision for prompt payment on achieving costly milestones. Liquidated damages are unlikely to recognise fully that the costs to the Commonwealth of delayed delivery of military equipment are in the form of lost military capability. Accordingly,

5 *Committee Hansard*, p. 250 (Ms Shireane McKinnie)

Defence contracts need to be clear that progress payments will be paid only on contract performance.

- Although each project is unique, project management can benefit from the experience gained on similar projects. Project managers should disseminate lessons to be learned from their projects and, in turn, be alert to lessons from other projects. Future project managers would benefit from having access to a database of lessons to be learned from previous experience on projects.
- Through-life support costs tend to exceed the original acquisition cost, and should be estimated and budgeted in conjunction with acquisition cost. Arrangements for through-life support need to be considered early in a project. Equipment tenderers' assertions relating to reliability, operating costs and life-cycle support costs could be translated into contractual arrangements, with incentives for reliability and lower costs and recourse in the event of unserviceability and higher costs.
- Contract milestones should be expressed in terms of substantive progress and paid only on evidence of achieved performance or earned value. Without such evidence, the project manager should withhold relevant progress payments until the terms of the contract have been met. The contractor's system for assessing progress on the project needs to be validated by Defence at the outset of the contract and validated periodically to ensure that Defence can rely on it.
- Project managers should act decisively when problems arise. Experience shows that it is unsafe to postpone such action in the expectation that a fixed price contract will require the contractor to meet requirements after all payments have been made. Delayed action involves risks in delayed military capability and risks that the contractor will have inadequate resources to complete the contract.
- Senior management should be alert, at key review points, to the need to decide whether a project experiencing significant cost increases, delays or other problems should proceed, be modified or be cancelled. Similarly, care needs to be taken that any changes to capability requirements or specifications that emerge after contract signature do not significantly add to cost or delay delivery.
- Project management should proceed on the basis of a systematic risk analysis, since complex technology projects are inherently risky. Problems can be expected to arise, but management should aim to be in a position to foresee risks and forestall them.
- Defence's project managers (in effect, contract managers) should have appropriate training and experience in project management, knowledge of contract law and a close familiarity with their project requirements as expressed in the contract. Managers need to be alert to project developments.
- Documentation of equipment test and evaluation during the acquisition phase needs to be adequate for the Service to conduct its final testing for acceptance into service.

- Project management costs should be collated for benchmarking with industry work of a similar kind and to demonstrate that the services represent good value.⁶

4.14 The *Capability Systems Life Cycle Management Manual 2002* devotes a substantial section to Project Management and embraces many of the best practice principles described above.

4.15 For example, the *Manual* highlights as reasons why projects often fail such things as inadequate planning and control of resources, activities and timings; lack of communication between stakeholders; lack of control over project progress and consequent lack of insight into project status; poor quality management.

4.16 The *Manual* goes on to describe project management as:

...several distinct but related processes including:

- a) establishing a project organisation;
- b) preparing a Project Management Plan;
- c) exercising control over a project by monitoring progress, reviewing plans and the achievement of milestones, solving problems and, if necessary, outsourcing further work;
- d) partitioning projects into stages with clear decision points;
- e) managing risk;
- f) ensuring the quality of the project outcome is consistent with sponsor and customer requirements; and
- g) managing changes to the project.⁷

4.17 Such requirements seem, to the Committee, to be little more than commonsense ways to approach a project. Having the approach set out clearly in a manual is a basic, but important, preliminary. But what bothers the Committee when it reflects on the failures that have prompted the recent DMO reforms is the fact that commonsense management strategies have long been embedded—or should have been—in public service practices. There have no doubt been earlier incarnations of the *Manual* that have set those strategies out with equal clarity and eloquence. Yet projects have frequently come unstuck.

4.18 Is it simply the fact that information systems within Defence have been so inchoate that project managers have not had access to the information needed to exercise the control and manage the risk? Has staff turnover been so rapid that any information that *is* available does not get passed on to newcomers? Or have people simply not been diligent in performing their duties? The Committee is unable to

6 *Submission 2*, pp. 7–9 (ANAO)

7 *Capability Systems Life Cycle Management Manual 2002*, para 3.93

pursue these questions in detail, but suspects that the combined result of at least two or more of these factors would commonly be found in the rubble of a collapsed project.

4.19 Much of what the Committee has heard from the Defence in the course of this inquiry suggests that the good project management practices have been clearly reinforced by the DMO, and that it has modified its structures, procedures and training accordingly.

We have put a huge amount of effort into improving our project management... accountability and responsibility. We have changed the government approval process to the two-pass process. We have put significant effort into better reporting. Reporting is a real challenge... In my experience over the last three years it is not the case every time that a project management system would indicate the problems to you at an early enough stage. Certainly project management systems will tell you if you are missing milestones or possibly even if you are likely to miss a milestone, but many of the project problems that we run into would need alternative methods to assess what is likely to go wrong to manage the risk and to do something about it before it becomes a major problem... The Defence Committee gets a comprehensive report each month on the top 20 projects and other projects of concern, and they discuss those. The minister gets a report on a monthly basis, and we are in the process of instituting new arrangements for reporting to government twice a year on the same projects.

We are introducing new project management methodologies to the SAMS. I mentioned project governance boards. ... The board can actually make some decisions but... [w]e have shifted... to a much clearer responsibility on the project manager. We deal with the stakeholder input in a different way, and the governance board acts almost like a company board. It covers financial expertise, project management expertise and legal expertise; it has a user and a capability person on it.⁸

Software expertise: ...we have gone down the path of the Capability Maturity Management model for assessment of companies. That... effectively assesses the ability of companies to deliver workable software solutions... It is quite a complicated assessment basis. It rates companies... We have been assisting companies in Australia to get that sort of accreditation. ...

We have put all of our senior staff through either a one- or two-week course which takes you through the basics you need to be looking for to assess the structure of a software system. It is not going to turn us all into software experts, but it does mean that we are able to make some reasonably informed judgments about whether what we are being told is sensible. We have also invested a huge amount in the Electronic Systems Division, in people that are well qualified in these areas and are able to get involved in the acquisition of software projects... We are putting people out of that division into another division, so that, if a division is buying a weapon that

8 *Committee Hansard*, p. 147 (Mr Michael Roche)

involves a considerable amount of software, we will move in somebody from that Electronic Systems Division to work on it.⁹

Among DMO's training initiatives for middle managers are its Leadership Program and Project Managers Development Program. The DMO Project Managers Development Program provides advanced qualifications (Master of Engineering Studies, with a Project Management major) and experience to become project managers. In its fourth year, 41 people have completed the program and 39 are still in the organisation. As for the future, DMO has formed a strategic partnership with the US Defense Acquisition University to cooperate in other tertiary level acquisition training and education.¹⁰

4.20 The Committee received mixed accounts from industry concerning the extent to which DMO is regarded as being successful in implementing standard Project Management Methodology (PMM). On balance, however, the Committee considers that the DMO has made genuine progress in this respect. One submission from a firm specialising in project management consultancy judged that:

PMM (Project Management Methodology) has been central to improvements in project management in DMO. Implementation of PMM has been patchy but where implemented properly has delivered real benefits to the projects and the Australian Defence Organisation.¹¹

DMO are attempting to re-invigorate PMM implementation through the creation of a Standard Acquisition Management System (SAMS). SAMS has potential to be positive if implemented properly but there are risks that the integration will fail if links between elements are not properly recognised.¹²

4.21 The Committee expects that the DMO will continue to monitor the effectiveness of PMM/SAMS and adjust it as required. The following example is indicative of the need for diligence in fine-tuning project management processes.

While the required capabilities were often technically well-defined, the acquisition schedules have not been based on the products that need to be delivered to meet that capability and the constraints faced by the project (as PMM recommends). For example, acquisition schedules have supposed that RFTs will be released immediately upon or very soon after approval, contracts will be signed within one month of the RFT, production will start immediately upon contract signature and acceptance will occur immediately after production. This approach did not recognise, for example, the time to create and clear RFT, design and design acceptance, testing and operational

9 *Committee Hansard*, p. 160 (Mr Michael Roche)

10 *Submission 10*, p. 14 (Defence Materiel Organisation)

11 *Submission 8*, p. 1 (Tanner James Management Consultants)

12 *Submission 8*, p. 1 (Tanner James Management Consultants)

transition. Additionally, it was very rare that any allowance was made for contingencies or changes of Government direction.¹³

These problems appear to be becoming less common. The use of Integrated Project Teams (IPTs) which combine resources of Capability Systems Division and DMO, and the application of improved project management in the capability definition phase appear to be improving the estimation of acquisition schedules. While Capability Systems Division has not formally adopted PMM, many of the IPTs are using a PMM approach to developing schedules.¹⁴

4.22 The Committee notes that Integrated Project Teams (IPTs) are specified in the *Capability Systems Life Cycle Management Manual* as responsible for managing a capability from First Pass Approval to Second Pass (Project) Approval. Of particular significance is the *Manual*'s requirement that 'the IPT leader, whether civilian or military, should typically expect to remain in appointment for several years to provide continuity.'¹⁵

4.23 The Committee also notes that, when it comes to the establishment by the DMO of the Project Management Team (PMT) to handle the acquisition phase, the *Manual* states:

Ideally, the Project Manager should be a member of the Requirements Phase IPT. Similarly, there are considerable benefits in having the IPT leader transfer to the PMT as the sponsor representative during the Acquisition Phase.¹⁶

4.24 Before proceeding to its final assessment of DMO's performance in the project management area, and prior to specifying recommendations in relation to it, there were a handful of particular issues raised in evidence that require discrete attention.

Enforcement of contract provisions

4.25 Projects will never be delivered on time and within budget if the various provisions relating to cost and timeliness are not taken seriously by either the contractor or the project manager—or both. The essence of the Committee's concerns in relation to the enforcement of contract provisions is encapsulated in this extract from a submission by a witness with a 30 year history of monitoring and analyzing Defence policy and procedures.

There seems little point in writing performance milestone and penalty clauses into contracts if they are not going to be enforced. Without

13 *Submission 8*, p. 6 (Tanner James Management Consultants)

14 *Submission 8*, p. 7 (Tanner James Management Consultants)

15 *Capability Systems Life Cycle Management Manual 2002*, para 3.96

16 *Capability Systems Life Cycle Management Manual 2002*, para 3.105

enforcement, such clauses become mere *proforma* provisions of no practical significance. Repeated failure to enforce such clauses sends entirely inappropriate signals to industry. A would-be contractor can be justified in concluding that a low-priced bid, which it suspects it cannot meet at the quoted price, might secure it the contract. Because it believes that any penalty clauses will probably not be enforced, it can then anticipate that when it fails to perform, the Commonwealth will eventually come up with the necessary supplementary funding or its equivalent.¹⁷

4.26 The Committee was concerned to hear from industry people that Defence had a reputation for being soft on contractors who failed to deliver.

There is a widely held perception in industry that Defence is most reluctant to exercise its right to enforce contract terms. It seems that Defence would rather renegotiate price and schedule. On the rare occasion when penalty clauses are incorporated in a contract, the amount of the penalty amounts to a potential slap on the wrist rather than any real financial pain. It is the prospect of real financial pain which would deter contractors from bidding unrealistically low prices in the knowledge of being able to negotiate high prices when they judge the project has progressed beyond the point of no return. For example, with respect to Project Air 87, in a parliamentary report it was stated that the cap on liquidated damages of that \$1.4 billion plus contract was something less than five per cent of the contract value; most likely a lot less than the expected escalation.¹⁸

4.27 The Committee recalls the view of the ANAO that ‘liquidated damages are unlikely to recognise fully that the costs to the Commonwealth of delayed delivery of military equipment are in the form of lost military capability.’ However, the parliament takes a very strong view of its responsibilities to the taxpayer in terms of ensuring value for money and protecting public dollars.

4.28 The Committee sought the views of Defence about its attitude towards the enforcement of penalty provisions in contracts, and the extent to which the Commonwealth had already acted to recover damages.

First of all, it might be worth clarifying that, under the terms of contract law, we do not have penalties as such; we have liquidated damages, which are meant to compensate the Commonwealth for the costs we might incur as a result of delays or other problems. So we need to be careful when we use the word ‘penalty’. In terms of liquidated damages, yes, there have been cases where we have exercised that where a company has clearly defaulted. In some cases it will be grey because there will be issues where the company argues there was some excusable problem that, for example, could have been our provision of equipment.

17 *Submission 12*, p. 9 (Mr Gary Brown)

18 *Committee Hansard*, p. 236 (Mr Joseph Moharich)

...We prefer to negotiate rather than to litigate. We find that damages are really not an adequate remedy for us. We tend to want to seek capability rather than tie up a contractor in a court for five or 10 years and have nothing at the end of it but a lot of hassle in the meantime. We also tend to want to establish long-term relations with our suppliers, and that is another reason we tend to negotiate out of any difficulties that arise. In our contracting templates we prefer ADR, alternative dispute resolution. Loosely, that might mean negotiation, mediation, arbitration before you get to litigation. Whatever we do, we always seek legal advice, and we usually find that that legal advice is a bit messy and inconclusive, regrettably. Liquidated damages is a damages provision as distinct from a penalty, and we might have half a dozen of those each year on our major capital projects. We normally fix those issues by amending the contract to get additional capability to the value of the liquidated damages. Sometimes we take the dollars; not very often.

We rarely terminate contracts—perhaps one a year. In terms of terminating a process—a tendering process, for example—or restarting a tendering or contracting process, we have a few of those. We might have a couple a years for major capital projects; sometimes they are restarts, sometimes they are hiatuses or whatever. We have provisions in our contracts for default, for companies going bankrupt or into liquidation and things like that, for breaches of intellectual property provisions, for maintenance of export licences and for what you might call wilful non-progress on a contract. We have a process that establishes those sorts of things. There is a raft of remedies and approaches that we use. Normally, we negotiate to get a resolution to fix the issue so that we can get a capability for our fighting folk.¹⁹

4.29 The Committee appreciates the preference for Defence to focus on acquiring capability, rather than have it languish while the contractor and the Commonwealth battle over the dollars in court. Nevertheless, the Committee has some sympathy with those who take a harder view of what is required.

To improve contractor performance, contracts need certain requirements as standard provisions—not some fixed form of words, but provisions that protect the Commonwealth interest in risk management, milestones for payment, non-performance. It is vital, of course, that both the government and the department enforce these contractual provisions. Non-enforcement encourages underbidding. Let one or two non-performing contractors be hit with substantial legal penalties and I guarantee that future bids will be realistic and closer attention paid to meeting targets.²⁰

4.30 The Committee notes that representatives of peak defence industry bodies are similarly concerned that poor performance by suppliers is not adequately dealt with.

19 *Committee Hansard*, pp. 287–288 (Dr Ian Williams, Mr John Fitzgerald)

20 *Committee Hansard*, p. 28 (Mr Gary Brown)

Defence as a customer has been too timid in applying its legitimate contractual options. For example, suppression of progress payments when milestones are not achieved has been under-utilised as a tool.²¹

4.31 The Committee agrees that a rigorous monitoring by project managers of the achievement of project milestones is a key factor in ensuring that contractors stay focused on their contractual responsibilities. There may well be a place for bonuses to be paid when contractors deliver consistently on, or ahead of, time. But where milestones, or key deliverables are not met during a project, the project manager should inform the SPO Director and Branch Head, who should immediately report in writing to that effect to the USDM. Copies of the report should go to the Project Governance Board and the relevant single Service Capability Management Board.

4.32 Should agreement about how to remedy a delay or failure not be arrived at within 15 days of the failure being reported to the USDM, a case manager from Industry Division should be commissioned to embark on a dispute resolution process similar to that recommended for the handling of a grievance by a contractor against the DMO.

Recommendation

4.33 **The Committee recommends that:**

(a) in the event that a project milestone is missed or that a supplier flags a delay in the provision of a contracted deliverable, then the project manager shall instigate a written report on the matter to the USDM, with copies to the Project Governance Board and the relevant Service Capability Management Board; and

(b) should agreement between project manager and contractor about how to remedy the matter not be arrived at within 15 days of such a report being submitted, a case manager from Industry Division shall be commissioned to negotiate a remedy. The case manager shall report to the USDM within 15 working days. In the event that a remedy has not been negotiated, the matter shall be referred to the Project Governance Board for a determination as to how to proceed. The USDM shall then make a final decision taking into account the advice of the Project Governance Board.

Project Governance Boards

4.34 Project Governance Boards have been established to

...review the technical, financial, contractual, risk, and schedule performance of projects. The boards provide independent advice to delegated decision makers, to relevant Division Heads and to the Under

21 *Submission 20*, p. 7 (Australian Industry Group Defence Council)

Secretary Defence Materiel, in a manner that assures the governance principles of accountability, transparency, disclosure and independence.²²

4.35 The Committee has received evidence indicating some disquiet about the extent to which these boards will achieve their purpose. This disquiet arises from perceived structural and procedural inadequacies.

Project Boards, when properly constituted, have proven an excellent mechanism for engaging stakeholders in the decision making processes. Accordingly, the strongest support for DMO's PMM often comes from outside of the DMO. Some Project Boards have been incorrectly constituted, sometimes leaving out user representation altogether. Others have been created but have never actually sat in a PMM context. That is the Boards may have met to discuss particular issues but have never considered the plans for the project, to give approval for progression of plans or to consider problems achieving plans. Far from increasing the confidence of the organisation, Boards acting in this way have potential to detract from that confidence in the project and in PMM itself.²³

4.36 A confidential submission to the Committee outlined a series of alleged shortcomings with the competence and independence of Project Board members.

The major failings to date have not been with the system, but with the individuals on Project Boards. The major failings:

- Project Board Executives who hide behind the Board and will not make decisions (every time a decision is deferred, money and time are lost);
- Project Executives who see themselves as day to day managers and who insist on interfering with the P[roject] M[anager] as s/he manages a Project Stage;
- The appointment of DMO staff as Project Board Executives;
- Project Board Executives who are also the 'Senior Supplier' on the Board and who cannot discriminate between making a DMO oriented decision (eg. to defer spending to make the Project meet its forecast spend spread) and the best interest of the ADF (eg. spending now to deliver capability);
- Senior Users (a position on the Project Board) who are disinterested, too busy with their own priorities and lack direction from within their own chain of command;
- Sponsors (also a position on the Project Board) who consider that their work is done once they have passed their vague requirements and funding to the DMO; and
- USDM seeking counsel from his Senior Management, not from his PMs and the end user.²⁴

22 *Submission* 10, p. 8 (Department of Defence)

23 *Submission* 8, p. 12 (Tanner James Management Consultants)

24 *Submission* 14, p. 3 (Confidential)

4.37 The Committee has been unable to determine the extent to which these alleged shortcomings actually apply. Another witness expressed concerns along similar lines:

I would suggest the committee might inquire as follows: who appoints the members to the board, who are the members of these boards, how independent are they and, really, how can they be independent if they are insiders to the DMO? The National Audit Office can comment—and, I believe, should comment—and investigate Defence contracting and existing Defence contracts, but it seems to me they are able or willing to do so only after major project problems have become apparent.²⁵

4.38 The Committee draws all these remarks to the attention of the VCDF and the USDM for their consideration. The Committee will seek a response to the matters raised by these witnesses in the course of its ongoing scrutiny of the performance of the DMO.

Transparency of projects and project management

4.39 One of the most frequently expressed criticisms coming to the Committee concerned the lack of transparency about the progress of projects.

One thing that strikes us at ASPI, particularly from our perspective on these issues, is that the level of transparency—the amount of information available to the public on the way in which major projects are being developed, the problems they are facing, the successes they are having, the issues and so on—is much lower than it could be.²⁶

My principal criticism of current reporting arrangements is that they provide insufficient information as to how projects are progressing or how well they meet their objectives and how they were assessed at completion. There has not been adequate feedback to designers, to builders and to taxpayers in regard to project outcomes. I think there is some need to learn from the past and it is not evident that this is occurring. The many reviews from the department of audit emphasise this shortfall.²⁷

4.40 The Committee is alert to the fact that there is a very large number of projects being managed by the DMO, and that the so-called ‘knowledge systems’ relating to financial and other data are still not sufficiently integrated to allow ready access to information. However, the principle remains that access to information is the *sine qua non* of accountability, and the Committee shares the concerns of witnesses who are frustrated at the limited visibility of the vast bulk of Defence projects.

25 *Committee Hansard*, p. 235 (Mr Joseph Moharich)

26 *Committee Hansard*, p. 58 (Mr Hugh White)

27 *Committee Hansard*, p. 292 (Rear Admiral (Retired) W J Rourke)

The question was asked, ‘Please tell us, for the projects in the capital program, how the schedule is going and how the cost is going.’ A response came back for the top 20 projects, but it also said, ‘We don’t have the resources to go through and generate this information for the remaining projects.’ The point is that sort of information should be readily available within Defence. Unless that information is constantly updated and visible to the people managing the program, they do not have the information at their hands—on the dashboard, so to speak—to allow them to manage and discharge their responsibility.²⁸

4.41 The DMO has repeatedly affirmed its commitment to better reporting of projects.

[W]e are reporting now at the Defence Committee level. The Defence Committee get a comprehensive report each month on the top 20 projects and other projects of concern, and they discuss those. The minister gets a report on a monthly basis, and we are in the process of instituting new arrangements for reporting to government twice a year on the same projects.²⁹

4.42 But the Committee remains concerned that while the internal reporting of projects may have been enhanced, and the minister and cabinet are increasingly well-briefed about them, the projects still remain largely invisible both to the parliament and to the public—including the tens of thousands of people involved in Australia’s defence industries. This concern is not helped by remarks which cast doubt on the integrity of the reports themselves.

I might say that I was surprised at some of the evidence I heard this morning about how well Project Air 87 is going. To the best of my knowledge, which is limited because of the secretive nature of the project, there have been no deliverables available yet, and industry sources—and industry does tend to leak—quite markedly tell us that things are not as bright as some of the reports may have indicated.³⁰

4.43 In the Committee’s view there must be a significant improvement in both the quantity and quality of information available to interested parties and to the public generally.

There are some effective models overseas, particularly the UK MOD, which publishes an annual survey with an update of the state of a range of major capability development projects. We think this could serve as an effective model for much higher levels of transparency. I think that is good not just in terms of what you might call general public policy and public administration processes but because it would help to strengthen an environment of

28 *Committee Hansard*, p. 59 (Dr Mark Thomson)

29 *Committee Hansard*, p. 147 (Mr Michael Roche)

30 *Committee Hansard*, p. 234 (Mr Joseph Moharich)

accountability and results orientation, which would be good for the organisation more broadly.³¹

4.44 The Committee has examined the UK approach and is impressed by its comprehensiveness and utility. The UK Comptroller and Auditor General, with the active involvement of the Ministry of Defence, produces each year a substantial report on progress with major defence projects. The report is produced by order of the House of Commons.

4.45 These Major Project Reports ‘provide cost, time and technical performance data for 30 projects split, in accordance with Smart Acquisition principles, between the 20 largest projects on which the main investment decision has been taken (post–Main Gate) and the 10 largest projects yet to reach that point (pre–Main gate).’³² The report also includes the Comptroller’s analysis of the key themes and trends emerging during the procurement process.

4.46 Given that the DMO has drawn heavily on British models for the reforms it has undertaken (e.g. the introduction of the two pass process and Smart Acquisition principles and templates) the UK Major Project Reports are patently relevant as models for Australia.

Recommendation

4.47 The Committee recommends that the Senate request the Auditor General:

- (a) to produce, on an annual basis, a report on progress in major defence projects, detailing cost, time and technical performance data for each project;**
- (b) to model the report on that ordered by the British House of Commons and produced by the UK Comptroller and Auditor General; and**
- (c) to include in the report such analysis of performance and emerging trends as will enable the parliament to have high visibility of all current and pending major projects.**

31 *Committee Hansard*, p. 58 (Mr Hugh White)

32 UK Comptroller and Auditor General, *Ministry of Defence Major Projects Report 2002*, p. 1

Chapter 5

Tenders and contracts

If we could off-set the horrific costs of tendering and administering the tendering process and put that into the research and development and the ongoing production of a continuing build, I think that as a nation we would be a lot better off.¹

Industry's concerns are the ones that I attempted to address when I first came to the DMO. They are about the cost of tendering and doing business with the government... A whole raft of the reforms that we were putting in place were directed to that end. We changed our contracting arrangements. They said our contracts were unreasonable, oppressive, too detailed et cetera. So we redid the whole structure of our contracting arrangements and we did it in consultation with industry... So it is with contracting; it is with the nature of the tenders that we put out; it is with the length of time that we take; it is about getting people out of the process early; it is about moving platoons of our people out of shipyards and letting the classification societies get on and do the job. A whole raft of those things are designed to make it cheaper to do business with the government.²

5.1 The above extracts from evidence convey the essence of the issue that was identified for action in the 1998 Defence and Industry Strategic Policy Statement.

5.2 That statement, *Team Australia*, declared that 'Defence's goal is for a procurement process which is flexible, responsive and efficient' and specified as a key step in achieving that goal action 'to minimize business costs to Defence and industry.'³ Such actions were to include the use of panels, short-listing of tenderers, use of restricted tenders, standardization of tender documents and streamlined processes across all purchasing activities.

5.3 The Committee notes that the *Capability Systems Life Cycle Management Manual* gives procedural effect to these goals and actions. Section 4-4 of the *Manual* sets out various mechanisms by which procurement can be facilitated from the earliest phases of a tendering process. For example, in requesting offers from potential suppliers four options are available, each designed to enhance the ease and efficiency of Defence-industry business:

- *Invitation to Register Interest*—firms can register their interest with minimal documentation compared to preparing a detailed tender.

1 *Committee Hansard*, p. 321 (Mr Don Fry)

2 *Committee Hansard*, p. 334 (Mr Michael Roche)

3 *Team Australia*, p. 23

Registrants who are clearly ineligible can withdraw or be passed over before incurring the additional expense of developing a formal, detailed offer at a later stage.

- *Request for Proposal*—invites potential suppliers to provide an innovative and cost effective idea, concept or solution, along with only an indicative price. If the idea or solution is accepted, specifications are then prepared against which a firm price can be quoted.
- *Request for Tender*—presents a formal written, detailed request for the supply of goods or services. RFT may be by public invitation or by invitation to selected potential suppliers. Where there are complex or strategic procurements, opportunities are provided to industry to comment on draft versions of the RFT before the Request is formally launched.
- *Request for Quotation*—requests prices from potential suppliers for material items or services. This is often more cost-effective than a full RFT, and can be used in conjunction with a qualified supplier list.

5.4 In both their written submission and in oral evidence to the Committee, DMO officials stressed their commitment to efficiency in procurement methods, and described in some detail a variety of improvements upon past practice.

We have made major changes in the processes that we go through. We are tailoring the process to the requirement. I think that before we were accused of doing the full mil-spec treatment for any project, regardless of complexity. We have shifted away from detailed specifications to more functional requirements. The requirement for the patrol boats, for example—the guts, if you like, of that requirement—runs to 50 pages, and it does not even define the number of patrol boats. It tells industry what we want to achieve in terms of effective patrol boat days. It leaves a very great part of the solution to industry, to allow them to provide their best offer—and that is shown up in the final three tenderers that are now alive in that project, where we have three quite different solutions to the problem.⁴

We have moved to faster contracting. Typically we would spend six and sometimes 12 months after down-selecting to actually get into a contract, and that was not sensible because we were not in a terrifically strong negotiating position at that time. We have revised all of our contractual forms and templates. We put that out at the start of the project and we now negotiate with the final short list of tenderers to get a contract that is pretty close to finality when we down-select. In the case of the armed reconnaissance helicopter I think we were in contract within four to six weeks of selecting Eurocopter, and that would be the sort of time frame that we are looking to do in the future.⁵

4 *Committee Hansard*, p. 144 (Mr Michael Roche)

5 *Committee Hansard*, p. 146 (Mr Michael Roche)

We are also using RFIs—requests for information, requests for proposal approaches—which try to sort out the field at an early stage at a cheaper rate. The second thing is that we are doing it faster, and that helps. One of the costs to companies is the cost of keeping a project team fired up. If you have a tender process that runs over 2½ years and the company has a project team of 10 to 15 people tied up for that time, that is a fairly big expense... What we are doing now with faster processes is cutting the length of time that companies, even the unsuccessful ones, have to stay in the bid.

Thirdly, we are excusing people early from the process. Where somebody is not competitive, we will tell them as soon as we have determined that they are not competitive rather than wait until the down-select stage. That is exactly what we did in Air 87, where we released the first tender, I think, within one month of the tenders closing. We said, ‘You’re not competitive. You should stand down your team.’ Three months later we excused a second one and, at the same time, we said to the third one, ‘We’re holding you in reserve. You’re not our preferred candidate. You should stop spending money.’ They were at that point about to commission some quite expensive test flying for us and we said, ‘You should draw a line under that,’ and I think we saved the company probably, straight off, \$100,000.⁶

5.5 The Committee is encouraged by these reports, and notes that the actions described are consistent with the requirements of the *Manual* described earlier.

5.6 Some industry witnesses have yet to be satisfied that sufficient progress has been made in refining tendering processes. One witness drew the Committee’s attention to the relative costs of tendering in commercial and Defence projects.

The amount of documentation sought remains the major cause of the excessive cost of tendering—a cost that is borne ultimately by the Australian taxpayer. Typical marketing and tendering costs borne by industry are 2% to 3% of project costs. Tendered prices must recover the cost of bidding the particular project but also the costs of previously unsuccessful bids. If the average tender short-list is three, then 6% to 9% of the defence acquisition dollar (i.e. as much as \$200 million per annum) is being spent on the tender process... Defence has always demanded much more data than industry needs to generate to define prices and reduce risk to an acceptable level. The principal causes appear to be an attitude of “let’s ask for it, just in case” which arises from the fact that tenders are not funded and therefore the cost to Defence of demanding more than it needs is not immediately evident.⁷

6 *Committee Hansard*, p. 152 (Mr Michael Roche)

7 *Submission 11*, p. 4 (SAAB Systems Pty Ltd)

Refining the paperwork

5.7 One of the most significant initiatives in reforming the tendering process has been the adoption of Smart Acquisition principles—a methodology developed by the UK Ministry of Defence.

The Smart Procurement Initiative (SPI) was a fundamental review of the way [UK Ministry of Defence] procured equipment for our Armed Forces and was a key element of the 1998 Strategic Defence Review. Its aim of providing better, cheaper equipment more quickly has since been sustained and broadened and, as a result, it has been renamed Smart Acquisition. Smart Acquisition applies not only to the procurement of new equipment, but to its support in service, and to stores and supplies. The principles of Smart Acquisition are currently being extended to the non-equipment areas of the MOD, such as the infrastructure and services of the defence estate.⁸

5.8 Drawing on the successful UK experience, Defence has applied Smart Acquisition principles to develop its SMART 2000 contracting template (now replaced by ASDEFCON). Comments on SMART 2000/ASDEFCON received by the Committee were consistently favourable. The Committee commends DMO for its careful engagement with industry in developing the template.

Some significant improvements were made in the standard forms of contract under the SMART 2000 Contract initiative which included extensive consultation with industry.⁹

5.9 The DMO has sought to achieve a similar outcome with the development of a contract template specifically for software intensive projects.

The new proforma we call ASDEFCON (Strategic Materiel) for software intensive systems. It is developed to provide a standard approach on which we approach industry in our tenders and then contract on. The template was developed in consultation with the technical directors of the companies that we do a lot of defence business with in software. They assisted with us by identifying what they believed to be best practice in the approaches that we were using across each of the divisions. They said, ‘We think Air Force has got best practice in this part of it; Navy does it best in this area.’ So we brought those together using not only the technical directors of those companies but also some highly experienced software people whom we brought in on contract. As a result, the proforma is intended to try to introduce best practice approaches in acquiring software. We are also aiming to reduce the cost of tendering by standardising the type of information that we seek. So when we ask for a project plan, a project plan will always contain this sort of information, rather than having individuals

8 http://www.mod.uk/aboutus/factfiles/smart_acquisition.htm

9 *Submission 11*, pp. 3–4 (SAAB Systems Pty Ltd)

create their own new requirements. In that fashion, industry can know exactly what we are expecting well before they put in a tender.¹⁰

5.10 On the general issue of walking the fine line to ensure that tendering processes and contracts are flexible but rigorous, the USDM told a Defence Watch Briefing in April 2002 that:

So far we have introduced the SMART 2000 derivative contract pro forma, we have put out the first Software Intensive Statement of Work and more is in the pipeline. All this has been done with industry. Some of the lawyers say we've gone too far—that we've rolled over for industry. Industry, on the other hand, says that there's still some distance to go, so maybe we've got the balance about right. As a result of these changes, we now expect to settle contracts more quickly from the time of source selection, than the current six or more months.¹¹

5.11 The Committee is inclined to agree with USDM that the balance achieved in these contract proformas are 'about right'. At least one witness begged to differ on that assessment, especially with respect to the software template ASDEFCON, and the SMART 2000 Statement of Work template.

Industry was... consulted on the SMART 2000 Statement of Work but its advice that the document was over-prescriptive and would increase costs was largely ignored. The Under Secretary noted in his April speech that "Some of the lawyers say we've gone too far—that we've rolled over for industry. Industry, on the other hand, says that there's still some distance to go, so maybe we've got the balance about right." Unfortunately the lawyers appear to have prevailed and the most recent document (ASDEFCON) has dropped a number of the more sensible initiatives. The result will be more protracted contract negotiations with hardened attitudes and the probability of inferior outcomes for both Defence and Industry.¹²

5.12 The Committee did not have the benefit of a wide range of views on this particular matter, but notes the following advice submitted by the Australian Industry Group Defence Council:

Importantly, attempts have been made to speed up the acquisition process. For example, the procurement process for AIR 87 made use of the SMART 2000 contracting documentation and effectively used the guidance provided by Getting Smarter about Knowledge Rights ... and the revised Australian Industry Involvement (AII) guidance.¹³

10 *Committee Hansard*, pp. 248–249 (Ms Shireane McKinnie)

11 Speech available at http://www.defence.gov.au/dmo/DMO/function.cfm?function_id=100#group48

12 *Submission* 11, pp. 3–4 (SAAB Systems Pty Ltd)

13 *Submission* 20, p. 2 (Australian Industry Group Defence Council)

5.13 The Committee explored the tension between industry's preference for optimum flexibility and minimal paperwork and government's requirement for a level of specificity that satisfies the requirements of accountability and audit. A particularly useful account of this tension was provided by DMO's Dr Ian Williams.

In the past, on occasions we had specifications that were far too detailed and we tried to tick them off individually. That does require respondents to go into a lot of detail. Under the DMO, one of the reform processes is to try to move to more functional specifications, but that is a double-edged sword. If you go to functional specifications, that also opens up a bit of flexibility. Without going into projects, some of the ones that caused me the greatest problem were the ones we did not pin down. For example, if you want to test that you have had a product delivered to the standard that you want and you have a broad functional specification—take a vehicle, for example—you can say that the vehicle must be able to operate off road. Unless you specify the conditions and the times and you go through a fairly elaborate process, you find that the conditions can be met in functional terms but do not do what you want. So there is a swing and roundabout situation and we need to be a little careful.¹⁴

5.14 The Committee is satisfied that the refinements to contract proformas made under the banner of SMART/ASDEFCON have produced an eminently sound basis for procurement. It is apparent to the Committee that the DMO is committed to, and has the capacity to provide for, business practices that address industry's request for flexibility and functional rather than over-prescriptive specifications.

5.15 The only caveat that the Committee might apply to these remarks goes, as on other occasions, to the question of whether officials' actions will consistently match the reform's intentions. That is, have the attitudes required to eschew adversarial for more accommodating approaches to contracting been sufficiently embedded in the DMO? One witness from industry suggested that this process is reasonably well advanced, but not completed:

There is a growing realisation in Defence and industry that the old-fashioned adversarial form of contracting, where you signed the contract, the contractor immediately tried to deliver as little as possible and get the maximum price and Defence tried to hold the contractor to ticking every box and doing everything, if it was wanted or not—there is, I think, a shared recognition between the two parties that that does not make sense. If you are in a business relationship you need to concentrate on what is needed to be delivered and get on with the job. That is a positive change. You would not say that every project officer with DMO has that attitude, but I think more now have it than had it before.¹⁵

14 *Committee Hansard*, p. 333 (Dr Ian Williams)

15 *Committee Hansard*, p. 189 (Mr Nicholas Hammond)

Partnerships and alliances

5.16 The Committee has examined elsewhere the policy basis for Defence's interest in partnerships and alliances with industry, and for promoting alternative forms of contracting which reflect this. The 1998 *Team Australia* Strategic Policy Statement was quite explicit in its support for what it called 'partnering'—but was very clear about what the concept entailed:

Partners need to be chosen following a rigorous process of competition. Each side needs to be confident that it can place its trust in the other. However, there is no single template for these kinds of relationships—especially in Defence, which contracts with so many different local and overseas companies for a vast and complex array of products...

Transparency and communication ... include, for larger contracts, full visibility of costs and earned value around a shared cost and schedule control system; there should not be separate books for internal and external reporting. In all cases, it should mean real habits of dialogue at all levels of the relationship in which there are no surprises or recriminations...

Experience indicates that partnering will only work in organisations that are prepared to accept cultural change. The implementation of partnering culture will require experimentation. There may be other forms of partnering initiatives that both sides will wish to explore, including models used in other areas of federal and state governments as well as overseas.¹⁶

5.17 This strong interest in partnering arrangements, and the distinctive qualities that must be brought to it, is reflected in the advice on contracting contained in the 2002 *Capability Systems Life Cycle Management Manual*, which points out:

4.41 A **contract** establishes a legal relationship between a supplier and Defence. Experience shows that this relationship can become excessively adversarial and detrimental to the interest of both parties. This can be prevented by establishing a complementary **partnering** arrangement which determines how Defence and a supplier will work together to achieve contract deliverables.

4.42 Parties to a partnering arrangement need to be skilled in that technique if it is to work effectively...

4.47 [A]n alliance contract reflects a long term commitment between two or more parties for the purpose of achieving clearly stated business objectives by maximising the contribution of each participant's competencies. In essence an alliance contract is an agreement to:

- a. work together for a common goal; and
- b. share risks and rewards, the reward to the customer being the achievement of goals, and the reward to the contractor being profit.

16 *Team Australia*, p. 25

Alliance contracts can be established for delivering a Major Capital Equipment project of defined scope and finite length, or for delivering services over a long period...¹⁷

5.18 It appears to the Committee that there is a burgeoning of genuine interest from several quarters in pursuing the ‘longer term synergistic and flexible partnering arrangements with industry’ that were envisaged in the 1998 Strategic Policy Statement.

5.19 Referring to the strategic goals of capabilities with a ‘knowledge edge’, the submission from the Australian Industry Group declared:

Both Defence and industry must acknowledge that they bear joint responsibility and work together, as partners, to improve the outcome.¹⁸

5.20 The Committee explored partnering and alliances at some depth with both Defence and industry witnesses. The merits of partnerships and alliances are broadly recognized, but it is equally well understood that the partners need to be well skilled in managing and negotiating the joint enterprise.

Alliance contracting represents a fundamental change to traditional contracting, as the parties assume a degree of joint management responsibility for the acquisition of a capability. Alliance concepts involve open-book accounting, target cost identification, risk/reward payment structures, risk sharing, integrated project team structures, and the sharing of rewards.¹⁹

Partnering was the forerunner, if you like, to alliance contracting... The difference between partnering and alliance contracting is that the alliance contracting provides a contracting mechanism that ensures that that alignment is maintained... If it fails, it all fails. The Commonwealth has to pay more money and the industry partners take a loss.

The difference between that and the normal contracting hierarchy with prime and subcontractors is that if something goes wrong everybody is in the same boat and everybody tries to fix it... That is a fundamental difference between alliance contracting and traditional contracting which does make a difference. I am not saying it is a panacea, I am not saying all alliance contracts are wildly successful, but I am saying that the mechanism of it, applied appropriately, has a lot of potential.²⁰

17 *Capability Systems Life Cycle Management Manual*, paras 4.41 and 4.47

18 Submission 20, p. 7 (Australian Industry Group Defence Council)

19 *Submission 10*, p. 11 (Department of Defence)

20 *Committee Hansard* p. 185 (Mr Nicholas Hammond)

5.21 Defence has signed two alliance contracts—one for its lightweight torpedo project, and the second for ANZAC Frigate Ship in-service-support. Both of these projects are eminently suited to alliance arrangements.

5.22 While alliance contracting seems likely to be effective with respect to substantial, well-defined projects involving major Tier 1 companies, the Committee sought advice as to whether partnering arrangements were feasible at the level of SMEs. The President of the Australian Industry and Defence Network (Mr Turner) regarded it as a ‘complex issue’, and gave the following illustration:

If the industry player has to research and develop a technology for a specific purpose, and that purpose has no relevance to civilian marketability, then it would be of value for Defence and for that industry player to enter into a long-term partnership arrangement because that then ensures that the industry player is able to get a reasonable return on the investment made in developing that technology for the express purpose.²¹

5.23 The Committee is satisfied that the potential benefits from partnering arrangements are significant, while at the same time acknowledging that they must be entered into and managed with exquisite care. For the Committee, ‘cultural change’ is a fundamental issue here, as parties transform their usual way of doing things from the ‘black-letter-contract-with-adversarial-mindset’ approach to the ‘we-are-mutually-responsible-for-goals-and-all-problems-are-our-problems’ business marriage.

Evolutionary acquisition

5.24 On several occasions during the inquiry, discussions about partnering arrangements turned to the merits (and risks) of one-step-at-a-time approaches to acquisition. The *Capability Systems Life Cycle Management Manual* devotes a section to this so-called ‘evolutionary acquisition’. The *Manual* notes that:

3.49 Evolutionary Acquisition (EA) enables capabilities to be upgraded in a planned way from the delivery of a specified initial capability to eventual achievement of a full capability

3.50 The advantages of EA are:

- a. the sponsor, provider and the customer can learn from experience with the initial capability and its subsequent increments;
- b. a reduction of the risk inherent in introducing major technological improvements through a single step;
- c. a capability can incorporate evolving technology as it becomes available;
- d. by avoiding early commitment to the final capability system, the acquisition of obsolescent items can be avoided.²²

21 *Committee Hansard*, p. 230 (Mr Michael Turner)

22 *Capability Systems Life Cycle Management Manual*, paras 3.49 and 3.50

5.25 If Defence's procurement policy is meant to be 'flexible, responsive, innovative and efficient', then evolutionary acquisition seems to be ideally suited to effecting those qualities.

5.26 The Committee notes the *Manual's* admonition that evolutionary acquisition 'requires very tight management and a particularly close relationship between all stakeholders.' This is needed 'to inform decisions as to the definition of subsequent increments of capability and the performance of the project in relation to its approved project envelope.'²³

5.27 The appeal of an evolutionary approach to acquisition was highlighted in the evidence of a witness (Mr Don Fry) who has had several decades of experience in shipbuilding—including for the Navy.

I am a firm believer that the defence forces would be far better served and the Australian taxpayer would be far better protected if we could adopt a different culture for the way we go about ordering things like patrol craft, Anzac type frigates or watercraft. We should change from buying them all up-front in a block and causing somebody to create a machine that can punch out a whole series of craft in a very short time to a progressive delivery where the expertise to build is retained continually and the advantage is taken over the period bill to continually upgrade those vessels to incorporate the latest in technology. If we did a thing like that, for example, on a patrol craft, you would have a patrol craft builder in this country—as the Swedish do with Kockums or Karlskronavarvet—where there is interaction between industry and Defence and where the product is under continuous development and build.²⁴

5.28 The Committee acknowledges the attractions of such an approach which is consistent with the policy of developing a strategic capability for the nation by ensuring that key industries can function productively over the long term. With the development of the sectoral plans for Australian defence industry the opportunities for evolutionary acquisition will be even more abundant.

5.29 The Committee has referred elsewhere to the issue of scale as a significant determinant of how Australia manages, in a strategic sense, the development of viable defence industry sectors. Given the relatively limited pool of 'knowledge edge' skills and facilities in this country, a major Defence-supplier partnership may in fact require contributions from an array of sub-contracting firms, and thereby spread the available work more widely than might have been anticipated. However, the Committee is alert to the potential dangers of exclusive partnering relationships. They can discourage competition and dampen innovation.

5.30 This may be the case especially for major projects where Defence enters a relationship with a single supplier for the long haul. Such an arrangement keeps other

23 *Capability Systems Life Cycle Management Manual*, para 3.54

24 *Committee Hansard*, p. 320 (Mr Don Fry)

potential suppliers at bay. As a major shipbuilder himself, Mr Fry appreciates this problem. As he put it:

[Evolutionary acquisition] does away with the need to constantly call tenders. It probably is not in my best interests, because another company might get that job, but I am looking at what is best for Australia and how we could manage this more efficiently. If we did it like that, we would be able to have the world's best boat always coming out at the end of our production line, and we would always have a boat coming off the line at a delivery rate equal to the attrition of the boats that are becoming obsolete...²⁵

5.31 On balance, the Committee considers that the merits of evolutionary acquisition are sufficient to warrant proceeding with caution. The question of ensuring that the supplier remains focused on delivering a quality product and that the Commonwealth receives value for money is an important one. But as the following extract indicates, there are probably suitable ways to address these requirements.

I accept [that EA excludes other suppliers once the original contractor has been signed] and that is the downside of it. It can, however, be brought more into the commercial world to be competitive, by two mechanisms. Here I draw a parallel to refit contracts I once did for a long period under a period contract where we offered a schedule of rates which were cost investigated. We were kept on the ball by the cost investigation system. We had to prove our overheads and all of our costs constantly. Whilst that was tedious, it was a very effective means of controlling our involvement on a do-and-charge basis for refits. That could be reintroduced for such a long-term period build. It could also be written into an arrangement where the major work for that particular contractor was required to be tendered for by other industries under subcontract to the principal organisation that is putting together the boat. To some extent, the Anzac project with Tenix is running along lines like that where they have a lot of subcontractors out there feeding into them, although they seem to have taken over some of them in recent times.²⁶

5.32 This witness's optimistic view about these kinds of close partnerships was not shared by at least one witness who emphasized the difficulties of achieving the degree of cost transparency required.

I believe that partnering will most certainly lead to cost-plus contracting with Defence having no insight into the contractor's real costs. How could one expect Defence cost investigators to really understand contractors' accounts—we heard this morning that Defence has trouble managing its own accounts—when highly trained and paid public company auditors tasked with reviewing accounts can miss critical information? In the current HIH situation, a public authority was specifically tasked to monitor the financial matters of insurance companies and it showed itself unable to do

25 *Committee Hansard*, p. 320 (Mr Don Fry)

26 *Committee Hansard*, p. 321 (Mr Don Fry)

so. I put it to you that I think it would be very hard for Defence to get a good insight into tier 1 companies' financial and cost structure.

Partnering and expecting the tier 1 companies to consistently subcontract to SMEs is unrealistic. Experience has shown that in any downturn in workload the tier 1 companies bring work back in house. It is a most common practice in the US. The other way to go about it is if the subcontractors are making good money, buy out the subcontractors and retain the monopoly. Partnering can eliminate competition and dampen innovation.²⁷

5.33 The issues raised here cannot be dismissed as unimportant. The Committee is keenly aware of the kinds of risks that attach to partnering arrangements. But if the partnership is properly established at the outset, and the forging of that partnership has come about only after a rigorous process of competition to determine the most appropriate and competent partner, the risks can be managed and mitigated. Defence is an experienced customer, and should have little trouble—in a globally competitive environment—benchmarking the costs of services or of developing and manufacturing materiel. The requirements of an 'open book' approach, with only one set of books for both internal and external reporting must also provide a reasonable measure of security for the Commonwealth.

Recommendation

5.34 The Committee recommends that, in the event of Defence entering a long term partnership with a particular supplier, the DMO should remain in regular contact with the unsuccessful bidders. The DMO should report progress with the partnership, update potential suppliers on any changes to capability requirements emerging during the course of the partnership, and keep them abreast of strategic developments. The DMO should assist potential suppliers to be in a competitive position if and when an existing partnership expires and renewal is sought.

Transparency in tendering and contracting

5.35 In a situation where tender bids are hotly contested, and the amounts of money involved are often quite substantial, the rigour of tendering processes must be assured. Commercial-in-confidence considerations—especially with respect to things like intellectual property—occupy a significant place in a properly conducted tender process.

5.36 However, the Committee believes that there may be room for introducing greater openness in contracts, particularly after the successful contractor has been publicly announced. The issues raised by such a proposal were canvassed in some detail by the ANAO in its submission to the Committee:

27 *Committee Hansard*, p. 236 (Mr Joseph Moharich)

The ANAO suggested to Defence, in 1999, that it would be in the public interest to disclose terms and conditions in major Defence acquisition contracts, when signed, and that this would encourage improved management of the contract and monitoring of contractor progress, which in turn would enhance the prospects of achieving successful outcomes from the particular acquisition project. It would also prompt improved negotiation of contracts from the Commonwealth's viewpoint and better protection of Commonwealth's interests.

Defence considered, however, that disclosure would be contrary to the Commonwealth's interests because any concessions agreed for a particular contract would be revealed to industry, which would seek to adopt such modified terms and conditions as baseline negotiations points on later acquisition projects. Defence would prefer to continue to disclose only its preferred standard contract terms and conditions.

The ANAO accepted that disclosure of actual contract details raises issues beyond the Defence portfolio and which would need to be dealt with in the broader context of accountability by the Government and the Parliament.

More recently, the ANAO reported, in response to a Senate motion, on the use of confidentiality provisions in Commonwealth contracts. The report supported the principle that Government accountability obligations are such that contractual material should be protected as confidential only if there are sound reasons to do so. In recognising that there was an absence of comprehensive material to assist agencies in determining whether contractual provisions should be treated as confidential, the ANAO developed criteria to assist in such decisions. The criteria included that:

- the information to be protected must be identifiable in specific rather than global terms;
- the information must have the necessary quality of confidentiality; and
- detriment to the confider of the information is generally necessary.²⁸

5.37 The Committee sees considerable merit in the disclosure of contract details beyond the reasons already advanced by the ANAO. Assuming that the process has been carried out properly, the publication of the winning bid should reveal to the losing contractors the justification for Defence's preferred choice. Such publication should reveal starkly if mischief or malpractice has taken place. As long as the details of winning bids are kept secret, gossip, rumour and 'leaks' are likely to foment dissatisfaction amongst losing bidders, probably leading to a round of representations and complaints that simply weigh the system down.

5.38 The Committee has been advised that in the United States it is the usual practice 'to announce the content of all bids received for a particular contract, and to explain why one proposal is preferred to others'.²⁹

28 *Submission 2*, p. 11 (ANAO)

5.39 It seems to the Committee that to reveal ‘the content of all bids’ is excess to what is warranted by the level of transparency that the Committee would regard as desirable. The ANAO’s suggestion—being to disclose the details of contracts as far as possible, with confidentiality being accorded only to specific matters the publication of which would be detrimental to the confider—seems eminently sensible and workable. Here, the Committee would regard the ‘detrimental to the confider’ clause as extending to both specific information supplied by the contractor, and specific concessions granted by Defence.

Recommendation

5.40 **The Committee recommends that:**

(a) once a contract has been awarded for a Defence project valued at over A\$100,000, the details of the winning bid should be published, with the provision that information about specific matters which bear the necessary quality of confidentiality may be withheld from publication where detriment to either the contractor or Defence would ensue. Prior to publication of the details, Defence should seek a formal opinion from ANAO as to whether that publication meets the appropriate standards of transparency; and

(b) Defence should publish, with the contract details, a brief statement setting out its reasons for selecting the winning bid.

Chapter 6

Test and evaluation

The fundamental purpose of test and evaluation (T&E) in a defence system's development and acquisition program is to identify the areas of risk to be reduced or eliminated. During the early phases of development, T&E is conducted to demonstrate the feasibility of conceptual approaches, evaluate design risk, identify design alternatives, compare and analyse trade-offs, and estimate satisfaction of operational requirements. As a system undergoes design and development, the iterative process of testing moves gradually from development test and evaluation (DT&E), which is concerned chiefly with attainment of engineering design goals, to operational test and evaluation (OT&E), which focuses on questions of operational effectiveness, suitability and survivability. Although there are usually separate development and operational test events, DT&E and OT&E are not necessarily serial phases in the evolution of a weapon system development. Combined or concurrent development test and operational test is encouraged when appropriate (possible cost/time savings).

Test and evaluation ... provides information to many customers. The T&E gives information to: developers for identifying and resolving technical difficulties; decision makers responsible for procuring a new system and for the best use of limited resources; and to operational users for refining requirements and supporting development of effective tactics, doctrine and procedures.¹

6.1 From the outset of this inquiry, and when trying to come to grips with the series of acquisition failures that were the inquiry's genesis, one question has nagged persistently at the Committee: *why was it not possible for problems to have been detected in a timely manner during the development and acquisition phases of projects?* The Committee is assuming here that the members of project teams were not simply negligent, and ignored problems, or suppressed them, or glossed over them in the hope that they would go away.

6.2 The question, in the Committee's view, demands a systemic answer. Given that the capability development/acquisition process is an example of 'systems engineering', the only answer that seems tenable is that projects did not have in place effective feedback mechanisms for managing risk.

6.3 The Committee is completely in accord with the remarks quoted at the outset of this section that the 'fundamental purpose of test and evaluation ... is to identify the areas of risk to be reduced or eliminated'. The Committee therefore sought to establish

1 Defense Acquisition University, *Test and Evaluation Management Guide* (4th edition), The Defense Acquisition University Press, Virginia, 2001, p. 2-1

whether the policies, structures and processes to achieve this ‘fundamental purpose’ had received sufficient attention by Defence and have been attended to by DMO as part of the necessary reforms.

6.4 Overall, the Committee is not satisfied that this is the case. Indeed the Committee is very concerned by what appear to be systemic, and potentially serious, shortfalls in test and evaluation across the whole capability life cycle.

6.5 The *Capability Systems Life Cycle Management Manual 2002*, with characteristic thoroughness, sets out in a clear and relatively comprehensive way the function of T&E in capability procurement. It recognizes that T&E

... begins in the Requirements Phase when a concept is established for progressive evaluation of the capability to ensure that it meets the approved requirement. This must include provision for corrective action in the event that the requirement is not being met.... In that an evaluation indicates non-compliance, corrective action should be initiated as early as possible in the life cycle.²

6.6 The *Manual* goes on to specify the requirement for ‘more sophisticated’ testing as the configuration becomes ‘better defined’; for a series of ‘formal tests’ during the Acquisition Phase which include technical, environmental and human dimensions; the tests should be ‘planned... scheduled... integrated’.

6.7 Having set down the parameters for Development T&E and Operational T&E, the *Manual* arrives at the requirement for a Test and Evaluation Master Plan, and emphasizes:

Key milestones during the Acquisition Phase should be related to T&E results. Measured progress toward achievement of the required capability baseline and retirement of risk should be a determinant of a project schedule.³

6.8 All of this is entirely consistent with the kinds of advice provided by standard texts on test and evaluation, and parallels the processes described in copious detail in the *Test and Evaluation Management Guide* published by the Defense Acquisition University for the US Department of Defense. Test and evaluation is also given substantial attention in other Australian Defence guides, such as the *Technical Regulation of Army Materiel Manual (TRAMM)*.

6.9 But the Committee has a strong sense that this abundant and sound advice is very poorly translated into the actual practice of project teams and others responsible for capability. What is worrying about this situation is that the advice of the *Capability Systems Life Cycle Management Manual 2002* does not specify any truly ‘new’ processes. The new *Manual* essentially underscores the long-established need

2 *Capability Systems Life Cycle Management Manual 2002*, paras 6.16 and 6.18

3 *Capability Systems Life Cycle Management Manual 2002*, para 6.31

for T&E to be properly integrated (planned and resourced) in the capability life cycle. The *Manual*'s processes draw on established Defence systems engineering practice in terms of key T&E-related documents and processes.⁴ In short, the systemic application of T&E seems to have been mandated in Defence guides and manuals for some time.

6.10 If this is in fact the case, Defence has a serious problem on its hands. It seems to the Committee that these mandated requirements have not been effective.

6.11 A simple indication of the fundamental importance of T&E—and the seriousness with which it is to be attended to—can be found in the above-mentioned Army *TRAMM*, which requires that 'All materiel involved in T&E is to have its details clearly recorded for identification and traceability' and 'All records relating to T&E activities are to be retained in a form subject to the Commonwealth Archives Act 1983.'

6.12 The Committee's concerns about T&E in capability development and materiel procurement received its initial boost from the submission to the inquiry by the ANAO, and from the ANAO's Report no. 30 2001–02 on *Test and Evaluation of Major Defence Acquisitions*.

6.13 The ANAO's Report No. 30 concluded that:

... there was little evidence of effective corporate initiatives to implement Defence's test and evaluation (T&E) policy, which aims to promote a unified approach to T&E to guarantee effective and efficient use of all T&E resources and avoid unnecessary duplication of effort. The policy needs to be reviewed and to articulate how the 'unified approach' is to be implemented.⁵

6.14 The Committee was concerned that some of the key recommendations of that report had been rejected by Defence. Defence's disagreements related to strategic management and oversight of T&E and the training of personnel responsible for safety critical system development, maintenance and test and evaluation.⁶ The Committee asked the USDM why Defence had dismissed the ANAO's recommendations.

I think that 'dismiss' is probably not the word I would choose. We thought very carefully about what the Audit Office had to say on this... Firstly, it was a single-issue audit. They looked at the role of T&E on its own and tried to give it a status in their recommendations and in our project management approach that put it on a pedestal almost on its own, without it being integrated into the total collection of tools that we use for project management. It does not stand on its own, in our view. We have a

4 Advice to the Committee in correspondence from ANAO, dated 27 February 2003

5 *Submission 2*, p. 4 (ANAO)

6 Australian National Audit Office, Report No. 30 2001–02, *Test and Evaluation of Major Defence Acquisitions*, p. 21

fundamental disagreement with Audit on that—not a dismissal, but we disagree that it should be out there on its own. We disagree with the need to provide, for example, a specific isolated budget for test and evaluation.

Audit also proposed a role for test and evaluation that went down the American route, where the test and evaluation authority was responsible for independent reporting—I think it may have been to Congress. We did not agree with a separate role for it—again, because we believe that it should be integrated as part of our project management techniques...

The audit, in some respects, was quite extreme. The Audit Office believed—and I think I saw a suggestion to this effect in one of the early drafts—that the proper test and evaluation procedures would have, in fact, prevented the problems with Collins and would have avoided the difficulties we face with Bushranger. I disagree with that. That is putting test and evaluation on a pedestal far above where it should be. The problems that we had with those projects were not related to not knowing what the problems were. It was not a case that these platforms were not tested and that no-one knew what the problems were. We knew what the problems were, but it was a question of whether people were doing anything about them to fix them.⁷

6.15 The Committee is somewhat surprised by this response on at least two counts.

- The Committee has examined the ANAO's Report No. 30, and contrary to Mr Roche's view that ANAO 'put [T&E] on a pedestal almost on its own, without it being integrated into the total collection of tools that we use for project management', the Committee considers that the ANAO report clearly recognizes that T&E is part of the systems engineering and management processes. Indeed the relationships were explored at several points in the ANAO report.⁸
- Mr Roche says 'It was not a case that these platforms were not tested and that no-one knew what the problems were. We knew what the problems were, but it was a question of whether people were doing anything about them to fix them.' This indicates project management problems that go beyond T&E. The Committee would argue that perhaps a more strategically placed T&E function—one which is captured, say, in the governance structures of Defence—would result in closer scrutiny of, and better accountability for, the implementation of prescribed T&E procedures.

6.16 In this context, the Committee notes the view of former Defence Secretary Dr Allan Hawke, expressed in a communication with a defence industry firm in July 2001:

T&E is an important tool in our plans for the management of Defence capability to ensure successful achievement and maintenance of operational effectiveness.

7 *Committee Hansard*, pp. 347–348 (Mr Michael Roche)

8 For example, at pp. 27–30, 42–46, 54–58 and 110–112

As Defence moves to consider its governance strategies in a theme of organisational renewal it is timely for us to consider T&E as a key management tool. I am aware of the proposal to review the governance structure for T&E and the proposal is currently under consideration by members of the senior leadership team in Defence.⁹

6.17 It seems to the Committee that the ideas flagged by Dr Hawke have not come to fruition. If a unified T&E approach is what risk management requires, then it seems to the Committee that some kind of feedback loop which is wholly integrated into the governance of Defence and the management of acquisition and logistics is exactly what is needed. Giving T&E status at this level would encourage and support the iterative, integrated, ongoing T&E being conducted (supposedly) throughout all phases of the capability life cycle.

6.18 The Committee felt generally uneasy about the evidence given by Defence witnesses in response to the Committee's questions about test and evaluation. Responses seemed to be sometimes contradictory, occasionally equivocal and frequently confusing. As a consequence, test and evaluation is not something about which the Committee has full confidence in Defence's capacity or will to seriously address.

6.19 Even at the level of clarifying what was generally understood by the phrase Test and Evaluation, the Committee struggled to establish common ground with Defence witnesses.

6.20 For example, one witness declared that the process known as IV&V (Independent Verification and Validation) was: 'the process within the systems engineering arena which goes beyond test and evaluation and which is far more important when dealing with software systems, particularly software systems that are safety critical.' When challenged about this statement, the witnesses reiterated that: 'Test and evaluation is a key component of verification and validation, which is a part of the systems engineering process.'¹⁰

6.21 The Committee is puzzled by this elevation of IV&V to overarching status with T&E falling under it. Key standard texts and guides consulted by the Committee placed T&E as the generic concept, with IV&V as a sub-class of T&E, and then one which was applied almost exclusively to software development projects. This certainly is the case in Blanchard's *System Engineering Management*, and the US Defense Acquisition University's *Test and Evaluation Management Guide*. The Australian *Technical Regulation of Army Materiel Manual (TRAMM)* also has IV&V as an annex to T&E. Nor does IV&V appear as a discrete entity in Defence's *Capability Systems Life Cycle Management Guide*.

9 Private correspondence made available to the Committee by the recipient

10 *Committee Hansard*, pp. 348–349 (Ms Shireane McKinnie)

6.22 The argument here is not a semantic one. Rather the Committee is highlighting the perplexity it invariably encountered when seeking to engage Defence witnesses on T&E matters.

6.23 For example, the Committee asked Defence witnesses about reports it had received about certain vessels entering service without T&E having been fully completed, and without the documentation necessary to enable this to happen.¹¹

6.24 There followed a series¹² of convoluted exchanges and disagreements about whether the vessels were actually in service or were not in service; about whether the Chief of Navy was doing a ‘review’ of Acceptance Into Naval Service procedures or had simply ordered a new direction for that to proceed; about the different responsibilities of the DMO and the Service chief with respect to confirming that contractual and functional requirements had been met as opposed to determining whether the system delivered fulfilled current service requirements; and whether or not relevant T&E data had actually been fully documented for some major platforms.

6.25 The Committee believes it an urgent task to have these matters clarified. The distinction between DMO’s responsibilities and those of the Service customer when it comes to T&E must be made clear. The point for the Committee is not that any of the platforms going into service are provably unsafe, but rather that the platforms seem not to be as assuredly safe as they are required to be according to Defence’s own guides—guides such as DEF (AUST)5679 dealing with the procurement of computer-based safety critical systems, or Navy’s delivery and acceptance document TI 338.

6.26 In response to a question on notice about the provision of T&E documentation (see 6.22 above), Defence stated that ‘all documentation related to pre-delivery tests and trials [for the vessels specified] has been made available to Navy to support its operational test and evaluation phase, culminating in the Acceptance into Naval Service milestone’. It is not clear whether that documentation was adequate, nor its delivery timely. The Committee assumes that it was. But a close examination of the table provided raises more questions than it gives answers.

6.27 For example, for each of the specified platforms, the Overall Test and Evaluation Assessment is stated to be ‘Transient’.¹³ The Committee assumes that this means that all the platforms are yet to be found ‘Compliant’, and presumably therefore not yet suitable for formal Acceptance into Naval Service. But in any event, with respect to what are these vessels being assessed as ‘Transient’ (or ‘Compliant’ or ‘Non-compliant’)?

6.28 The Committee notes that Test & Evaluation Master Plans (TEMPs) are not a new requirement. But where they exist, do they specify testing outcomes required to achieve Provisional Acceptance, or full Acceptance into Service? The Committee also

11 *Committee Hansard*, p. 352 (Senator the Hon Peter Cook)

12 *Committee Hansard*, pp. 352–358

13 The options were Compliant, Transient, Non-compliant.

notes that the Reports of Materiel State at Delivery (TI 338) are listed for each platform. But do these TI 338's record required data in terms of safety case, contractual liabilities, work to be completed, the status of the regulatory/certification system, Integrated Logistic Support, and performance limitations? Only a much more detailed examination of T&E processes would enable an assessment of their adequacy.

6.29 The Committee's view at this stage¹⁴, and pending the outcomes of the work of DTRIALS in developing a new T&E concept document (see below), is that:

(a) Operational Test and Evaluation (OT&E) should be planned and scheduled from the outset of a project and should be conducted by the relevant Service's OT&E organization, independent of the DMO and the contractors;

(b) OT&E should progress from a well-established foundation of Development Test and Evaluation (DT&E); and

(c) VCDF (and the Owner Support Executive) should be advised of the extent to which equipment delivered by DMO to the Services has met the functional requirements which had been originally specified in the documents that secured government approval for the project.

6.30 At one stage during the rather confusing evidence referred to above, there was discussion about the Navy receiving vessels from the DMO, then Navy seeing how far they could 'push the operational envelope', with 'the humans in the loop and asking, "How does this work as a bit of operational kit?"'.¹⁵ The Committee remains uneasy with that discussion because of the Committee's concerns about the seeming inadequacy of implementation of T&E during the development and acquisition phases. Operating 'with humans in the loop' should focus the minds of Service personnel on T&E issues with particular alacrity.

6.31 The Committee may appear over cautious in these matters, but insists that integrated and effective T&E throughout the capability life cycle is the only way to ensure the delivery of a fully functioning platform with safety-critical systems operating at peak efficiency and effectiveness. The recent 'sea water pipe burst incident' of the HMAS *Dechaineux*, for example, has reinforced to the Committee the imperatives of optimal T&E (both developmental and operational)—whether or not the pipe failure in the case of *Dechaineux* can be attributed to inadequate T&E. The Committee notes that the 1998 ANAO Report on the *New Submarine Project* included several pages devoted to stainless steel pipe risks which included the conclusion that the 'SMO pipe welding case study provides an example of uneven and unsystematic risk management.'¹⁶

14 On the basis of advice from the ANAO in communications with the Committee.

15 *Committee Hansard*, pp. 352–356 (Mr Michael Roche, Vice Admiral Chris Ritchie)

16 ANAO Report No. 34 1997–98, *New Submarine Project*, p. 93

6.32 While the Committee has not engaged in a thorough examination of risk management and T&E matters, it nevertheless asserts a right to express concerns when it feels that its exploration of test and evaluation matters elicits muddled responses from Defence witnesses and produces no convincing evidence that T&E has a profile in Defence commensurate with its fundamental importance in systems engineering generally and in weapons platform development in particular.

6.33 The Committee is pleased to note that there are some resources being devoted to a review of T&E policy within Defence.

Following the 2001 ANAO report, VCDF directed DTRIALS to initiate a review and redevelopment of Defence's T&E policy... Throughout 2002, DTRIALS has been developing a T&E concept paper and working to achieve alignment between the T&E policy and the guidance provided in the Defence Capability Systems Lifecycle Management [Manual]... and to address the ANAO report's recommendations.

This proposed T&E concept paper has been circulated and it has been agreed in principle as a conceptual basis for development of defence T&E policy. Importantly, it... seeks to ensure that the Operational Acceptance is validated against the Operational Concept Document—which is a new document proposed by the manual—so we have a chance to carry out test and evaluation against what has been delivered and against what was proposed in the Operational Concept Document. In addition to that, we have also recommended that a business case closure procedure be carried out, whereby the capability is measured against the original business case. That would then identify whether the field capability has met all the requirements. I am looking to within the next six months to achieve that.¹⁷

6.34 The Committee looks forward to examining a copy of the revised T&E policy when it has been finalized. The Committee will be particularly keen to ensure that the policy provides for T&E which is fully *integrated* (planned and funded) with the capability development process, that it provides for T&E to be carried out in an *independent* fashion, and that the policy embeds a 'cradle to grave' philosophy.

Recommendation

6.35 The Committee recommends that the Senate, under Standing Order 164, order the production, upon its completion, of the report by Director of Trials (DTRIALS) of the Review of Test and Evaluation in Defence, and that the Senate refer the document to the Senate Foreign Affairs, Defence and Trade References Committee for examination and report.

17 *Committee Hansard*, pp. 352–358 (Group Captain Michael Gaspert)

APPENDIX ONE

Submissions received by the Committee

Submission no.

- 1 Confidential
- 2 Australian National Audit Office
- 2A Australian National Audit Office
- 3 Confidential
- 4 Rear Admiral (Retired) W J Rourke, AO
- 5 Mr David Truelove
- 6 ABN.AMRO Australia Limited
- 7 Mr John Malden Elliott
- 8 Tanner James Management Consultants
- 9 Nautronix Limited
- 10 Department of Defence
- 11 SAAB Systems Pty Limited
- 12 Mr Gary Brown
- 12A Mr Gary Brown
- 13 Confidential
- 14 Confidential
- 15 Confidential
- 16 Confidential
- 16A Confidential
- 17 Confidential
- 18 Confidential

- 19 Mr L F Mahony
- 20 Australian Industry Group Defence Council
- 21 Mr John Coochey
- 21A Mr John Coochey
- 22 Motive Power
- 23 Australian Business Limited
- 24 Confidential (package)

APPENDIX TWO

Witnesses who appeared before the committee at public hearings

Canberra, 27 September 2002

Mr Raymond Geoffrey Ahern, Senior Consultant, Defence Materiel Organisation Client Manager, Tanner James Management Consultants Pty Ltd

Mr Aldo Antony Borgu, Program Manager, Operations and Capability, Australian Strategic Policy Institute Pty Ltd

Mr Gary Maurice Brown (Private capacity)

Mr Warren Cochrane, Group Executive Director, Australian National Audit Office

Dr Raymond Gordon McNally, Senior Director and Audit Manager, Australian National Audit Office

Mr Tony Minchin, Executive Director, Australian National Audit Office

Dr Mark John Thomson, Program Manager, Budget and Management, Australian Strategic Policy Institute Pty Ltd

Mr Michael Watson, Group Executive Director, Australian National Audit Office

Mr Hugh John White, Director, Australian Strategic Policy Institute Pty Ltd

Melbourne, 9 October 2002

Colonel Peter Anthony Acutt, Director, Wheeled Manoeuvre System Program Office, Land Systems Division, Defence Materiel Organisation

Mr Grant Medbury, Director, Materiel Operations and Support, Land Systems Division, Defence Materiel Organisation

Mr John Patrick Pluck, Director, Tracked Manoeuvre System Program Office, Land Systems Division, Defence Materiel Organisation

Lieutenant Colonel Gary Potter, Program Manager, Small Arms, Armament System Program Office, Defence Materiel Organisation

Dr Ian Sidney Williams, Head, Land Systems, Land Systems Division, Defence Materiel Organisation

Bendigo, 10 October 2002

Mr Barry M Ellis, Chairman, Bendigo Manufacturing Group; CEO; Keech Castings Australia Pty Ltd

Mr Stephen William Gibbons, Federal Member for Bendigo

Dr Ian Thomas MacBean, Director, Centre for Sustainable Regional Communities

Mr Andrew William Paul, CEO, City of Greater Bendigo

Mr Ged Rodgers, Regional Manager, Industrial Supplies Office (Victoria) Ltd

Adelaide, 8 November 2002

Mr Nicholas David Hammond, Managing Director, SAAB Systems Pty Ltd

Dr Timothy John McKenna, Acting Chief Defence Scientist, Defence Science and Technology Organisation

Dr Doraisamy (Nanda) Nandagopal, Director, Systems Sciences Laboratory, Defence Science and Technology Organisation

Mr Michael John Roche, Under-Secretary, Defence Materiel Organisation

Group Captain Stephen Charles Sheedy, Director, Over The Horizon Radar System Program Office, Defence Materiel Organisation

Group Captain Colin Barry Thorne, Officer Commanding, Maritime Patrol Systems Program Office, Defence Materiel Organisation

Canberra, 15 November 2002

Mr John Thomas Fitzgerald, Director-General, Contracting Policy and Operations, Department of Defence

Air Vice Marshal Norman Arthur Gray, Head, Airborne Surveillance and Control Division, Department of Defence

Major General Peter Francis Haddad, Commander, Joint Logistics, Department of Defence

Air Marshal Allan Grant (Angus) Houston, Chief of Air Force, Department of Defence

Ms Kim Isaacs, Director-General, Materiel, People and Performance Branch, Defence Materiel Organisation, Department of Defence

Ms Shireane Kay McKinnie, Head, Electronic Systems Division, Department of Defence

Mr Joseph Vladimir Moharich, Group Managing Director, Helitech Industries Pty Ltd

Air Vice Marshal John Gordon Monaghan, Head, Aerospace Systems Division, Department of Defence

Rear Admiral Kevin John Scarce, Acting Under Secretary, Defence Materiel Organisation, Department of Defence

Vice Admiral Russell (Russ) Edward Shalders, Vice Chief of the Defence Force, Department of Defence

Ms Ann Louise Thorpe, Head, Materiel Finance Division, Department of Defence

Mr Michael Rodney Turner, National President; and President, Tasmanian Chapter, Australian Industry and Defence Network

Dr Ian Sidney Williams, Head, Land Systems Division, Defence Materiel Organisation, Department of Defence

Canberra, 7 February 2003

Mr Lucio Di Bartolomeo, National Executive Member, Australian Industry Group Defence Council

Mr Peter James Dunn, Head, Management Information Systems Division, Department of Defence

Mr Donald George Fry, Chairman of Directors, NQEA Australia Pty Ltd

Group Captain Michael Gaspert, Director of Trials (DTRIALS), Department of Defence

Air Vice Marshal Norman Gray, Head, Airborne Surveillance and Control Division, Department of Defence

Major General Peter Francis Haddad, Commander, Joint Logistics, Department of Defence

Ms Kim Isaacs, Director General, Materiel People and Performance Branch, Department of Defence

Mr David Learmonth, Head, Industry Division, Defence Materiel Organisation,
Department of Defence

Ms Shireane Kay McKinnie, Head, Electronic Systems, Department of Defence

Mr Leigh William Purnell, Executive Director, Australian Industry Group
Defence Council

Vice Admiral Christopher Ritchie, Chief of Navy, Department of Defence

Mr Michael Joseph Roche, Under Secretary, Defence Materiel, Defence
Materiel Organisation

Rear Admiral (Retired) William John Rourke (Private capacity)

Rear Admiral Kevin John Scarce, Head, Maritime Systems Division,
Department of Defence

Dr Ian Sidney Williams, Head, Land Systems Division, Department of Defence

APPENDIX THREE

Benchmarks for Committee scrutiny of DMO

The Committee intends to monitor closely all aspects of the Defence Materiel Organisation over the next few years, culminating in a formal review of the Organisation at the end of 2005. The Committee will also be examining carefully the performance audits of the DMO undertaken by the Australian National Audit Office.

Throughout this inquiry, in the evidence provided by DMO officials, various undertakings were made concerning goals, time frames, milestones etc. The Committee will use the Estimates process (Budget and additional) to monitor the DMO's performance with respect to those undertakings.

The Committee has been impressed with the standard of documentation prepared by Defence for many aspects of its capability development and acquisition processes. The Committee is satisfied that these guides and manuals constitute, in themselves, a substantial benchmark against which to assess performance.

Some benchmarks to be used by the Committee in its scrutiny of the DMO

- Adherence to the requirements of the *Capability Systems Life Cycle Management Manual 2002*.
- Adherence to the Goals and Values set out in the *Defence Materiel Guide 2002*.
- Achievement of the objectives and performance indicators contained in the DMO Balanced Scorecard.
- Full compliance with the Business Rules specified in the DMO's Corporate Governance Framework.
- Implementation, by the end of 2004, of the Defence Business Model for in-service support, including a Customer/Supplier Agreement between Output Executives and Enabling Executives, and Service Level Agreements between the SPOs and the Force Element Groups.
- Between 2003–05, the Air 87 Armed Reconnaissance Helicopter Project, the Airborne Early Warning and Control Aircraft Project, and the replacement Patrol Boats Project shall meet all scheduled milestones.
- Tracking and managing of enterprise risk in accordance with the DMO Risk Management Plan.
- Achievement, demonstrated by the results of the annual Defence Staff Survey, of the DMO's goal to 'create a climate where people are valued for doing their best.'

- Timely provision by DMO to the Senate Committee, on an annual basis, of an audited summary of the industry feedback on the effectiveness of the Systems Program Offices.
- Full compliance with the Defence Procurement Policy Manual and the requirements of the *Financial Management and Accountability Act 1997*.
- Achievement by 2005 of tendering costs as a percentage of contract value being at a level equivalent to commercial industry standards.
- For each project, acceptance of materiel capability to be on the basis of fulfilment of the requirements of the Operational Concept Document and the Test Concept Document.
- Successful implementation, by end of the financial year 2003–04, of policy and guidelines for achieving world's best practice in the acquisition and maintenance of software intensive systems, with particular reference to independent verification and validation and the management of safety critical systems.
- Establishment of a formal and transparent complaint handling mechanism using a case management approach for implementation from the beginning of 2004.
- Independently verified enhancement, each year, of the involvement of Australian industry in Defence acquisition projects, in accordance with the *Australian Industry Involvement Manual 2001*.
- Establishment, by the end of financial year 2003–04, of a database of all Professional Service Providers engaged by Defence which will include details of the location and project upon which the PSP is engaged, the length of time for which the PSP has been involved in the project, and the anticipated duration of the PSP's engagement.
- Implementation, by the end of 2004, of a fully functioning inventory and asset management system (SDSS) with common software and common processes across all three ADF services.
- By the end of 2005, full integration of SDSS with Defence's financial management system.
- In each of 2004 and 2005, at least twenty DMO staff will have completed the Masters degree level Project Manager Development Course.
- In each of 2004 and 2005 at least three DMO staff will have participated in an industry exchange/work experience program of no less than 6 months duration.

- By September 2003, the endorsement by the Defence Capability Committee of the report by DTRIALS addressing Defence's Test and Evaluation policy.
- By the end of 2004 each System Program Office and business unit will have established quality management systems, and 50 per cent will have been formally accredited.
- By the end of 2005, the DMO will have achieved accreditation to ISO standard of its corporate level quality management system.
- The Defence and Industry Advisory Council will have met at least twice per year in 2003, 2004 and 2005.